

## **PLENARY SPEAKERS ABSTRACTS**

### **THE SOCIAL FOUNDATIONS AND TRAJECTORIES OF EUROPEAN AND CHINESE TRANSFORMATION AND GROWTH**

**Mick Dunford, University of Sussex, UNITED KINGDOM**

This starting point for this paper is an examination of the comparative trajectories of transition economies in Europe and China paying particular attention to the contrasting institutional foundations of development: the role of Washington Consensus ideas in the formerly Communist countries of Central and eastern Europe and subsequent integration for some into the European Union and of the establishment of a socialist market economy in China. The paper will go on to trace the re-emergence of China as a global economic and political force. It will document China's astonishing economic miracle and place it briefly in a wider historical perspective, covering the way in which a great civilisation lost ground with the advent of the industrial revolution and the rise of western and Japanese imperialism. Most attention will be paid to China's recent economic development, the global shift in the geography of wealth and population that it is driving, and the significance of China's trade and foreign capital and reserves for its relations with the rest of the world. This paper will show that the rise of China represents the achievements of the collective rationality of a 'Beijing Consensus' and a socio-economic order that is quite distinct from the neo-liberal individualism of the 'Washington Consensus'. This social order is rooted in traditional Taoism and Confucianism, draws on a long tradition of a commodity-producing (market) economy developed and regulated by a hierarchically organized central state, and of collective ownership of economic assets and yet opens up numerous opportunities for hyper modernization in a globalizing world. The paper will also outline the challenges that China is facing (economic development model, resource and environmental issues and problems of social and geographical inequality). In addition it will deal with the shift in the global political order and in international development highlighting the contrasts between Chinese and developed country development models with China giving much greater weight to South-South relationships, concentrating on hard investments in infrastructure and emphasising country ownership and the absence of political conditionalities.

### **CHINA'S REGIONAL (SPATIAL) PLANNING: RISING AND PRACTICES IN RECENT YEARS AND ITS FUTURE DEVELOPMENT**

**Jie Fan, Chinese Academy of Sciences, CHINA**

During the 20 years after the Reform and Opening in 1978, China has achieved a fast economic growth, changing the natural and humanistic outlook dramatically. However, the lack of regional planning has created a serious situation where the spatial distribution and the utilization of territorial resources are orderless, the industrialization and urbanization are sightless, the living environment is deteriorated, and the sustainability is weakened. Entering the new century, the importance of regional strategies, policies, and planning has been increasingly appreciated by the central and local governments during the decision-making process. Various kinds of regional planning have continually sprung up. These regional planning pay close attention to different development modes tailored for different regions, to the protection of natural eco-environment, and to the construction of public service infrastructures as to improve the people's welfare. As a result, these planning play a crucial role in changing the development concepts, in optimizing the growth objective, and in selecting the key construction projects. Yet, these planning have still not entirely changed the situation where 1) the primary goal of achieving high GDP growth rate mislead the regional development; 2) the construction of industrial projects is redundant and repeated; 3) the major infrastructure lacks of co-ordinate layout; 4) the implementation of the planning is ignored, etc. At the same time, new conflicts have been created where various kinds of planning are not coordinated and different planning would define a same area with different functional orientations. Currently, China is exploring a new method to set the regional (spatial) planning 1) as the major instrument for the government to perform the spatial regulation and to change the traditional economic management, and 2) as the major policy tool to coordinate the development relationships between the nature and human, between different economic and social departments, between cities and counties, and between regions. China attempts to ensure the important position of the regional planning through laws, creating a planning system with connected layers and coordinated methods based on the Major Function Oriented Zone as the basic planning. This transform requires 1) a reconstructed pattern of benefits distribution among the central and local governments

and all governmental agencies, and 2) a comprehensive reform of cadre performance evaluation standards, industrial and investment policies, fiscal and tax system, and land and environment management, etc. Therefore, it will be a long and challenging process to effectively implement the regional (spatial) planning in China. Chinese geographical scientists, especially human geographers and economical geographers, are extremely crucial to advance the regional planning and its relevant research.

## **LANDED REGIONAL DEVELOPMENT IN CHINA UNDER METROPOLITANIZATION: STATE POWER RESHUFFLING, LAND COMMODIFICATION, AND LOCAL PUBLIC FINANCE IN THE BEIJING, SHANGHAI, AND GUANGZHOU CITY-REGIONS**

**George Lin, The University of Hong Kong, CHINA**

Prevailing theories of regionalism see agglomeration economies and competitive advantages as the key to sustaining efficient regional economic growth. This study argues that, in an emerging economy and populous nation such as China with intensified competition for land as the precious resource for both basic living and original capital accumulation, efficient and sustainable utilization of land has played a role instrumental to regional development. A conceptual triad consisting of state power reshuffling, land development, and local public finance is introduced to shed light over uneven economic growth in China's leading metropolitan regions, namely Beijing, Shanghai, and Guangzhou. The research traces the rescaling of state power since the 1980s, analyzes how commodification of land has been used to contest with the neoliberalization of state power and generate local revenue, and evaluates the effects of city-centred land development on urban growth, regional inequality, and social volatility. For China, sustaining regional future will depend upon how the dwindling and precious land resource is developed in an economically efficient, socially equitable, and environmentally sustainable fashion. Theorization of uneven regional development needs to go beyond the EuroAmerican canon and take seriously alternative practices and struggles of the men and women in the global South.

## **TWO TALES OF REGIONALISM: DECLINING US REGIONS AND EMERGING ASIAN REGIONS**

**Jessie Poon, University At Buffalo-SUNY, USA**

Declining Fordist regions bordering the US Great Lakes and emerging regions in East and Southeast Asia share a common goal of trying to turn themselves around economically. Economic revitalization and growth strategy draws upon the new regionalism's emphasis of agglomeration economies through metropolitan-led and trans-border regionalism. But the model seems to be rather at odds with patterns of political cooperation, social distributional priorities as well as local residents' desire for increased quality of life. This presentation will discuss the effect of such a model on the level of regionality in declining US and emerging Asian regions respectively.

## **DEVELOPMENT POLICIES FOR PERIPHERAL REGIONS: EXPERIENCES AND PROSPECTS IN KYUSHU, JAPAN**

**Keni Yamamoto, Kyushu University, JAPAN**  
**Yoshihiro Miyamachi, Oita University, JAPAN**

The purpose of this paper is firstly to review Japan's experiences for regional development policies since the 1950s, taking into account the long-term development of Japanese capitalism since the 19th century, and secondly to propose an important viewpoint for a peripheral region to grow out of the centre-periphery relationship within a national territory. The centre of Japan is undoubtedly the Tokyo metropolitan area. Kyushu, located in the southwestern part of Japan, is one of the peripheral regions. During the second half of the 19th century, however, Kyushu acted as one of the core region in Japan. In the 19th century, several feudal clans within southwestern part of Japan became so powerful politically that they overthrew the ruling Tokugawa shogunate and then established a new government in 1868. Accordingly, peoples from these clans occupied the new government and became nation's political and economic leaders. Kyushu was endowed with natural resources including coal and waterpower, therefore, modern industries had started to grow in some localities.

While the Osaka-Kobe-Kyoto area as well as the Tokyo acted as the core regions in those years, Kyushu, in particular, northern part of it saw rapid growth of coal and steel industry and became known as one of the major four industrial regions in Japan. Since the middle of the 20th century, Kyushu has been progressively losing its central position and became peripheral. As energy sources shifted from coal to petroleum in the 1950s, Kyushu came to lose its industrial base and then a large number of people; especially younger generations out-migrated to the major metropolitan areas such as Tokyo, Osaka-Kobe-Kyoto and Nagoya. Nowadays Kyushu has a population of 13.3 million people, which account for eleven percent of Japan's total population. The Japanese government has introduced a series of new nationwide policy to overcome the spatial uneven development since the middle of the 20th century. In 1962, the government launched the First Comprehensive National Development Plan, then the second plan in 1969, the third plan in 1977, the fourth plan in 1987, and the fifth plan in 1998. During the 1960s to 1970s, the plans seemed to be effective in reducing regional disparity because regional difference of per capita income was largely reduced. And income difference among regions has been occasionally enlarged or reduced slightly according to the business fluctuation since the 1980s. The circumstance of regional policy in Japan has greatly changed during this decade. In the 2000s, as the policy moved towards neoliberal-oriented, regional disparity started to grow again and people's consciousness of regional disparity has been rather acute especially in the periphery. In fact, a number of local economies in peripheral regions have gradually become worse mostly because of depopulation, decline of indigenous SMEs and closure of branch factories and regional offices whose headquarters are located in the major metropolitan areas. And on 11th March 2011, the Great Earthquake, Tsunami and the collapse of nuclear power stations attacked the northeastern part of Japan. This region is also a periphery of this country. In the paper reading, the authors try to give an overall picture of regional policy debate in Japan and to present a new thinking for sustainable and balanced regional development from the viewpoint of periphery.

*Gateway J*

## **PROPERTY RIGHTS OF SMALL HYDRO ELECTRIC POWER PLANTS AND REGIONAL DEVELOPMENT**

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**Johannes Idsø, Sogn Og Fjordane University College, NORWAY**

In Sogn og Fjordane, a remote county in Western Norway, there have been built more than 80 small hydro electric powerplants in the last ten years. Building a hydro electric power plant is quite capital demanding and the farmers that own the rivers have two choices: To raise the capital by themselves by borrowing from banks or to hand over the whole project to external investors that build and owns the power plant. In the latter case the farmers are compensated by sharing the profit with the external investors. By case studies we investigate the consequences for the regional economy of these two choices. According to our findings, In the short run the difference in the effect on the local economy is not so large, but since the capital flow from the increased income will depend on the property right of the power plant, the difference in the long run effect of choosing external investors to build and run the plant will be profound. The result may be generalized to other investments as well and it shows the importance for the regional economy keep the property right of natural resources in the region.

*Gateway ESS1*

## **MULTI-LEVEL GOVERNANCE AND STRATEGIC PLANNING FOR REGIONAL DEVELOPMENT POLICY. THE CASE OF ROMANIA IN THE CONTEXT OF EUROPEAN INTEGRATION**

**Anca Otilia Dodescu, University of Oradea, ROMANIA**  
**Lavinia Florentina Chirila, University of Oradea, ROMANIA**

The present paper aims to illustrate the experience of Romania in coordinating regional development policy in the context of European integration, focusing on governance and strategic planning in the period 2007-2013, after Romania's accession to EU (1st of January 2007). The paper highlights the manner in which regional development problems in Romania have been understood in the context of European integration, changes regarding who, how and with what responsibility and competencies are involved in regional development policy. The paper also investigates out to what extent we can speak about an efficient multi-level governance in regional development policy of Romania. We try to make a clear presentation of the state of the art in Romania,

including the authority levels involved into the decision making at regional and national level. Attention is drawn to the Regional and Local Development Plans for the period 2007-2013 and to the emergence of a new regional awareness articulated directly in the strategic planning frameworks for 2014-2020. Romania launched in January 2012 an official debate regarding the forthcoming programming period that focuses on smart, sustainable and inclusive growth. Up to September 2012 Romania has to establish the institutional and programming framework in order to be able to attain the objectives established. As it is known, the present programming period faced in Romania institutional deficits because of the lack of a proper implementation and understanding of the multi-level governance concept. In order to adjust the situation and improve Romania's performance in the field of regional policy, Romanian authorities take into account creating an extended and interactive partnership with the civil society, unions and patronages, including economic environment (commerce chambers, consulting firms) and the banks. Another possible solution brought into attention refers to the Intermediate Organisms about which our government considers that would work better if they were from the private sector. Therefore, Intermediate Organisms would be more efficient if were formed by former consultancy firms that worked in the field of structural funds accession and implementation. We consider that the solutions identified so far by the Romanian authorities trying to solve the multi-level governance deficits that were a cutting edge to Romania in the 2007-2013 programming period are not enough and superficial. In change, we argue that the new emphasis on regional planning must address multi-levels governance deficits and also regional coordination limits, inter-regional and sub-regional disparities conflicts in development decisions, especially in the field of infrastructure and investment. The paper presents research results afferent to the post-doctoral research project: "Growth and regional development economic policies. Challenges for Romania in the context of economic-financial crisis and European model integration", carried out in the project "Economic scientific research, reliance of human welfare and development in the European context", financed from the European Social Fund and by the Romanian Government through Sectorial Operational Programme Human Resources Development 2007-2013 (SOP HRD), contract number SOP HRD/89/1.5/S/62988 and to the doctoral research project "Using the specific instruments of regional policy of the European Union for growing economic competitiveness of Romanian development regions", partially supported by the strategic grant POSDRU/CPP107/DMI1.5/S/80272, co-financed by the European Social Fund-Investing in People, within the Sectorial Operational Programme Human Resources Development 2007-2013.

#### *Gateway K*

### **REGIONAL GROWTH AND DEVELOPMENT IN MEXICO AND SOUTH KOREA: A COMPARATIVE ANALYSIS OF KALDOR'S LAWS**

**Roldan Andres Rosales, COLTLAX / FES Acatlan UNAM, MEXICO**

**Nam Kwon Mun, Hank, University of Foreign Studies, KOREA**

**Luis Quintana Romero, FES Acatlan UNAM, MEXICO**

The economic growth and development of Mexico and South Korea has been different and accentuated in the last three decades. Since the eighties, Mexican economy has maintained a slow growth that has not allowed it to enter in an accelerated growth path, while South Korean economy has overcome this problem and now it maintains a rapid growth path. Empirical evidence of Kaldor's laws estimations shows that this growth is determined endogenously; this means that the manufacturing sector works as a pivot for the economic development because it leads the sectorial and productivity growth, while exports work as a complement for this growth and development. On the other hand, empirical evidence indicates that growth and development of the country is not determined endogenously, but exogenously. In this case, exports are the ones that determine the growth and development of the country, also, there is not a leading sector keeping a strong and robust local market. This tends to be an influence in economy's long term growth path.

#### *Gateway H*

### **THE ROLE OF THE EU COHESION FUND INVESTMENTS IN PROMOTING REGIONAL DEVELOPMENT**

**Janis Aprans, University of Latvia, LATVIA**

One of the most challenging aspects in allocation of EU funding is the principal choice between the support to investments in infrastructure or channelling more of the funds into measures aimed at development of human

resources and other so called “soft activities”. The question should also be posed whether the improved public infrastructure is precondition for socio – economic development or shall it serve as the response by servicing the increased economic activity in certain region or country. The debate on the above mentioned patterns of public expenditure has been ongoing since the late 90 ties regarding the original four “Cohesion countries” – Ireland, Greece, Portugal and Spain, whenever assessments of their progress towards greater economic and social cohesion were attempted. But with the joining of the New Member States in 2004 and later in 2006, the debate has acquired even wider discourse as the amount of funding allocated for infrastructure projects through the EU Cohesion fund has increased significantly. The aim of this paper is to examine how the EU Cohesion fund investments in infrastructure have influenced the regional economic and social development in selected Members States. The main focus of analysis will be on the case of Latvia as it is one of the leading recipient countries of funding, judged by the size of Cohesion fund allocations as proportion of National income. However, the research will be carried out in comparative manner by contrasting Latvia’s experience with that of neighbouring Estonia and Lithuania. In the paper particular attention will be paid to examining in what kind of infrastructure (transport, environment or energy) public investments most certainly will yield positive effects in form of economic growth and social development of the regions, and is the existing and planned EU priorities and corresponding regulatory framework is in compliance with these findings. Methodologically, the paper will be based on the desk research of available documentation on implementation of the EU Cohesion fund, with the particular emphasis on review of available evaluation studies as well as statistical data that will be verified through semi – structured interviews with persons involved in implementation of EU Cohesion fund both in public administration and private sector. As the result of carried out research, the better understanding and new knowledge will be produced about the role of the EU Cohesion fund interventions in promoting the development of regions with high concentration of Cohesion fund assistance. These findings might come in right time as following the publication of the Fifth Report on economic, social and territorial cohesion in the very end of 2010, and proposal of new draft Regulations in the second half of 2011, the time when Member States will have to commence the elaboration of new framework of strategic and regulatory documents is approaching, and the recommendations of the paper could be tested in this process.

*Gateway OSS1*

## **NEW PATTERNS OF PROPERTY INVESTMENT IN ASIAN CITIES, A COMPARATIVE STUDY OF REAL ESTATE INVESTMENT TRUST INVESTMENT IN TOKYO AND IN HONG KONG**

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Over the past few decades, financial markets have become increasingly intertwined with property markets. The deregulation of the banking industry has been a crucial milestone in this process. Starting from the US in the early 1980s, the wave of deregulation gained Japan in the late 1980s, and spread in Asia in the early 1990s, entailing an unprecedented series of property cycles. The magnitude of the boom-bust cycle was particularly dramatic in Japan, where the financial crisis impacted the economy for two decades. To recover from the banking crisis, real estate securitization was introduced in Japan in an effort to defreeze the property markets. By transforming large, illiquid property assets into liquid and affordable investment vehicles, securitization contributed to clean up the bed debts in the Japanese banking sector and to achieve the restructuring of the financial industry. Real estate securitization includes two major categories of vehicles, private equities and listed public funds in the form of real estate investment trusts (REITs). The former involves non listed (large) shares by institutional investors, while the latter is accessible to small individual investors, generally via funds of funds investing on the stock market. As public listed funds, REITs embody the highest integration degree of integration between finance and real estate. First established in Japan in 2001, REIT funds took root in South Korea and Singapore, before gaining Hong Kong in 2003. Since then, these funds have become a growing force in Asian property markets. The Link REIT, which was the first REIT fund established in Hong Kong, is currently the largest in Asia in terms of capitalization; it holds a portfolio of 180 properties with an internal floor area of approximately 11 million square feet of retail space and approximately 80,000 car park spaces. This presentation examines the comparative development of REIT funds in Tokyo and in Hong Kong. It turns the spotlight on the diverse ways a highly standardized investment vehicle may contextualize in totally different institutional environments. The comparison will focus on three main issues:

1. How REIT funds contribute to the diversification strategies of local property players.
2. The geographies of investment: the spatial distribution of the building portfolios
3. The role of public policies —direct and indirect—in the development of REIT funds.

**CHINESE ENTREPRENEURS IN PRATO AND THE 'I.O.I. SYNDROME' (ILLEGAL – OUTSIDERS – INVADERS)**

**Mirela Barbu, University of Sussex, UNITED KINGDOM**  
**Mick Dunford, University of Sussex, UNITED KINGDOM**

In the last ten years the industrial district and city of Prato has undergone a profound transformation as a result of the growth of the Chinese entrepreneurship and the Chinese population. The number of Italian enterprises working in the textile industries was almost halved between 2001 and 2011 while, in the same period, the number of Chinese-owned enterprises working in the clothing industries more than doubled. The growth of a large Chinese presence has been accompanied by the emergence of a discourse that can be called an 'I.O.I syndrome' according to which the Chinese population is seen as illegal, and made up of outsiders and invaders. The aim of this paper is to explain, deconstruct and criticise this discourse of which many components lack solid factual foundations. The paper will proceed by first setting the context and then examining each of the three components of this discourse in turn. The first part analyses the connotations associated with the migratory phenomena in Italy, looking at the regulatory system and the connections between the status of 'illegal migrant' and 'illegal worker'. The focus will centre around the economic features of the Chinese migration in Italy and its transformation over the last decade. The second part focuses on the geographical concentration of the Chinese businesses in Italy as well as the use of space for production and social relations. Theories concerning ethnic and enclave economies are taken into consideration in order to explore the relationship between 'insiders' and 'outsiders'. We will argue that some traits of the socio-economic model of the district have influenced the ways in which the Chinese-owned enterprises operate in Prato, the reproduction of the social relations within the community as well as its relations with the other national and foreign communities. The third part of the paper will explore the growth of Chinese entrepreneurship in Prato, highlighting the factors that have created strong reactions against this community such as the perception that it is too large, has developed too fast and that there is little legal authority to control it and prevent its illegal practices. The collective perception of the concept 'invaders' was developed along three interconnected dimensions: spatial, temporal and institutional. These parts are linked to the role of migrant workers in their host countries and, more specifically, to the perception of Chinese as being 'entrepreneurs' rather than 'workers'. We will conclude by examining the distinctiveness of the 'I.O.I syndrome', focusing on the features that make it diverse from other forms of exclusion which different migrant communities have experienced in Italy or in other host countries. This also implies some reflections on the role played by the Chinese manufacturers in Prato in a scenario dominated by China on a global scale.

**PATHS TO SUSTAINABILITY UNDER THE CONTEXT OF CLIMATE CHANGE DEADLINES – REGIONAL, CLASS AND OTHER DISTRIBUTIONS MATTERS**

**Josef Baum, University of Vienna, AUSTRIA**

The highly unsustainable level of social metabolism in the developed countries together with the broad industrialisation and a compressed catch-up process of emerging countries is causing new situations unprecedented increases of material flows and unprecedented implications on the resource and emission side. The international community unanimously accepted the target of not transcending 2°C, but there is no consensus on the path. So the probability to proceed beyond "safe operating space" towards "unknown territory" is decreasing continuously. Further business as usual seems to be an "utopian fantasy". Environmental crises are no new phenomena; on regional levels they have existed for a very long time and also on global scales at least since decades. But there are essential news: by climate change there are deadlines. Since about twenty years there is a significant and increasing concordance in science about this, and since the last twenty years the probability of dramatic consequences of a business-as-usual path has been increased (not to be confounded with uncertainty in the sense of high variance of concrete realisation). These irreversible tipping points change the rules of the game: Until now distributional conflicts often have been solved also at the cost of the environment or at the costs of future generations, but they environmental debts has been somehow redeemable (or seemed to be). In the next years and decades the things will be changing: not to consider future harms will hurt mid term and sometimes even short term assets. Environmental issues substantially (also) are distributional regional, class, gender and other conflicts with strong weight on the vertical time axis (future generations). We see an asymmetric structure of the stakeholders in climate change. First the causation is different. Basically the richer and more powerful have caused much more pollution. The need for adaptation and the vulnerability mostly is

inverse: the poor are hit relatively stronger. So we have to analyse power, domination, and inequality in the environmental space. We can see causations, impacts, and contributions for solutions differentiated along classes and other distributional criteria. Increasing commodity prices reflecting (relative) scarcity and increasing (mining) costs can be generally positive climate change solutions but on the other hand raise serious distribution issues. E.g. for food because this sector is determined by energy development to a high degree - food prices are highly correlated to energy prices. There are complex patterns of many losers and only few winners of climate change and other environmental issues; and probably the “poor” are hit relatively stronger than the rich (although the poor hardly caused the mess), but uncurbed climate change developments also will significantly strike the “rich” (worldwide and regional) which will also absolutely have to lose a lot and they will only partly be able to shift this incidence. “Common but differentiated responsibility” was agreed by the international community in Rio 1992 and probably will be agreed again in Rio conference 2012, but the interpretation of this principle is very different. A “grandfathering” strategy to integrate developing countries on the basis of differentiated reduction rates in the Kyoto mechanism hardly recognizes the development issues and the historic realities. The “Brazil proposal” and similar models consider the historical emissions per capita and takes account of justice in a much more comprehensive way. As seen also in Copenhagen stable solutions for the fundamental resource and emission problems are probably possible only by “fair” distribution (on global and various other levels) and solidarity. And 'simultaneous' solutions for many problems – resources, emissions, distribution and development - are necessary and possible. -The long paper shall display in details along the intermediary results of a research project: the asymmetric structures of the stakeholders of climate change: causation, adaptation, vulnerability, the relatively stronger concernment at the poor but absolutely significantly at the “rich” (globally and in examples regionally) - an overview on concluding “fair” and 'simultaneous' sets of solutions based on different principles.

*Gateway E*

## **PATHWAYS TO REGIONAL LEADERSHIP IN AUSTRALIA**

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There has been growing academic interest over recent years in place based leadership, a form of leadership that is seen to be distinct from conventional accounts of leadership in corporate settings. Accounts of regional leadership in Australia have noted the intersection between class and power outside the metropolitan areas, and the often dysfunctional relationship between places and the centre of political power. Previous work has also noted the diverse ways leadership is expressed, and this insight resonates with Sotarauta's work from Finland on different styles of leadership. This paper considers the trajectories of leaders in non metropolitan Australia and speculates on the degree to which these pathways are distinctive to Australia.

*Gateway M*

## **CHINESE TOURISM: A SUSTAINABLE OPPORTUNITY FOR LOCAL ECONOMIES?**

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**Anna Loffredo, Scuola Superiore Sant'Anna, ITALY**

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An increasing number of localities and regions in Italy are looking at the growing flows of tourists from China and especially at the 'second phase' of this phenomenon (Arlt, 2011) as an important opportunity, both to sustain the industry's growth and to revitalize individual critical situations in specific localities<sup>2</sup>. The 'Chinese option' is also attractive to the extent that it involves the possibility to be accompanied by Chinese investments in the tourist industry. So far, various factors (including the limited amount of direct flights connecting Italy to China), the inefficient management of visas, the cultural and operational shortcomings of national and regional promotion etc.) have severely limited the incoming flows, thus making the margins for future growth even more remarkable. However, also based on negative experience with other BRIC countries (namely with the Russians), there is a growing perception that substantial flows of Chinese tourists will be sustainable only under specific conditions. On the other hand, the failure to set up adequate destinations management with an effective targeting on China would cause a deterioration of the Italian relative position in the world tourism market. In the following paragraphs we report some early results of a project work on the issues raised by Chinese tourism growth in Italy and in particular in the Region of Tuscany. The first paragraph summarizes the nature and size of

the phenomenon worldwide and with reference to Italy and Tuscany. The second paragraph defines the sustainability issues raised by the growth of Chinese tourists, a phenomenon that marks a discontinuity in the long and successful history of tourism in Tuscany, furthermore we discuss some specific elements that have been identified as critical in the Chinese tourists experience in Tuscany. The third paragraph deals with the policy implications and raises the issue of governance in destination management.

*Gateway J*

## **THE APPLICATION OF GREEN TECHNOLOGIES IN THE AUTOMOTIVE INDUSTRY: AN ASSESSMENT OF POLICY ATTEMPTS IN THE UNITED KINGDOM TO STIMULATE THE UPTAKE OF ALTERNATIVELY FUELLED VEHICLES**

**Nigel Berkeley, Coventry University, UNITED KINGDOM**

The automotive industry continues to face tremendous competitive pressures, an issue brought into sharp focus during the recent economic downturn. However, new opportunities are emerging through the application of green technologies to alternatively fuelled vehicles (AFVs). Such opportunities are influenced by both environmental and economic drivers, including the challenge of meeting the demands of the climate change agenda and reducing CO<sub>2</sub> emissions from road transport, as well as the economic potential for the automotive industry arising from the exploitation of such niche technologies. Failure to respond to these challenges could prove economically and socially damaging especially to those local economies with traditional automotive manufacturing clusters, which in many cases continue to contract in the face of global competitive pressures. A case in point is the West Midlands region of the United Kingdom, well-served by a strong automotive design and engineering base, and where the automotive cluster contributes 15% of United Kingdom car production, 28% of its market value and 28% of all automotive jobs nationally. Here, the embracing of low carbon auto mobility by both local policy makers and manufacturers presents opportunities to diversify into new market niches and prevent further hollowing out of the cluster. Whilst engagement with green technologies offers the potential to provide a significant boost to the automotive industry, this type of transformative shift requires a significant push from government both on the supply and demand sides. In particular, the lack of a clear winner in terms of competing alternative fuel solutions and the inherent assumption, at least in the short-term, that consumers are willing to invest in more expensive, poorer performing vehicles has stalled the rate of market penetration of AFVs and are challenges that the 'market' will not meet without public intervention and investment. This is itself potentially hampered by significant restructuring of sub-national economic development policy delivery in the United Kingdom since 2010. As such, this paper assesses the effectiveness to date of attempts by policy makers in the United Kingdom to influence the uptake of alternatively fuelled vehicles. In doing so it looks at supply and demand side policies, considering a range of key initiatives and schemes that have been introduced to promote the purchase of AFVs by consumers. A case study of the West Midlands region is used to illustrate how policies are being applied and implemented at a regional level. In assessing the impact of policies, wider lessons are considered for automotive clusters in other developed and developing economies. The paper finds that the United Kingdom experience demonstrates some good practice as well as areas where policy has not worked so well. A positive lesson to be drawn is the effectiveness of joined-up solutions and partnership working which engages industry, government at all levels, research institutions and energy suppliers collaboratively. Alongside this, the automotive industry itself has played a key role in forming, leading and delivering solutions. At a regional level, the West Midlands has benefited (and potentially will continue to benefit) from building upon key historical strengths and an established cluster rather than attempting to develop new industries from a position of weakness. At the same time, whilst the government should be applauded for the package of supply and demand initiatives introduced to support development, application and consumption of LCV technologies, the balance of these is considerably out of step. Much more attention needs to be paid in these early years to a demand push if potential economic benefits are to be maximised.



## **AUCKLAND 2040: PLANNING A METROPOLITAN REGION FOR LINEARITY, MULTI-DENSITY AND POLI-CENTRICITY**

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

Auckland is New Zealand's largest and most populous metropolitan area. In 2011, its four urban municipalities and three rural districts were merged into a single local government body - the Auckland Council. The city became a region. The new Auckland Council undertook to prepare its first ever Spatial Plan, with the key stated aims to achieve the status of the 'world's most liveable city' while successfully accommodating another million inhabitants in the next 30 years, on top of the current 1.5 million. The Plan adopted the 'quality compact city' concept as its preferred future form. It aims to contain 60 to 70% of the future physical growth within the present urban boundary. This paper argues the case for a different growth management strategy. We believe that the city must take into equal consideration five strategic goals: prosperity; affordability; liveability; sustainability; resilience. Having in mind the physical, economic, political and cultural realities of Auckland, is more likely that the five goals can be achieved by a more tolerant - or pragmatic - attitude towards further horizontal growth than attempting an aggressive policy of 'intensification'. The regional landscape offers many natural restrictions to 'sprawl' anyway. Provided this is coupled with a strict environmental impact restriction policy, there is no danger of greater Auckland turning into a vast suburbia. We also argue that the centrifugal forces will remain strong in the 21st century, even as it is likely that energy (and therefore mobility) will soon become two or three times more expensive than today. Innovation in ICT, ET (environmental technology) and TT (transport technology) will see that decentralised living and working remains attractive and feasible for many households and businesses. At the same time, challenges posed by climate change and resource shortages will render dispersed development less exposed to various hazards. The alternative spatial plan we propose is a low density semi-urbanised region at three levels:

- a) a 300 km long, 'banana' shaped macro-region stretching along the north coast of the North Island;
- b) a 'crescent' shaped metropolitan region along the coast of the Hauraki Gulf;
- c) a 100 km long 'necklace' shaped conurbation with an 'infrastructure spine' in the N-S direction, with about a dozen nodes (city and town centres) along it, and with suburban and peri-urban areas with additional nodes, at the west and the east side of the spine. The overall urban form is described as a 'linear regional metropolis with a variety of densities' (including selected 'compact areas', but relatively small in proportion to the whole) and many town and suburban centres. The overall infrastructure concept consists of hard, compact, linear systems (the spine), and soft, distributed and decentralised systems. This includes a big role for 'smart', 'clean' and 'green' technologies of urban infrastructure. In sum, rather than trying to become a sustainable, compact city, we argue that Auckland should strive to become a multi-density resilient urban region. In developing this paper we see the implication for the rest of the world: the idea of a resilient, polycentric region with the tolerance for a very wide range of densities of urban development is far superior and realistic in comparison to the 'compact city' dogma.

## **GOING GLOBAL: THE GEOGRAPHY OF CHINESE FIRMS' OVERSEAS LISTINGS AND ITS IMPLICATIONS**

**Daniel Brooker, Peking University, CHINA**

**Fenghua Pan, Beijing Normal University, CHINA**

Experiencing rapid economic growth during the past 30 years China has become the second largest economy in the world, producing a large number of firms with significant revenues and growth potential. With the gradual reform and opening of China's financial system a number of firms are seeking to become public firms via initial public offering (IPO) and raise capital from Chinese and overseas investors. To date, there have been over 2000 firms listed in mainland China and more than 500 firms listed abroad, many of which are well-known and highly influential. As the largest developing and transition economy, the destination of Chinese firms becoming listed has the potential to reshape the geography of stock markets. However, there have been few studies to date seeking to address and unpack this emerging financial geography and its implications. Utilising comprehensive data on overseas listed Chinese firms, this paper seeks to address this research lacuna and provide a preliminary analysis of the geography of overseas listings. Findings suggest an uneven distribution in the listings of Chinese firms in global stock markets. The main markets of Hong Kong, New York and London are the destinations of larger Chinese firms for overseas listing. Due to place promotion activities, the stock markets of Germany and

South Korea are emerging destinations for Chinese firms listing attracting generally small and medium sized private firms. Over half of firms listed have done so in the past five years and the majority high-tech or internet firms, while more traditional manufacturing firms are now listing. Furthermore, most listed firms are located in eastern China, especially in Yangtze River delta area, Pearl River delta area and Beijing, thus reflecting the spatial pattern of Chinese economy. The implications of this emerging financial geography and a future research agenda are provided at the end of the paper.

*Gateway K*

# **DRAGONS AMONG THE STARS? INTERNATIONALISATION AND IMPORT/EXPORT BETWEEN EUROPEAN SMES AND CHINA AND ITS IMPACT ON INNOVATION: AN EMPIRICAL STUDY**

**Ignazio Cabras, University of York, UNITED KINGDOM**

**Mike Tze, University of York, UNITED KINGDOM**

Small and Medium Enterprises (SMEs) are an essential component of the economy worldwide. SMEs account for 99% of the total number of businesses and approximately two thirds of global employment (OECD 2005). They are major sources of new jobs, products and processes, marketing and management (EC 2010). In particular, SMEs are important incubators and generators of innovation, which is also highly associated with their survival, with small and young firms benefiting most. However, SMEs do not always make full use of the potential of their regional innovation systems, and while advanced innovations based on scientific knowledge may result from more local social networks (e.g. with universities), incremental innovations the adoption of new technologies, can result from interactions with business partners at larger spatial levels, including international partners. Internationalisation indeed, which refers to an increasing involvement of enterprises in international markets, appears to play an important role in the process of creating and commercialising innovation among SMEs. Firms and companies expand their networks and exchange with foreign partners in the attempt to achieve competitive advantages and economies of scale. In 2009 the European Commission launched a study to map the level of internationalisation of European SMEs. The study, conducted by EIM (2009), aimed to identify and explore the main barriers and advantages of internationalisation. Results indicated that SMEs' international activities are mostly geared towards other countries inside the EU and only about 13% of EU SMEs are active in markets outside the EU. In addition, internationalised SMEs reported employment growth of 7% versus only 1% for SMEs without any international activities. Within internationalisation, China plays an important role with regard to commercial relations and partnerships for businesses worldwide. However, the number of Chinese SMEs has grown rapidly since the economic reforms of the early 1980s, which led to a more market-based economy (Hall 2006). Today, Chinese SMEs represent almost three quarters of China's total exports. In the recent decades, Europe has progressively increased its engagement with China in terms of business activity. But does the increasing internationalisation of Chinese SMEs bring more opportunities or more treats for EU businesses? And in particular, what are the implications of this expansion with regard to innovative products and services, which still provide some competitive advantages to European SMEs? This paper investigates the factors that have an impact on the capability of European SMEs to introduce new products or services in their market of reference. In particular, this paper focuses on relationships between European and Chinese companies. By using data gathered from a survey of SMEs across Europe, the author examines whether commercial exchanges and import/export between SMEs located in Europe and China influence the generation of innovative products or services, and the modalities this influence is likely to occur. Results are then discussed in the light of policies and issues concerning sustainable growth for European and Chinese SMEs.

*Gateway F*

# **INTERNATIONAL MIGRATION AND HOUSING IN OTTAWA, CANADA: A NEW TREND IN GENTRIFICATION?**

**Huhua Cao, University of Ottawa, CANADA**

**Ziwei Liu, University of Ottawa, CANADA**

**Jingle Liu, University of Ottawa, CANADA**

**Matt Gaudreau, University of Ottawa, CANADA**

Ottawa is the capital of Canada, with origins in the early 1800s. The current urban area lies in the most populated province, Ontario, and shares a long river-based border with the province of Quebec. Ottawa is

Canada's 4th largest metropolitan area with a population over 1.2 million. The city's growth rate was established at 9.1% in the 2011 census, well above the national average of 5.9%. Canada is a country that has historically relied on immigration as a source of population growth, and over the last 150 years has received many waves of newcomers from all over the world. In the current context of Ottawa, over 21% of residents are immigrants. In recent years, the urban centre has undergone significant transformation and intensification. Former commercial areas and lower income neighbourhoods have been converted into high-rise condominiums, and the periphery of the downtown core has experienced renovation of old properties. In this sense, Ottawa has simultaneously undergone two physical forms of urban redevelopment involving both "traditional gentrification" by renovation, as well as "new build" scenarios involving clearing old structures and replacing them with high rises. This is in line with the municipality's overall intensification plan for the urban core. The social dynamics of this dual process of gentrification is, however, different than traditional notions of gentrification – it is supplemented by the demand for upscale housing from recent international immigrants. While immigrant populations have previously been a group noted as victims of economic eviction due to gentrification, the case of downtown Ottawa presents a new scenario. Both income and age have risen in the downtown core over the last 15 years, alongside intensification and renewal – with a comparatively large proportion of the new residents being represented by recent immigrants. This research will use spatial analysis and advanced statistical analysis to demonstrate the unique socio-spatial patterns of Ottawa's urban redevelopment. Gentrification is a long studied phenomena in urban and regional geography. However, Ottawa provides a significant case-study of gentrification which demonstrates a trend that opposes what is often seen in cities such as London, Paris or Toronto, where newer immigrants are often ghettoized. Ottawa has increasingly witnessed new high income immigrants establish themselves in the city centre as a both primary and secondary sources of residential demand for newly gentrified property. The city has seen a fluctuation in pattern over the last 30 years, where recent immigrants initially established themselves in downtown enclaves (ex: Chinatown), then trended toward sub-urban regions, and are now re-emerging to the urban core in highly diverse, newly gentrified areas. In some cases families have property both in sub-urban areas as well as the newly redeveloped downtown. The case of Ottawa is an important example that offers insight into differing trends in gentrification, and also raises questions with regard to successful integration of new immigrants in the downtown core of cities. It is suggested by this trend that many recent immigrants in Ottawa are experiencing more fluid social mobility, and are spatially able to balance integration with community creation. This has implications for the design of immigration policy, urban development planning, and understanding behavioural differences between recent immigrants and native Ottawa residents in terms of their spatial mobility.

*Gateway J*

# **BRIDGING THE GAP BETWEEN PLACE MARKETING AND INVESTMENT ATTRACTION: REGIONAL PROMOTION IN CENTRAL EASTERN EUROPEAN REGIONS**

**Pawel Capik, Sheffield Business School, UNITED KINGDOM**

The growing mobility of multinational enterprises is increasingly matched by the public authorities' engagement in promotion activities aimed at attracting foreign investment in the hope of benefiting from the advantages this brings to the area. Regions in Central Eastern Europe continue to be relatively new destinations on the global map of investment locations. Equally the involvement of public authorities at different levels of the administrative hierarchy in the promotion process is at the developmental stages. The paper aims to achieve two principle objectives. It strives to identify the intricacies of place promotion to inward investors in the regional development context, and, in that perspective, to examine the promotional practices of relevant institutions in the Czech, Polish and Slovak regions. The former is accomplished through a conceptual linking of 'place marketing' and regional studies literatures. The latter is attained through the analysis of strategies and practices of organisations involved with investment promotion in regions of the three countries. The paper proposes a new approach to understanding of investment promotion emerging from connecting of selected promotion and marketing concepts with the established regional development policies and practices. Consequently it introduces the notion of place promotion aimed at investment attraction as a process, and elaborates its key aspects in the context of promotional tools and regional development instruments. In the subsequent part of the paper the constructed proposition serves as a framework for analysis. The argument presented results from the analysis of empirical datasets compiled in the series of interviews with representatives of national and regional promotion agents, complemented with the desk-based research and information sourced from printed and on-line materials published by the organisations concerned. The paper explores regional promotion in a multiscale context in selected regions, identifies distinct organisational arrangements and investigates how those are reflected in actions performed by participating promotion actors. In the CEE regions, a variety of organisations get directly

involved with investment promotion. An analysis of the relationships between them allows identifying organisational frameworks characteristic for each country. The review of activities performed and strategic choices made by the component agents discloses political dimension of the investment promotion process and reveals various levels of internal coherence conversely proportional to the degree of power and initiative centralisation. The dominance of the national investment promotion agency does not guarantee appropriate flow of information between the different participants of the process, which further impedes the inter-institutional synergy. Overall the current activities are often uncoordinated, unsystematic and lack long term vision. This, however varies between (and within) the countries. The findings allow the drawing of conclusions contributing to the development of place promotion discourse particularly in areas related to scale and development, and identifying a number of policy recommendations related to regional promotion organisation and practice.

*Gateway O*

## **LOCAL FINANCIAL AGGLOMERATION AND INVESTMENT IN BRAZILIAN MESOREGIONS**

**Anderson Cavalcante, Cedeplar-UFMG, BRAZIL**

The aim of this paper is to estimate a regional investment function in which financial concentration and centralisation assume a central role. An introduction is made to a post-Keynesian model where the levels of local capacity utilisation and income are determined in the short-run, altering the distribution of financial resources over the territory. Changes in regional financial concentration and centralisation then alter the dynamic adjustment of interest rates in the model. The model assumes that banks set up their mark-ups, which in turn determine the levels of local interest rates. In this framework, investment is the main component driving regional effective demand. Firms are the main drivers of growth, setting up their investment plans according to the levels of profit, real interest rates and, in the specific case of this model, local financial attributes (financial concentration and centralisation). Such regional view over the determination of interest rates and investment are rare in the literature. Few works have highlighted the region and its features as primary drivers of the behaviour of financial institutions. Banks are important players in the regional growth process, since they take the changes in regional liquidity preference, uncertainty and distribution of financial resources to set their mark-up. Moreover, as the regional banking mark-up directly affects local interest rates, the level of investment of firms in the region is dependent on this process. This is because changes in interest rates affect borrowing costs by firms, which can alter their investment plans. Since financial institutions and (complex) financial services are not ubiquitously distributed over the territory, there is an extra component that should be considered when investigating the difference in regional investment rates. In line with that, this paper brings the estimation of the effects of local interest rates and financial agglomeration on investment by firms in Brazilian mesoregions. Brazil is a continental country, with extreme economic differences among its regions. Therefore, studying the regional context of such country is of extreme relevance. However, the available dataset on local investment rates in Brazil is rather limited, only offering annual information from 1996 to 2005. Nonetheless, the short time period and the large number of regions (128) favour the use of a panel data technique for the empirical investigation. In spite of issues that panel data estimation raises in relation to the heterogeneity of regions, the investigation in this paper can be said to suffer less from such problem. First, it can be expected from heteroskedasticity to be less significant for regions within a country due to homogeneity of institutions and, particularly in the case of Brazil, for having a national banking system that operates through branching. This characteristic indicates that banks in Brazil manage their portfolio nationally, taking regional financial features into account. The prevalence of centralised banking strategies when managing portfolios, which are submitted to specific characteristic of different regions, renders the regional heterogeneity more evident. This, in turn, facilitates the use of a econometric technique that models these heterogeneities explicitly. Secondly, this paper uses hierarchical (multilevel) modelling, a panel data technique that enables estimations to provide parameters that have their own variance according to different regional scales. This feature not only does it allow parameters to have their own confidence interval according to the group of regions investigated, but it also offers sufficient flexibility to address issues with heterogeneous regions. Furthermore, the panel data technique enables the analysis of a large number of regions, which simplifies the exposition and analysis of results. Overall, results not only do they indicate that local interest rates and regional financial attributes are fundamental to firms' accumulation plans, but also that investment and the sensitivity to their predictors might change depending on which mesoregion firms are located. This is due to the variability of coefficients on local interest rates and their relationship to financial agglomeration and profit rates set locally. Moreover, results also indicate that investment in peripheral regions is more sensitive to changes in the financial conditions, which alludes to the importance of taking a special care for the local financial attributes as a tool for regional development in Brazil.

## **CITY GREENING AS A BRAND IN HONG KONG – ITS POTENTIAL AND IMPLEMENTATION GAP**

**Chung-Shing Chan, The Chinese University of Hong Kong, CHINA**

**Lawal M. Marafa, The Chinese University of Hong Kong, CHINA**

Continuous urbanization is an inevitable global trend that brings a number of fundamental changes in various dimensions to cities. In a globalized world, cities have increasingly competed for various types of resources and attention. In attempt to attract tourists, investors and professionals from other regions, cities have begun to study how to promote, market and even brand their competitive advantages and make these advantages sustainable. Place branding is multi-disciplinary nature because places including cities can be viewed from different perspectives such as consumer products, images, corporate brands and clusters of services. From a marketing perspective, cities are complex entities unlike products and services. Branding of cities involve more complex elements, structuring of spaces and relationships among stakeholders. This is a point for geographers to play an important role in studying the phenomenon beyond marketing discipline where the concept of branding originates. It is observed that some cities have long identified their abundant city green resources such as urban parks and green spaces, as an advantage in promoting and marketing their cities as liveable and sustainable ones. Nevertheless, there appears a dearth of knowledge and theoretical development in studying ecological or environmental factors like green resources as a theme for city branding. There is one basic question to be answered: Can city green resources be potentially used as a theme in the emerging conceptualization and development of city branding? Hong Kong has been officially branded as the Asian World City for more than a decade. After a brand review exercise conducted in 2008, there appears a call for a greener city with a green living environment. In fact, Hong Kong possesses rich resources of city greening such as protected areas, parks and green spaces, trees, urban forests and landscapes scattered around the territory. To achieve using these green resources as a city brand, what can be learnt from the concept and models of city branding? Can green resources be a successful theme for city branding in Hong Kong? As part of a doctoral research, this presentation aims at: (i) introducing the key concepts related to city branding and proposing a conceptual framework through review on some fundamental literatures; and (ii) establishing some research questions on a study supported by some methodological propositions related to city branding in Hong Kong. The proposed research may contribute to filling a knowledge gap of utilizing city green resources as a theme for city brand. It may act as a pioneer study on the city greening image of Hong Kong.

## **THE REGIONAL ECONOMIC EFFECTS OF A REDUCTION IN CARBON EMISSIONS**

**Anping Chen, Jinan University School of Economics, CHINA**

**Nicolaas Groenewold, University of Western Australia, AUSTRALIA**

**A.J. Hagger, University of Tasmania, TASMANIA**

Climate change has lead to policy to reduce CO<sub>2</sub> emissions and it is likely that policy will have differential regional impacts. While regional impacts will be politically important, very little analysis of them has been carried out. This paper contributes to the analysis of this issue by building a small model involving two regions and we incorporate the right to emit CO<sub>2</sub> as a factor of production with the level of permitted emissions set by the national government. We argue that there is likely to be pressure on governments to use other policies to offset the possible adverse regional economic consequences of the pollution-reduction policy and also consider a range of such policies. Using numerical simulation we find that a 10% reduction has relatively small but regionally differentiated effects. Standard fiscal policies are generally ineffective or counter-productive while labour market policies are more useful in offsetting the adverse effects.

**POLITICAL RELATIONSHIPS AND REGIONAL COOPERATION IN CHINA: A CASE STUDY OF PAN-PRD**

**Yu Chen, Shenzhen University, CHINA**

**Anthony Yeh, The University of Hong Kong, CHINA**

Since the beginning of the 21st century, regional development has become one of the most vital economic issues in China. Local governments have sought opportunities to foster local economic prosperity by forming more competitive economic blocks with neighbouring jurisdictions. In particular, growth poles like the Yangtze River Delta (YRD) and Pearl River Delta (PRD) have been very active in promoting regional integration and cooperation as they need the support of other hinterlands for further development. Since economic development is strongly influenced by both central and local governments in China, the political relationship between local governments, especially key political leaders, has significant importance on regional cooperation and regional development. It is argued that local government leaders compete with each other to pursue political promotion, meaning one official's promotion implies his competitor's absolute failure. Such competition between local leaders is described as a political tournament. Under such assumption, local officials will have little room for cooperation but ample room for competition. However, not only different provinces in China have different economic status, the provincial leaders not necessarily have the same political ranking. Therefore, provincial leaders with different political rankings may not have direct political competition with each other. This study attempts to explore the political relationships between provincial leaders in the context of regional cooperation in China, using Pan-PRD as a case study. Using game theory, the study shows that political incentives for local governments to perform regional cooperation are viable given a proper institutional arrangement. The central government can leverage its political control on the appointment of provincial leaders to provide such political incentives to promote regional development.

**THE OVERALL EVALUATION OF YANGTZE RIVER DELTA REGION TO IMPLEMENT THE NATIONAL STRATEGY**

**Wen Chen, Nanjing Institute of Geography And Limnology, The Chinese Academy of Sciences CHINA**

As an important means of making overall planning of regional resources and coordinating regional development, Regional planning receives attention increasingly. Because regional planning and its implementation is a long-term process, especially accompanied by many uncertain factors, so it's necessary to make assessment of the actual situation of planning to achieve the best performance. The implementation of regional planning of the Yangtze River Delta Region make the development of this area rise up to the overall national development strategy. In the face of the rapid changing environment at home and abroad, we need to make Dynamic evaluation of the past policies, the future direction and the overall development strategy. Based on this, this article take three aspects as the focus of evaluation, including the overall goals, strategic positioning and spatial layout framework to make detailed evaluation. Based on the assessment results, this article further analyses the possibility to finish objectives and the problems may exist, which could provide reference when adjusting planning and promoting its scientific implementation.

**IS CHINESE URBAN ENTREPRENEURIALISM WORKING TOWARDS KNOWLEDGE BASED AND ECOLOGICAL OUTCOMES? A PERSPECTIVE OF LAND-CENTRED DECENTRALIZATION**

**Shiuh-Shen Chien, National Taiwan University, TAIWAN**

Urban China scholars generally agree that Chinese entrepreneurial city authorities play a crucial role over post-Mao economic transition. This is called Chinese urban entrepreneurialism, one of whose characters is to build up their development zones for short-term economic growth with many negative externalities, like limited innovation and unsustainability, as a consequence. In order to fix these externalities, since the late 1990s many urban governments started to build up so-called university towns in their jurisdictions. After the mid-2010s, there is even a tendency that city governments made plans to construct eco-city projects. These two phenomena

actually call for a research question whether or not Chinese entrepreneurialism is catching up global opportunities such as knowledge economy or green economy? This paper critically reviews these two phenomena, which is what I call “university-town” fever and “eco-city” fever. My argument is that Chinese urban entrepreneurialism seldom operates knowledgeably and ecologically as its western counterpart does. Under the particular context of land-centred decentralization, concepts of university-town and eco-city only work tacitly as another entrepreneurial strategy by Chinese city authorities to respond local financial crisis.

*Gateway L*

## **COMMUNITY MOTIVE: THE UNTAPPED IDENTITY FACTOR FOR REGIONAL DEVELOPMENT**

**Thomas Christoffel, Regional/Greater Communities, LLC, USA**

Regional development theory advises localities to cooperate, building environments that are “profit motive” friendly. As localities respond to this short-term business motive, what is their motive? Taxbase improvement? Wages? Though answers, an inclusive “community motive” is offered. Aldo Leopold (1944) wrote: “Acts of conservation without the requisite desire and skills are futile. To create these desires and skills and the community motive is the task of education.” No use of this term for development was found. Community is assumed to exist for localities with long term perpetuation its goal. In multi-jurisdictional regions, regional identity is a loss of local identity. Making “community motive” conscious and scalable is offered an untapped identity factor for regional development.

*Gateway F*

## **GLOBALISING CHINA'S CITIES: A CRITICAL REVIEW OF RECENT EVIDENCE AND AN EMERGING SOCIO-ECONOMIC TYPOLOGY**

**Ilya Chubarov, Peking University, CHINA**  
**Daniel Brooker, Peking University, CHINA**

The rapid growth of the Chinese economy during the last three decades since the period of reform and opening is closely connected to processes of globalisation and urbanisation. In particular, rapid development in CHINA has led to the emergence of a number of large urban centres characterised by their competing claims of becoming 'global cities'. However, to date research on global cities has tended to focus on case studies from 'developed' countries and limited attention has been given to the urban outcomes of globalisation and regional development in China. Concomitantly there has been a pre-occupation with the production of rankings, both specific and comprehensive in nature, to measure the 'globalness' of cities. The paper here seeks to examine the development of global cities in China and is grounded in empirical research attentive to both China's urban geography and its uniqueness as the largest developing and transition economy. Utilising recent data the focus of the paper is to develop a typology of China's global cities and to unpack their functional economic and socio-cultural characteristics. The first part of the paper summarises recent developments in 'global city' theory and then provides a summary of work within the East Asian context. The paper then develops a conceptual framework for understanding global cities in the Chinese context drawing on literature from Chinese and international scholars. A preliminary typology is then discussed drawing on empirical data which suggests the emergence of Beijing as a 'global capital city', Hong Kong as a 'global gateway city' and Shanghai, Shenzhen, Guangzhou as 'global industrial and innovation cities'.

*Gateway J*

## **FORMING OF CREATIVE ECONOMICS ON THE BASIS OF HISTORICAL CONTEXT**

**Ondoej Chwaszcz, Tomas Bata University In Zlin, CZECH REPUBLIC**  
**Jitka Kloudová, Tomas Bata University In Zlin, CZECH REPUBLIC**

This work presents complex theoretical framework of new growth theory called a creative economics. Recently, more and more of awareness is given to the creativity. Actually, the European Union nominates the year of 2009

as a year of creativity and innovation. On the other hand there is still not any unification concept of the creativity. That is why there is a need to formulate new paradigm in a form of creative economics, so that we would be able to understand the role of creativity in economic and social development. The creativity accompanies the human development since its roots till now. First discoveries from first time of human existence were mostly just accidental reaction. Gradually, the rising standard of living rose with contribution of creative thinking. This led to new finds enabling effective hunting and agriculture. However, the society slightly stagnated what was explained by population theory of R. Malthus. . The pessimistic attitude to the growth was definitely disproved during the 19th century on theoretic (Smith, Ricardo...) and primarily on practical field. The Industrial Revolution initiated the growth of economy and living standard. It is just this era which provides inspiring elements that are necessary to be analysed to understand the current processes in the economy. The Industrial Revolution is well known for the significant inventions. When taking a closer look to this issue this work presents other factors which support the economic growth. These factors are based on well working institutional environment, micro innovations, openness and cooperation. The other significant step which contributes to formation of creative economics is so called second technological wave based on the arrival of internet and information and communication technologies (ICT). The World has started being interconnected. The rare resource could be allocated much effectively (outsourcing, offshoring, insourcing), this caused the pressure on change of business models and patterns of business cooperation. Companies realized the necessity of transformation and the demand for scientific workers and wide base of knowledge. The development of ICT created the demand for specialists from that branch, many new branches have appeared and the former ones required to be supplemented by knowledge. As a result the new labour class has arisen, this class is charged to create ideas. We are talking about the specific creative class, formerly described by Richard Florida. These people currently present the engine of economic growth. Their allocation is not equal what cause the different economic development of the regions. At the same time there is another effect of second technological wave which was reflected in routine social rule, manners of work and level of living. Human wants to diversify himself currently, creates the demand for luxury good and strives for self-realisation. On the ground of these facts the second part of creative class is formed, this composes the suitable environment of social development. If the individual regions like to succeed in a future they must focus on the expansion of creativity. The only way how to achieve this is to create appropriate atmosphere which would be attractive for the holders of creativity – creative workers. The understanding of the concept of creative economics may be the guideline to realisation of prosperous creative regions. In conclusion of the work there are the basic thesis of creative economics supported by present research in the field of the mapping of creative potential and its connection to basic macro economical indicators. It is demonstrated on the example of Germany that the creative cities perform positive correlation to economic level. Same results were confirmed at the selected regions of some countries of European Union.

*Gateway KSS1*

## **BRIDGING SCIENCE AND TRADITIONAL INDUSTRY: REGIONAL INNOVATION SYSTEMS AND INSTITUTIONAL CHANGE FOR EMERGENT BIOREFINERY TECHNOLOGIES**

**Lars Coenen, CIRCLE, Lund University & NIFU, NORWAY**  
**Jerker Moodysson, CIRCLE, Lund University, NORWAY**  
**Hanna Westendorf, CIRCLE, Lund University, NORWAY**

Following an evolutionary turn in economic geography (Boschma and Frenken, 2006; Boschma and Martin, 2010; Martin and Sunley, 2007) there is an increased interest in industrial renewal in the context of regional development (Fornahl et al., forthcoming; Hassink, 2009). Since the early 1990s there has been an ongoing engagement in the sub-discipline with the particular problems, challenges and strategies of old industrial regions (Benneworth and Hospers, 2007; Hassink and Shin, 2005; Hudson, 1989, 2005; Tödtling and Trippl, 2004). In this significant body of work there has been a particular focus on how such regions may, or may not, be able to break out of locked-in paths of development by pursuing innovation and new technological pathways. More recently this debate has gained further momentum through the introduction of the concept of related variety (Frenken et al., 2007). Instead of juxtaposing regional specialization versus regional diversity as guiding principles for economic development, it draws attention to the economic importance of bringing different but complementary pieces of knowledge together. More specifically, it offers a new way to consider opportunities of regions to diversify into new industries and, thus, to contribute to dynamic processes of economic renewal (Asheim et al., 2011). At the same time, various scholars have articulated some doubts that an overriding focus has been attributed to micro-level firm routines in evolutionary economic geography at the expense of other actors and institutions (such as the state) (MacKinnon et al, 2009, Morgan, forthcoming). This reflects a more



fundamental concern concerning how to combine and relate overlapping economic, institutional and political approaches in the context of evolutionary economic geography. The objective of this paper is to further insights on the potentials and barriers for industrial renewal in locked-in regions and industries by building on a combined institutional-evolutionary approach. To do so, the paper analyzes the Swedish VINNVÄXT program 'Biorefinery of the Future' (Biof). VINNVÄXT is one of VINNOVAs (the Swedish agency for innovation systems) regional support programs with the aim to promote sustainable regional growth by developing internationally competitive research and innovation environments in specific growth fields. More specifically, the Biof initiative is geared to develop a strong innovation environment for biorefinery development from raw materials provided by forests in the area of Örnsköldsvik and Umeå in Northern Sweden by strengthening industry-university ties. The forest industry is a traditionally important and sizeable industry in this region in terms of employment opportunities. However, due to shrinking global demand for paper products and tightening global competition, the industry is facing challenges to remain competitive. Therefore, the industry is seeking alternative ways to extract greater value from biomass. A biorefinery can be seen as a platform technology that integrates biomass conversion processes and equipment to produce environmentally friendly fuels, power, heat, and value-added chemicals from biomass. As such, it offers a possibility for forest related industries to increase its efficiency and diversify into different markets and, in doing so, potentially contribute to a renewal of this industry. The Biof initiative can therefore be seen both as an attempt to address regional lock-in but also, and more importantly, as a way to promote renewal of an industry which, if successful, would have far reaching (environmental and economic) positive impact also beyond the region in which it is set up. From an EEG perspective, the Biof initiative makes a relevant and interesting case to study the emergence of novelty in the context of a mature industry. The initiative pertains to a large extent to the introduction and bridging of new scientific and technological knowledge into what is considered by many as a conservative and risk-averse industry, located in an area where traditional forest related industries to a large extent have defined the economic identity of the region. Previous studies have shown that there has been a fair deal of resistance in the forest industry against what is considered to be a radical and disruptive technological pathway (Laestadius, 2000, Wolf et al., 2006). As such, it makes an interesting case to question: To what extent and how can a regional innovation support program, and its efforts to foster the adoption of science-based knowledge creation and exploitation, contribute to the renewal of a mature industry? The active engagement and involvement of policy and public authorities in Biof opens up for both an evolutionary and institutional perspective on industrial and regional renewal. To cater for a joint evolutionary and institutional perspective, the paper draws on a theoretical framework that borrows concepts from EEG regarding path-dependence, related variety and lock-in, and combines these with insights from science and technology studies concerning the co-evolution of technologies and institutions in light of disruptive shifts or transitions in socio-technical systems (Geels, 2002, 2004; Truffer and Coenen, 2012).

*Gateway J*

## **DISPARITY IN PATTERNS OF LOCAL DEVELOPMENT: THE CASE OF 'DIRT ROAD' CLUSTERS AND CO-EXISTING DIFFERENCES**

**Ambra Collino, University of Florence, ITALY**

**Marco Bellandi, University of Florence, ITALY**

**Mario Biggeri, University of Florence, ITALY**

**Huanhuai Zhou, Wenzhou University, CHINA**

In this paper, we remark the need to change the coordinates of thinking regional development toward the notion of "local and regional human sustainable development". In the countless theoretical and empirical papers on regional and local development through SMEs and clusters of SMEs there still is a vacuum due (we think), to a mismatching of 'interests'. Clusters to be studied need to be successful (at least once in their life cycle) or need to present strong potential, so the support regional, national programmes and also international agencies programmes tend to select the 'right' clusters to demonstrate success and policy makers want to show successful cases. Thus, in the literature there is much evidence of these successful case studies and very few (although increasing in number) in the literature. A cluster and its related local system of development can have two roads of development: a low road or a high road (Pyke 1992; Pyke, Senberger and Becattini, 1990). We also advanced the debate on this dichotomy by arguing that high road/low road are not sufficient to depict fully the dynamic process of clustering and, thus, we introduced a dirt road to include the ignored dimension of social results (Mehrotra and Biggeri, 2007). The dirt roads cluster is characterised often by micro-small enterprises in the informal sector with no or insufficient social protection. They can be a product of international competition, an expression of sub-contracting (in the international value chain) often involving foreign direct investment that

escapes social/environmental costs in their home countries. Thus, inducing the reduction of wage and labour rights and/or capturing negative externalities such as: poor environmental conditions, no social protection, sometimes hazardous occupations or processes and poor working conditions (e.g. poor lighting and ventilation, non-availability of safety devices, exposure to toxic substances, and so on). Furthermore, and is increasing with globalisation, quite often in the same local development system high, low and dirt road patterns can be found even in the same cluster although they may reside in the same local area and are often networked at least through sub-contracting and via intermediaries, but also presenting different segments of the supply and demand structure. Up to nowadays, the lack understanding of these phenomena and of the integration in research had a negative effect at policy design effectiveness both in developed and developing countries. According to this, the objects of this paper are two. The first is to propose a theoretical framework to analyze the evolutionary patterns of local and regional systems and their key role for human development. The second is to present a case study in Italy and a case study in China where the 'dirt road' and the 'high road' development patterns coexists and to present some policy implications accordingly. The paper is divided into four sections. In the second section, we propose a theoretical framework to analyse local and regional human sustainable development. This framework facilitates the identification and analysis of human development patterns in terms of outcomes performance from a cross and time perspective at regional and local level. the theoretical framework captures different patterns of human development progress through the distinction between the social dimensions (SD) and the economic dimensions (ED) as 'command over resources'. This framework also increase the understanding of the weakness of a cluster itself, helps to explain the potential strategic routes to up-grade the cluster and the local systems. The transition from one stage of development to a better one is not an easy socio-economic process itself, which can be positively or negatively influenced or, on the contrary, not influenced at all by any policy directed to an up-grading objective Furthermore, as we underline in the case study different levels of good and bad human and sustainable development may co-exists in the same cluster and in the system of local/regional development. In the third section, we present two case studies which demonstrate the necessity to disentangle local/regional development in order foster human sustainable development at the local level. The first case study regards the Chinese community in Italy (specifically Wenzhounese) in the province of Florence. While the second case study takes into consideration a specialized town in Guangdong China where large part of the labour force is constituted by migrants from other provinces. In the last section of the paper policy implications for the stakeholders at local level and their relationship with national and international policies are outlined and the main conclusions and research perspectives are reported. Although we do believe on the relevance of local/regional development we do not deny that human development progress requires broader national and international actions e.g. broader macroeconomic policies including those to create and promote human rights and decent work, overcome poverty, policies addressing human security and universal social protection.

*Gateway A*

## **REGIONAL LABOUR PRODUCTIVITY GROWTH, MIGRATION AND ENVIRONMENTAL DECOUPLING**

**Cathy Xin Cui, Fraser of Allander Institute, UNITED KINGDOM**

This paper examines the issue of decoupling economic growth and pollution through growth driven by productivity improvements; and the extent to which pollution effects spill over regional and national borders. Focus is widened from conventional production measures of pollution to a consumption accounting principle (carbon footprints). This adds a useful dimension to understanding of pollution leakage effects. Using an interregional empirical general equilibrium framework, we consider the impacts of productivity growth in one region in that region and a neighbour linked through trade in goods and services and in the factor of production that is targeted with the productivity improvement (here through interregional migration of labour). The key finding is that while economic growth resulting from the productivity improvement in one region is accompanied by increased absolute pollution levels across both regions, positive competitiveness effects lead to a reduction in imports and pollution embodied therein to both regions from the rest of the world.

**WHERE THE BRAINS ARE, WHERE THE BRAINS MOVE? EDUCATION, SKILLED MIGRATION AND HUMAN CAPITAL IN POLAND**

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

**Krzysztof Janc, Institute of Geography And Regional Development, Wroclaw University, POLAND**

**Artur Bajerski, Institute of Socio-Economic Geography And Spatial Management, Poznan University, POLAND**

The development of human resources potentially has a key role to play as a driver of regional development and constitutes a specific element of the territorial capital of a region. In this concern, it can be argued that accessibility to educational opportunities is an important determining factor in developing the potential of such human resources. Whereas the Lisbon Strategy (EC 2000; CEC 2005) stresses the important role played by R&D investments, and especially by those focusing on raising education levels, in the overall framework of a competitive Europe, the strong focus on successful economic areas that characterises the overall flavour of the document, translates in many cases to a lack of emphasis on the improvement of education opportunities within less favoured regions. Uneven accessibility to education implies that certain areas will be disadvantaged in terms of development potential and this, in turn, may contribute to further fuelling regional disparities and exacerbating the current mega-trends witnessed in the EU. Another important aspect is migration of well-educated person “; brains movement. Directions of migration, which point out the attractive areas, make it also possible to determine the areas featuring disadvantageous living conditions. So, the quantitative and qualitative changes of human resources are essential from the point of view of designation of feasible trajectories of regional development. The first aim of the presentation will be analysis of the educational level of pupils at the primary school and then educational level of the adult population. The analysis of that two different groups is very important, because in Poland we can observe the situation that pupils in the whole country has relatively similar educational skills and results. There are observed some regional differences and also differences between urban and rural areas but they are not very significant. But then the educational level of adult population is very diversified - every fifth inhabitant of the town has higher education, while in the countryside only every twentieth. The highest education levels are observed within the areas situated in the vicinity of large urban centres, especially regional capitals, the least advantageous situation exists in the areas between such zones, that can be labelled “;intraregional peripheries of economic development”;. Several disadvantageous conditions coincide on these areas: scarce accessibility to the establishments of tertiary education institutions in larger towns and lack of such establishments in the immediate vicinity. The second aim of the presentation will be explanation by a set of factors such important spatial differences and strong process of concentration of the highest skilled population. In this point the biggest attention will be paid on migration flows (especially migration according to educational level) and socio-economic situation (situation on labour market) on the areas of emigration and immigration.

**TOWARDS A PLACE-BASED EU REGIONAL POLICY? STRATEGIC REGIONAL DEVELOPMENT PLANNING IN CENTRAL AND EASTERN EUROPE**

**Marcin Marek Dabrowski, Institute for European Integration Research, Austrian Academy of Sciences, AUSTRIA**

The paper investigates the impact of the EU cohesion policy and its programming principle on the practices of the sub-national authorities in Central and Eastern European countries, the main beneficiaries of EU development funding. The programming principle requires that the EU-funded interventions are based on multi-annual strategic plans tailored to regional/local development needs. This issue is of prime importance in the current context of increasing pressure on EU cohesion policy to deliver more tangible results and added value. As a result, growing emphasis is put on spending the structural funds in a more strategic and effective way with interventions tailored to the specific development challenges and opportunities in the assisted areas. Drawing on new empirical evidence from the new EU Member States (NMS) the paper demonstrates that the impact of the programming principle is differentiated and too often remains limited to ‘formal’ and ‘superficial’ changes introduced in order to get access to EU structural funding. In fact, the implementation of strategic multi-annual development planning in the NMS faces a number of obstacles stemming from their institutional legacies: weak administrative capacity, centralized policy-making, mistrust, politicized decision-making and clientelism. This

can result in ‘shallow’ adjustment, whereby the sub-national actors adjust superficially to EU requirements in order to gain access to funding, which in turn would lead to sub-optimal use of the structural funds and limit the effectiveness and efficiency of EU cohesion policy. Against this background, the paper investigates the ‘depth’ of the impact of EU cohesion policy and its strategic planning requirement on the practices of the sub-national authorities in Central and Eastern Europe. The paper focuses on the strategic planning practices at the regional and local levels in three of the NMS having differentiated systems of territorial administration: Poland, Czech Republic and Hungary. While having many similar institutional characteristics, these countries differ significantly in terms of the degree of decentralization and the organization of territorial administration, which results in differentiated patterns of adjustment to the EU cohesion policy framework. The study is based primarily on 46 semi-structured interviews conducted during winter of 2011 in Lower Silesia (Poland), South East region (Czech Republic) and South Transdanubia (Hungary) as well in these countries’ capital cities. The interviewees were selected among the key informants within the institutions coordinating the implementation of EU cohesion policy (e.g. Ministries of Regional Development, Hungarian National Development Agency), regional-level institutions distributing the SF (regional authorities, regional development agencies), local authorities implementing EU-funded projects and a variety of experts. This was complemented by an analysis of secondary sources (evaluation reports, programming documents, press articles), which allowed for triangulating the findings from interviews. This comparative case study showed that in all three regions studied EU cohesion policy contributed to diffusion of multi-annual strategic planning of developmental initiatives at all levels (central, regional, local). The strategic planning requirement stimulated reflection on regional/local developmental needs, challenges and opportunities. There is also evidence of spill over effects, which can be considered as an indicator of internalization of strategic multi-annual development planning. This practice is increasingly used beyond the EU-funded programs and projects. A closer look, however, reveals several barriers to institutionalization of strategic planning. In fact, many sub-national actors consider it as an irksome ‘formality’ required to acquire EU money, while the enormous media and political pressure to spend/acquire the SF can relegate strategic planning to the background. Additionally, many local authorities lack the capacity to prepare strategic documents and, hence, decide to sub-contract this task to consultancies that use the same ‘template’ for preparing local strategic documents. Moreover, regional/local political considerations and the influence of clientelistic networks, can result in watering down the initial strategic assumptions. Therefore, the impact of EU policy norms is multi-faceted and tends to be differentiated across the local authorities within a region, depending on the capacity, preferences and attitudes of the local elites. Finally, limited participation of stakeholders in strategy formulation and the central government’s close control over the contents of the regional strategic documents (particularly in Hungary, Czech Republic) defies the purpose of strategic planning tailored to regional specificities. Regarding implications for policy, the paper shows that a place-based regional development policy can only be effective when the sub-national authorities have the capacity to engage in strategic planning and extract local knowledge from stakeholders. This points to the need for increased efforts to improve the administrative capacity at the sub-national level and actions raising the actors’ awareness of the benefits of strategic planning and horizontal partnership, which should be coupled with stronger incentives for putting them into practice (conditionalities).

#### *Gateway D*

### **CONTRASTING PERCEPTIONS OF THE CHALLENGES OF RURAL SMES: YOU SAY POTATO**

**Mike Danson, University of the West of Scotland, UNITED KINGDOM**

**David Moyes, University of the West of Scotland, UNITED KINGDOM**

Rural entrepreneurship research traditionally focuses on the farmer or on rural communities but increasingly fails to reflect the growing importance of non-agricultural enterprises. Indeed, very little work has been undertaken to examine the ways in which small rural firms adapt and respond to the challenges of operating in a difficult environment. While there have been recent studies to address this deficit (covered in particular in the RSA Research Network ‘Peripheral and Marginal Regions in Northern Europe’), this study focuses on examining the perceptions of the challenges of rurality for rural SME owners in the business to consumer service sector. It then contrasts their views with those of policy makers and small business advisers in the region. The paper adopts a qualitative approach with twelve business-owners and eight key informants drawn mainly from the public sector interviewed. It is shown that the perception of the two groups do not align: policy makers and advisers consider that structural weaknesses and a ‘lifestyle’ business culture in the region inhibit growth; businesses owners are highly critical of the promotion of the region and its poor image as a visitor destination. The owners are strategic in their business aspirations. The paper concludes that regional policies derived from a misunderstanding of the operating constraints and underpinning culture of indigenous businesses

are unlikely to be successful and may be counter-productive. Exacerbating this, it is argued that SME business support policy has not been developed from robust research into the needs and challenges of indigenous businesses. To support and inform the development of a dedicated policy appropriate for this environment, it is suggested that further detailed empirical work needs to be carried out.

#### *Gateway A*

### **REDUCING GREENHOUSE GAS EMISSIONS FROM URBAN COMMUTING: WHAT LINKS WITH HOUSEHOLDS' WELFARE, HOUSING DENSITY AND ACCESS TO URBAN AMENITIES?**

**François Des Rosiers, Crad, Université Laval, CANADA**

**Marius Theriault, Crad, University Laval, CANADA**

**Gjin Biba, Crad, University Laval, CANADA**

**Marie-Helene Vandersmissen, Crad, Université Laval, CANADA**

This paper presents and discusses spatial variations of average greenhouse gases (GHG) emission rates linked to daily transportation of persons within an urban context, considering the marginal effect of households' economic status and the urban form on mobility behaviour, motorization and residential choices. It presents an empirical modelling of these relationships for Quebec City (Canada) based on simulations and assessments combining an extensive origin-destination (OD) survey (33,859 households; 209,849 trips; sample rate > 10%), population census data and land use records (324,232 properties) for 2006. Complex simulation procedures were used in transportation geographical information systems (TGIS) in order to model travel from the OD survey, estimating route choice, distances, speed, fuel consumption, cost and GHG emissions for each trip, considering mode choice and vehicle occupancy. Average results of respondents (using survey expansion factors) are summarized at their living places within the entire region using hexagonal grid cells (250-meters radius; 16 hectares). Where needed, adaptive spatial kernels were used in order to improve precision and accuracy of results for low density grid cells, using neighbouring cells data in order to refine estimations (e.g. estimate local modal share based on a sufficient number of OD survey respondents). The main purpose of this research is to provide new insight for reducing GHG emissions linked to transportation, furthering our knowledge on linkages between urban form and economic constraints, travel behaviour, and ability-to-pay of households based on residential choices and property ownership statuses. The theoretical framework combines the Alonso's urban rent theory with Ewing and Cervero's 5D principles to assess the sustainability of urban developments. Quebec City provides a powerful experimental terrain for testing impacts of private costs and residential choices on daily mobility outcomes, having mostly the attributes of a typical North American city (urban sprawl and high density network of motorways with a public bus transit system), but still having a high density (and land use diversified) city core built before the 20th century. Regression models are developed at the grid cell-level (4,000 cells) in order to test relationships and estimate elasticity coefficients linking average daily GHG emissions (grams of CO<sub>2</sub>-eq. per day per household) to economic status of neighbourhoods (effort rate for housing computed for both property owners and tenants, housing expenses, effort rate to pay for transportation costs), motorization status, modal share of active and public transportation as well as carpooling ratios. Preliminary models test for the marginal effect of urban form indicators like residential density, access to public transportation and accessibility to urban services and the job market based on residential location. Actual findings indicate good potential for measuring relationships at this lowly aggregated geographical scale, leading to comparison of planning strategies for enhanced public policies. As expected, GHG emissions levels increase with motorization and high prevalence of car drivers, as well as with higher incomes, but only for home owners. Poorer tenants displaying high effort rates for housing are usually forced to stay close to city centre (and jobs) in order to reduce their transportation costs and overall expenditures for housing and transportation, leading to lower GHG emissions. However, increasing residential density, improving walking access to jobs and local shops clearly enhance the levels of active transportation, leading to the stronger, and highly significant reduction of GHG emissions as brought out by our model. Because nearly 40% of total GHG emissions in Quebec City are related to transportation, these preliminary findings are promising for urban planning and public policy (housing and transportation), potentially enhancing sustainability of the region, while reducing overall housing-transportation costs and households' commuting burden.

**Ilaria Dioli, Università Cattolica Di Piacenza, ITALY****Paolo Rizzi, Università Cattolica Di Piacenza, ITALY**

This paper intends to explore the theme of urban regeneration in peculiar quarters of some Italian cities hit by decay and decline. The first part concerns the main theoretical aspects of the theme and the second part takes into consideration some empirical examples highlighting culture and art as key factors of urban development. In fact a particular environment conducive to creativity is the Cultural Quarters which are, by virtue of the presence of production and consumption of culture, places of cross fertilization between people, genders and different areas. The policy actions for regeneration and cultural promotion have a relevant role to contrast feelings of insecurity caused by specific social situations, improving both the image of the city and forms of social cohesion by involving the community of residents and young artists as the process is long and needs the engagement of many people. This paper aims at presenting urban regeneration not only as a process of physical change and improvement but also a social and cultural enhancement. Starting from the definition of urban regeneration, this study focuses the evolution of such phenomenon, analyzing and evaluating the outcomes, by identifying some elements of success. It offers an overview of some Italian experiences and a particular focus is devoted to a case in the city of Piacenza in the North of Italy. The methodology adopted different methods and combines a qualitative and a quantitative approach, bringing together literature references and survey data along with an appropriate case study examination. In particular a survey on the quarter's residents and city users was led before and after the institution of a urban development Agency which reveals how culture-oriented actions and local operations based on young artists is able to change the common perception of quality of life, especially where multicultural areas are often subjectively perceived more as an issue than as a resource. The variety of results related to urban regeneration through arts and culture concerns different dimensions and eventual outcomes: economic (new opportunity in trade, shops diversification, activities openings), social, environmental and cultural awareness as well as physical improvement, as to image and perception. Some programs have succeeded in re-building or reinforcing the identity of urban quarters as a benefit of the whole city, in terms of quality of life, economic raise, place branding and social cohesion also contrasting ethnic exclusion and feelings of insecurity. These quarters become livable places able to attract new residents, tourists and investment and the examples presented in this paper show that some impacts of such strategies can have great effects on competitiveness and distinctiveness of a city and part of it.

**Miranda Ebbekink, Radboud University, THE NETHERLANDS**

Since the 1980s, public policymakers have drawn up and executed cluster policies aimed at competitiveness. Unfortunately, these cluster policies have met mixed results. To some extent, disappointments can be attributed to the dynamics manifested by the regional as well as the external economy. However, the way policies are conceived and implemented, is a contributing factor as well. To improve the latter, this paper argues that more attention should be paid to cluster governance. Cluster governance ensures that the cluster policy as a whole is guided by a continuous dialogue between governmental officials, cluster actors and experts that couples strategic intelligence, insights of grassroots cluster actors complemented by expert knowledge, and policy intelligence. Accordingly, the strategic development options, that is, the market-technology-product combinations, that couple local strengths to global market potentials, and anchor local innovation processes to global chains of knowledge production and circulation, become known, allowing for smart specialization. Also, the 'heartbeats' of industrial and local economic dynamics can be heard and mapped out, and the real cluster needs, aka the obstacles, constraints and inefficiencies in the innovative milieu, understood. Furthermore, chances and hiccups from a governmental perspective are identified: organisational and financial possibilities (locally and upper level), key limitations and conditions (e.g. legal restrictions, zoning regulations), options for influencing and aligning local policy domains, and guaranty and duration of public support. The shared embedded intelligence attained through cluster governance is used for instigating collective strategic visioning on and determination of the strategic actions to take. Through cluster governance, cluster policy will depart from the standard policy cycle (analysis – design – implementation – evaluation). The latter approach tends to confine cluster actor involvement to pre-set hearings and moments of evaluation. Also, through cluster governance, governmental officials are more in touch with the daily reality of cluster development. Currently, they primarily

rely on analytical techniques and expert knowledge, or – even more worrying – simply copy allegedly ‘best practices’, adopt generalist off-the-shelf blueprint policy prescriptions or follow standardized ‘one-size-fits-all’ recipes. As such, policymakers not only ignore context-dependency, but also offer little scope for the development of a genuinely locally rooted collective strategy. Also, through cluster governance the policy focus shifts from a fixation on cluster building to so-called ‘policy leverage’ in which innovation synergies are nurtured through the re-design and combination of existing policies rather than the development of separate cluster policies. Next to substantive changes, cluster governance involves implementation changes. Public actors are in doubt as to what their role, from the perspective of the cluster actors, should be – just facilitative or, claiming neutrality, directive as well. In practice, they are more pre-occupied with upper level anchorage (adjusting local policy options to fit upper level policies, actors and funding possibilities) than with ensuring the cluster’s factuality and inclusion on the global map. The role cluster actors themselves can play is not fully understood. Also, a range of political-institutional, organizational and cognitive-psychological factors prove to be a bottleneck in ‘installing’ a suitable governance ‘structure’. Both in policy design and implementation, the agency of civic entrepreneurs is instrumental as they carry out various distinct roles and perform different tasks in the policy process. These will be elaborated upon in the paper. The million dollar question of course is how to find these miracle agents and whether or not a breeding ground for their development could be envisaged. The necessity of building and keeping up a practice of cluster governance is illustrated by examining the case of Health Valley in the East-Netherlands. What practices impede successful reinforcement of this cluster? Is cluster governance present and if not, what is hindering its inception, and what are the consequences of its absence? Are there any misgivings, preconceptions or ‘games’ influencing the effectiveness of policy action? Are civic entrepreneurs present and if yes how do they make a difference? The case study insights have been gained through immersion of the researcher in the daily practice of reinforcing this health cluster. The researcher was on-site for several months and employed techniques of data collection that allowed her to shadow the policymakers, namely participant observation and iterative qualitative interviewing. The preliminary results will be presented in the paper.

*Gateway K*

## **TRUST - A KEY TO INNOVATION?**

**May-Britt Ellingsen, Northern Research Institute, NORWAY**

Work in progress Actors innovate – not systems or organisations. This perspective implies that innovation can be studied as relational processes; as interaction, involvement and dialogue. Trust is a prerequisite for relational processes and key to innovation processes. Risk is another characteristic feature of innovation. To trust is one possible strategy for coping with risk. Based on qualitative studies of innovation processes on firm level supplemented with survey data, this paper presents a discussion of trust as key to innovation. The purpose is to highlight how trust influence on innovation strategies in SMB in peripheral areas, which is an understudied subject, and to explore how various strategies may mould industrial growth patterns on aggregate level. The paper draws on a qualitative case study of 19 marine biotechnological and 7 tourism firms in Troms County, Norway, in addition to survey data from the tourism industry. By contrasting two different industries, variations and similarities and innovation patterns independent of industry are highlighted. Our study indicates that: 1) trust affects strategic choices and moulds various patterns of innovation strategies and 2) on aggregate level innovation strategies seem to influence on patterns of regional industrial growth. The marine biotechnological firms are small with mainly less than 15 employees. The firms are knowledge intensive, highly specialized, produce niche products and sell on profitable national and international markets. Some of them are still in the exploration or examination phase. The regional biotech industry is rather homogenous. The tourism firms are also small with mainly less than 15 employees, except from at seasonal peaks when the number of employees may be doubled. The firms are rather specialised, the level of formalised professional knowledge vary and they operate mainly in the regional and national market. Despite these differences, the strategic role of trust seems to be similar in the two industries. Trust facilitates innovation by being the foundation for mutual understanding, openness, collaboration, interaction and taking risk. These social qualities and processes are dynamic and create the space of trust. This space influence on various elements that affects the firms innovations process such as risk-taking, openness, willingness to share knowledge, to collaborate and ambitions of growth. Our data indicates that the case firms can be divided into three categories related to pattern of enterprise development. The willingness to trust affects the growth ambitions and is the distinguishing characteristic. The firm categories are: 1) The industrial developer: local, innovative enterprises with capital, industrial traditions, willingness to pursue innovations and focus on long-term industrial development in the region. 2) The steady entrepreneur: aims at stability and control of product and enterprise, owes the firm, unwilling to share knowledge and risk

aversive. 3) The dynamic firm: pursues growth, takes risk, has ambitions of internationalization and aims at attracting external shareholders. These enterprises are willing to share knowledge and have an inviting and cooperative attitude. Trust and collaboration are prerequisites for growth. The attitude of the steady entrepreneur is characterised by lower trust than the industrial developer and dynamic firm, and the steady companies show a relative slow pace of growth while the dynamic firms grow, take risks and collaborate. Dynamic firms consider innovation as a necessity for growth while the steady have a maintenance perspective on innovation. Regional industrial patterns are aggregates of strategic decisions on firm level. Our data indicates that the introduction of dynamic developers contribute to increased regional growth pace in the industry. This implies that trust as a relational quality on micro level also contributes to generate macro level effects. Trust is a general social mechanism independent of industry, our findings from both biotech and tourism illuminate this.

#### *Gateway J*

### **HYPERMOBILITY AND THE GOVERNANCE OF GLOBAL PRODUCTION NETWORKS: THE CASE OF THE CANADIAN CYCLE INDUSTRY AND ITS LINKS WITH CHINA AND TAIWAN**

**Boyang Gao, Central University of Finance and Economics, CHINA**

**Weidong Liu, Chinese Academy of Sciences, CHINA**

**Glen Norcliffe, York University, UNITED KINGDOM**

Western firms engaged in mass retailing and in product assembly make frequent changes to their global production networks (GPNs). Indeed, some GPNs show a tendency to hypermobility, which we define as “a rapid switching of economic links among manufacturers, importers and retailers”. This theme is explored in the context of the Canadian bicycle industry where domestic production collapsed between 1980 and 2008, following a century of remarkable stability. After a period of flux when Taiwan was the key player, China has emerged as the dominant OEM (original equipment manufacturer) of bicycles sold in Canada, with big box stores accounting for the great majority of sales. We connect this increasing fluidity in supply arrangements and in the global organization of the industry with the governance of these GPNs. Several aspects of governance are considered, including the Sloanist practices of the largest Canadian retailers, and the activist role of the Chinese state in directing regional patterns of manufacturing in China.

#### *Gateway O*

### **DOES PROXIMITY MATTER ON THE DISTINCTION BETWEEN FINANCIAL SYSTEMS? THE CASE OF SAVINGS BANKS IN GERMANY**

**Stefan Gärtner, Institute For Work And Technology, GERMANY**

The paper conceptualizes a distinction between decentralized and centralized finance inter-mediation regimes. Decentralized funding regimes (e.g. German Savings Banks) call for spa-tial proximity between debtor and creditor in order to allow direct decision making. Assumedly they are superior in lending capital to smaller, not-marketable companies or private real estate buyers. Centralized regimes - by contrast - require proximity between the actors on the financial markets (concentration at financial centres or the capitals of capital), allowing them remote decision at a distance. In case of bundling, evaluation and securitisation of capital, the spatial proximity to banks, rating-agencies and specialised lawyers can be considered relevant. Comparative studies of financial systems often focus on contrasting of bank- vs. market-based systems (e.g. Demirgüç-Kunt and Levine 2001). However in a meta analyses of the common macroeconomic analyses there is little evident in regard to the advantages and disadvantages of the systems. Without doubt international financial integration has reached a high level, but significant spatial differences can be detected by the causes and effects of the crises (e.g. French et al. 2009; Martin 2011), e.g. only some countries have witnessed the emergence and burst of a housing bubble and not all countries were affected by a credit crunch (Gärtner 2011). In spite of existing global trends there seems to be no single financial system, but territorial varieties which are not homogeneous but interlinked to different degrees. In the paper it will be proposed a comparison of decentralized versus centralized financial systems as an alternative approach for comparative studies of finance.



## **CONNECTING WITH CIVIL SOCIETY: ADAPTIVE ENVIRONMENTAL GOVERNANCE IN CHINA**

**Matthew Gaudreau, University of Ottawa, CANADA**

**Huhua Cao, University of Ottawa, CANADA**

There has been much discussion in Western countries over the last 10 years about Adaptive Governance as an approach to dealing with social-ecological change. Because institutional systems with the flexible characteristics of Adaptive Governance have been shown to build and share ecological knowledge in a manner conducive to policy adaptation, they are more resilient to change. They can facilitate the collaborative identification of issues and adjust policy in order to maintain the ecosystem services of a particular social-ecological system. However, these studies and theories have been developed in Western countries and are typically applied in democratic political contexts, or in areas where the reach of the state is less intense. This study examines the relevance and applicability of adaptive governance concepts in the context of the Qinhuai River in Nanjing, particularly from the perspective of civil society participation. Environmental issues in China have gained local, national and international attention over the past decade as urbanization and industrialization has taken hold of landscapes across the country. In Nanjing, urban land cover has increased by well over 300% in the last 30 years. This change in landcover, and the growth of population and industry in the city, contributed to a decline in the quality of Qinhuai River, which begins south of Nanjing, and runs through the city centre before joining the Yangtze. Field research in Nanjing was conducted from September to December 2011, consisting of interviews and questionnaires with NGOs and fishermen. Social network analysis was employed, taking relational data between civil society actors to determine how they are connected in terms of governing the Qinhuai River. In addition, the subjects were asked about their connections to government, activities regarding the river ecology/management, and perceptions of power in terms of key actors in river governance. The study takes steps towards illustrating the developing structure of governance engines in both government and civil society as they concern the lengths of the Qinhuai River. It will be presented that in its current state, though improvements have been made to certain areas of the Qinhuai River, Nanjing has not implemented adaptive governance strategies. However, the last 10 years have seen the significant emergence of NGO actors who are offering the basis for alternative, sound, input into deciding policy goals, and assistance in gathering and relaying information necessary monitor policy. Although there is some overlap between them, and different strategic goals, NGOs are specializing in various geographic areas of the Qinhuai River, and as such are each generating original ecological data. Furthermore, they are attempting to reach out to user groups of the river in order to harness local ecological knowledge – though in an ad-hoc fashion. The key item that is missing is a collaborative approach to designing policy goals, and consequently, a coordinated approach to responding to changes. Environmental governance of the Qinhuai River is guided by economic imperatives, which, along with top-down structures, make collaboration with civil society difficult. The thrust of Qinhuai River cleanup has surrounded the Confucious Temple area, catering to tourists and shopping centres, as opposed to the long stretches of residential neighbourhoods to the south-east and north-west. This goal is not one that is in line with nearby residents and users of the Qinhuai River, who experience river pollution in daily activities. Thus, Nanjing can be seen as being in very early stages of developing adaptive capacity, but is still in need of devising better institutional models for managing sustainable urban growth, particularly with respect to incorporating the existing data, ideas, and manpower available outside of government.

## **COMPETITIVENESS, INNOVATION AND REGIONAL DEVELOPMENT: THE CASE OF THE VISEGRAD GROUP COUNTRIES**

**Anna Golejewska, University of Gdańsk, POLAND**

The connection between regional development and regional innovation has its roots in the theory of economic growth. Innovation understood as technological change that leads to greater productivity and to better quality products is a key driver of economic growth. The paper relates to factors determining regional competitiveness in Poland, the Czech Republic, Hungary and Slovakia - the Visegrad Group. Conceptualizing regional competitiveness is rather hard task. It has been defined more poorly than micro- and macroeconomic competitiveness. The definition adopted in this paper characterizes regional competitiveness as the ability of a locality or region to generate high and rising incomes and improve livelihoods of the people living there. (Meyer-Steamer J., 2008 Systemic Competitiveness and Local Economic Development, Paper for publication in

Bodhanya S. (ed.), *Large Scale Systemic Change: Theories, Modelling and Practices*, Duisburg). It describes competitive regions not only by output-related terms such as productivity but also by overall economic performance such as sustained or improved level of comparative prosperity. In terms of economy, there have been both similarities and wide disparities between Visegrad countries. Similarities result from socialist economy, which form their economic and social systems for several decades. Differences are caused among others by cultural factors, different systems of law and dissimilar spatial structures. Transformation and regional development are closely related. Changes in regional economic structure depend to a considerable extent on structural changes in the whole economy. The paper is organised as follows. The study starts from a comprehensive survey of the literature surrounding regional competitiveness and the potential impact of innovation. The theoretical section is supplemented by empirical one (section 2). The aim of the empirical analysis is to investigate the regional diversity of innovativeness and economic growth in the group of 35 regions (NUTS 2 level) over the period 1999-2008. It is based on two different data sources: Eurostat Regional Statistics and OECD Regional Database. The period analysed is the 4th stage of transformation process in CEECs, characterised by visible uniformity in development paths. The lack of actual and comparable regional data and noticeable in different extent effects of financial crisis caused the termination of analysis in the year 2008. We use GDP per capita and its growth rate as the measure of regional competitiveness. The group of analysed regions consist of 16 Polish, 8 Czech, 7 Hungarian and 4 Slovak regions. They differ essentially in historical, geographical, economic and social dimension. To avoid generalisations across various types of regions we try to indicate regions defined as hubs of knowledge. In those regions innovation should have stronger impact on competitiveness than in the other regions. We carry out hierarchical cluster analysis using Wardâ's method applying Euclidean distance. The results for the Visegrad Group show an increasing dispersion of regional GDP per capita at NUTS2 level, faster development of capital city regions and other big agglomerations and diversity of regional innovativeness. Unfortunately, the most numerous group compose regions, where R&D expenditures are lower than 0,5 per cent GDP and decreasing. The analysis of R&D expenditures by sectors of performance shows the predominance of government sector. All the regions of the Visegrad Group recorded increase in the share of labour force with higher educational attainment (ISCED 5-6). The highest growth occurred in Polish regions. Economic growth was also accompanied by an increase in share of R&D personnel in total employment. There is a correlation between innovation indicators (R&D expenditures and patent applications to EPO) and the growth of regional GDP per capita.

*Gateway B*

## **PROCESSES OF STUDENTIFICATION IN CHINA?**

**Hao Gu, Loughborough University, UNITED KINGDOM**

Studentification engenders distinct social, cultural, economic and physical transformations within university towns, which are associated with the seasonal, in-migration of HE students. This paper will discuss and compare studentification within Chinese contexts. In the United Kindom, there is a consensus that the expansion of higher education is the most important factor that causes studentification (Smith, 2005). Similarly in 1999, the Chinese central government released the expansion of higher education policy. In effect, by the end of 2009 there were 29.7 million Chinese students in the HEIs and the gross enrolment rate reached 24.2% (Liu and Wang 2011). In addition, He et al (2010) claim that Chinese universities have highly regulated institution for student housing, with most students therefore are living in the regulated university accommodations. It is therefore not surprising that the total area of floor space in student dormitories increased in profound ways, with the ratio of student per square meter in floor space declining from 0.153 (1999) to 0.133 (2009), with the increasing provision of new-build student accommodation. This has led to sociospatial divisions between Chinese and overseas students. International students, mostly are from upper and middle classes, tend to gravitate to high-cost PBSA such as a gated community for International students in Peking University. The majority of Chinese students are concentrated in lower cost student accommodation. This paper will explore some of the factors underpinning these geographies of segregation.

**INCREASING RETURNS, DECREASING RETURNS AND REGIONAL ECONOMIC CONVERGENCE IN THE EU****Gianni Guastella, Catholic University, ITALY****Francesco Timpano, Catholic University, ITALY**

Regional economic development is driven by the accumulation of production factors. More traditional factors like labour and physical capital are accumulated under the law of diminishing returns. This, in turn, allows less developed regions to better perform. Recent branches of theoretical and empirical literature have paid attention to the role of increasing returns in an attempt to explain the persistence in regional economic disparities. Increasing returns are commonly attributed either to the accumulation of non traditional inputs such as human and knowledge capital or to the presence of local externalities generated by the spatial concentration of economic activities. In this paper the economic performance of 186 European regions is analysed by using the ordinary growth regression approach. An empirical specification which simultaneously accounts for the presence of both decreasing and increasing returns is derived. The study is intended to examine the extent to which regional development originates from the (un)balance between convergence, driven by diminishing returns and divergence, boosted by increasing returns. Results indicate that the accumulation of traditional inputs leads the economic development of less favoured areas while the presence of increasing returns plays a more crucial role in developed regions. Furthermore the use of a non-linear specification for the growth equation highlights evidence of important threshold effects in entering the stage of development characterized by increasing returns. Regional development process is accordingly depicted as a far more complex process than what the simple dualism between increasing and decreasing returns may help to figure out, with very important implications for policy.

**TECHNOLOGICAL INEQUALITIES AMONG EUROPEAN REGIONS: REGIONAL EFFECT VS. SPECIALIZATION EFFECT****Mercedes Gumbau-Albert, University of Valencia, SPAIN****Joaquín Maudos, Ivie, SPAIN**

This paper aims to analyze the differences in technological capital intensity and the evolution of these inequalities between EU regions, as well as establishing a comparison with USA. Our sample allows doing the analysis at industry level. To this aim, we use Theil inequality indices and a shift-share analysis to break down these inequalities and to quantify the importance of either a region or a specialization effect. In exploring how inequalities among EU regions have evolved, we use the Theil index which also decomposes the inequalities into two terms: a within-group inequality term and a between-group inequality component. The construction of the Theil index indicates that it is the productive structure of European different regions that explains most of the differences in technological intensity. The evolution of Theil index does not show a stable behaviour over time, although there are more significant inequalities in the last years than in previous years. The decomposition of the Theil index using both the country region variable and the industry variable as reference illustrates the significance of productive specialization when explaining the origin of inequalities. This result implies that, to reduce inequalities in the technological intensity between regions within the EU, it is also essential to increase the investment effort in the R&D of lagging regions thus eliminating the huge differences in the productive structure of their economies. Consequently, even if all regions made the same investment effort, major differences between regions would persist because of their differences in specialization. Finally, in addition to the differences between EU regions we conduct a shift-share analysis to explore the differences in technological capital intensity between the USA and EU regions. We find that, although the technological capital stock has been favourable for convergence in productivity, this effect is not sufficient to offset the divergent effect of other factors such as human capital, public infrastructures, but, specially, ICT investment and different “enterprise practices” mainly due to a more competitive environment which has paved the way to organizing industries on a large scale that draws heavily on ICT investment. This study contributes to the economic literature in several respects but we highlight two. First, it applies a methodology which has not commonly been used in the field of technological innovation to quantify the weight of industry and spatial characteristics when explaining differences between regions. Second, the variable analyzed is R&D capital stock and not R&D expenditures, given that the capital stock is the relevant variable when measuring a country’s increase in production and productivity. To this aim we have generated R&D capital stock series. The results shed light on

what sort of economic policy measures can be taken to support growth and increase comparative advantages of regions.

*Gateway E*

## **POLYCENTRIC DEVELOPMENT: THE CASE OF LATVIA**

**Inese Haite, University of Daugavpils, LATVIA**

Polycentric development is a concept, widely used in different scientific researches and regulatory agenda. Issues of economic development are closely linked to regional and urban networks. Countries with polycentric development model have better development possibilities, if compared to countries with monocentric direction. Evenly distributed city network is favourable for polycentric and balanced country development; direction of monocentric countries to polycentric development is prevented by low competitiveness, lack of development in cities, and weak bonds with neighbouring areas. In the field of polycentric concept there is not a common methodology and common measurement methods. One of the key issues arising from the polycentric region and the proposed regional development policy analysis is that European countries have not issued widely accepted standards for identifying them. A common approach would be useful in order to use planning and data analysis results in all European countries, regardless of the size and population. Thus it would be possible to perform comparative country assessment within the context of polycentric development, applied for regional development support tools effectiveness and compliance needs of the territory, as well as assessment of priorities. Unified standard should be flexible enough to be applicable in different territorial administrative structures in different countries. The concept of polycentrism takes the central place in current thinking on restructuration of the European Union's regional policy. It is believed the polycentric regional development approach can promote territorial cohesion. In 2004 Latvia initiated new regional development planning processes, large-scale inward investments, and received financial support from the European Union for national development. The primary goal of integration for Latvia in the European Union is to increase welfare level in all regions. Acquisition strategy of structural funds is based on national development priorities, the EU guidelines and policies that shall provide adequate conditions for sustainable and balanced socio-economic growth of the Latvia. Latvia has declared polycentric development path, but still there is a necessity to develop a common understanding of the current situation, possibilities and prospects, which this type of territorial development is able to provide. The particular article aims to identify the evaluation methodologies of polycentric development and to assess the applicability of it for the assessment of Latvian regional development trends.

*Gateway K*

## **GREEN ENTREPRENEURSHIP NETWORKS AND CLUSTERS: WHEN THE LOCAL REQUIRES (MEETS) THE GLOBAL?**

**Abdelillah Hamdouch, Poytechnic School - University of Tours, FRANCE**  
**Marc-Hubert Depret, University of Lorraine, FRANCE**

Despite the belated awareness of environmental protection and sustainable development (SD) challenges among stakeholders, and their limited commitment to these issues, the last few years have seen the emergence and gradual development of a number of innovative environmental products and technologies. Although many consider technology to be one of the main causes of climate warming and environmental degradation, along with demographic change and economic growth, it also represents a key solution. More sustainable technologies, products, services and processes will, to a certain extent, become available over the short to mid-term and can therefore be deployed rapidly if suitable public policies are put in place. The development of more radical environmental technologies (especially in renewable energies) is also already envisaged within the next decade or so with huge potential impact on growth and job creation. Furthermore, these technologies may even constitute a new techno-industrial paradigm reflecting the engagement of our societies in a sustainable or post-carbon era. This new paradigm is susceptible to impact and it has more and less already started to do it the technological, economic, institutional, organizational, strategic and territorial variables of many if not most sectors and countries. Moreover, as we aim to show it in this article, environmental innovations appear to reshape the dynamics of many territories (Countries, Regions, Cities) all around the World through the constitution of green clusters/networks of entrepreneurs around production, research and innovation activities addressing the challenging issues related to SD, to the preservation of the environment and to the attenuation of

climate change effects. As a matter of fact, a clear observation today is that most of the leading green innovation clusters and networks are located in countries (or regions) where the actors of green innovation have been able often with the help and incentives provided by the governments and other institutional entities to favour and develop efficient dynamics of interaction and collaboration among them, and with entrepreneurs located abroad that hold complementary strategic resources and competences. It follows that isolated or disconnected entrepreneurs are unlikely to participate actively in these new sectors involved now in a global competition. This means also that purely local (second-rank) green clusters/ networks can hardly succeed or even survive. In this way, the probability of innovating is greater for entrepreneurs benefiting from a favourable local milieu, but also from close links with global networks of knowledge, capital and people. The dynamism of clusters/networks also depends on the capacity of their members (entrepreneurs, large companies, SME, business angels, venture capital and private equity firms, layers,) to absorb knowledge outside the territory and to subsequently disseminate this within their own territory in order to hybridize them with the knowledge or innovations developed locally. Consequently, the openness of clusters/networks does not necessarily translate into a reduction of the intensity and density of local links. In contrast, this openness may represent a factor in making (inter-organizational) relationships more viable and stronger. This appears to be the case including for innovators that can tap in external sources of knowledge/competences/funding they cannot find (or not anymore) within their clusters/networks. This paper aims to further examine the phenomenon of the (industrial, institutional and spatial) emergence and structuring of new (green) growth sectors for products, technologies, processes and services designed to help protect the environment over the long term. We will start by sketching some key features of this green economy, the main innovations it has produced and the different industries it covers. We will then attempt to identify key public and private initiatives aimed at developing industrial and service activities related to the environment by focusing on those countries most advanced or active in the field. We will go on to show that only a long-term combination of measures pertaining to environment, innovation, entrepreneurship and other policies is likely to promote the emergence, development and dissemination of radical environmental innovations within certain territories. An overview of various national models will reveal how money, despite having an important role to play, is only one of a number of factors, and that, as with other issues, there is no One Best Model to apply to this question. The paper explains this phenomenon by the key role played both by the integration and inter-temporal coherence of public policies and by territorial specific settings and permissive conditions. Finally, the paper concludes by drawing some further research avenues.

*Gateway C*

# **KEEPING OLDER ADULTS ‘CONNECTED’: SOME PUBLIC POLICY IMPLICATIONS OF THE QUEST FOR DIGITAL INCLUSION WITH REFERENCE TO ENGLAND**

**Irene Hardill, Northumbria University, UNITED KINGDOM**

For a number of years that has been a commitment to E-government in the United Kingdom, including the push for online access to public services. The Coalition Government's agenda to make public services digital by default is heavily influenced by the United Kingdom Digital Champion Martha Lane Fox. Lane Fox was appointed in 2010 and she has argued that moving to digital services is essential for government to save money, to realise social benefits, and to move out of the current economic situation. Ultimately this would mean shutting down other more traditional and more expensive ways of accessing government services, such over the telephone or in writing. But for the move to the online delivery of public services to be successful it is dependent on digitally excluded citizens getting online but crucially staying connected and developing a level of competency in using Information and Communication Technologies (ICTs). The well documented changes in the demographic profile of the United Kingdom population is resulting in older adults (aged over 50 years) forming a growing proportion of the population. But older adults are less likely to have access to or use a networked PC or lap top at home, than younger people. Moreover as people age, they face changes in health, capability and/or social circumstances which may erode their capacity to use ICTs, including networked computers. Such changes may be compounded by the trend for continual enhancement and development of digital technologies, often leading for example to increased complexity. As a result it has been predicted that significant numbers of older people will, in future, move from being ‘digitally engaged’ to becoming ‘digitally unengaged’, with consequent reductions in their quality of life and independence (Digital Inclusion Panel Report, 2004, p.79). In this paper I focus specifically on the implications of this policy thrust on older adults drawing on research funded under the British New Dynamics of Ageing Research Programme. Manuel Castells (2001, p. 247) has argued that ICTs exacerbate existing cleavages to existing sources of inequality and social exclusion. Cyber space can act as an annex of social space, consolidating and reinforcing social practices and cultural norms, and so being digital excluded/unengaged could exacerbate existing cleavages to sources of

inequality and social exclusion (Castells, 2001, p. 247). Providing ICT access is not always enough to bridge the digital divide as social capital (such as skills and education) is also needed to engage with technology (Lindsay et al 2007); a view echoed by Sinclair and Bramley (2011), who also place emphasis on the ways in which technology is socially embedded in the tasks of everyday life. We have built on the work of Shove and Pantzar (2005) and Crang and Graham (2005) - reported above - to develop a framework for understanding the ICT use of older adults through their scale of implication in everyday life. The framework includes: •Pervasive use (confident ICT users; ICTs used daily forming an integral part of the architecture of everyday life; networked PCs/lap tops used to undertake a wide range of everyday tasks; such as for communicating with other people (via Skype/email; as a source of information; for organising everyday life and as a typewriter; in some cases mobile phones are used to access the internet); •Episodic use (sporadic use of ICTs, while some said they 'coped' using them, others were 'scared' of using them; ICTs not 'always on'; limited range of applications used ); • Fossilisation ( episodic ICT usage declines to complete cessation). As the particular focus of the [name of] project is on understanding the problems and circumstances which might cause people to 'disengage' or give up using ICTs, fossilisation captures the process by which ICT usage, for a variety of reasons, declines, to the point of complete cessation (Damodaran and Olphert, 2010).

#### *Gateway B*

### **THE DYNAMICS OF MIGRANT LABOUR IN AN ENLARGED EUROPE: THE CASE OF POLISH MIGRATION TO THE UNITED KINGDOM**

**Jane Hardy, University of Hertfordshire, UNITED KINGDOM**

In 2004 and 2007 the European Union was enlarged to include the former communist countries of Central and Eastern Europe (CEE). This extended the territory over which firms could restructure their operations and workers could seek employment. The accepted figure is that two million Poles left to seek work in other parts of Europe. Poles are by far the largest group from CEE, and make up between 60 and 70 per cent of migrant workers in receiver countries. Although it is a free world for capital, the mobility of labour is constrained. This is not simply the case for workers trying to enter from outside the European Union, but also within the EU itself. In 2004 only three EU countries, the Sweden, the United Kingdom and Ireland, opened their labour markets to new entrants from CEE, with the latter two countries experiencing the largest wave of immigration in the post-World War Two period. However, the financial crisis of 2008 and subsequent world recession have dramatically changed the imperatives and logics of firms and conditions in the global economy as a whole. Migrant workers have borne the brunt of the recession, as they are concentrated in sectors which have experienced the largest contractions in output, such as construction, export oriented industries and hospitality. The responses of European governments have been varied, the Czech Republic and Spain have given financial incentives to encourage migrant workers to return 'home'. However, in the United Kingdom there are contradictory stories and empirics regarding the return or non-return of migrant workers to Central and Eastern Europe. In the United Kingdom research on migration in an enlarged Europe has been driven by the examining labour market impacts and skills shortages at the level of national and regional government (Gilpin, 2006; Home office, 2007; House of Lords, 2008; McKay and Winkelmann-Gleed, 2005; Zaronaitė and Tirzite, 2006) and documenting the exploitation of migrant workers (Carby-Hall, 2007; CAB, 2005 and 2006; TUC, 2003 and 2004; Fitzgerald, 2006, 2007, 2008 and 2009). A growing body of academic literature has begun to address issues and challenges for trade unions both in the United Kingdom and other receiver countries, and in particular how labour organisations can intervene to prevent social dumping and to promote social inclusion (Datta et al, 2007; Donaghey and Teague, 2006; Dundon, 2007; Eldring, 2007; Friberg-Tyldum, 2007; Kahnmann, Ahleberg, 2006 and Meardi, 2007). However, there has been little attempt to offer an integrated conceptual framework in which to understand three interrelated sets of issues. The first issue relates to the structural and economic underpinnings of migration and the need to reconcile the reserve army of labour argument with the role of migrant workers as providing labour under particular conditions. The second issue relates to the contradictory role of the capitalist state as it attempts to represent sections of capital that benefit differentially from the employment of migrant workers. The third issue relates to the role of migrant workers themselves as having complex motivations in moving across boundaries and their ability to organise collectively in host communities. The aim of this paper is not to privilege the process of migration in an enlarged Europe, but to use the experience of the movement of people to the United Kingdom from Central and Eastern as a means of exploring the interplay of capital, the state and the individual and collective agency of migrant workers. To analyse migration simply in terms of 'push' and 'pull' factors falls into the trap of economic determinism, whereas ignoring the underlying economics undermines our understanding of the contradictory role of the state in negotiating the competing demands for capital. Further, rather than viewing migrant workers as pawns of capital

or state, it is important to recognise the importance of their agency as individuals and their capacity to contest these processes collectively.

#### *Gateway I*

### **THE THEORY OF BORDERS: GRASPING BORDERS' COMPLEXITY (EVIDENCE FROM EUROPE)**

**Beatrix Haselsberger, Vienna University of Technology, AUSTRIA**

European spatial planning has emerged in a way that has (mostly) ignored the complexities associated with national borders, tending to take a monochromatic view of them as either 'closed' (external borders of the EU) or 'open' (internal borders of the EU), often rooted on a singular view of either a 'space of places', or a 'space of flows' (after Castells 1996). But this view denies the much more complex, shaded reality of borders, which in reality are ambiguous human constructions (cf. Paasi 2009; O'Dowd 2003; Haselsberger 2010). It is argued here that despite all the debate around the 'diminishing importance of borders within the EU' and the striving for a 'borderless Europe', territorial borders still matter within the EU both consciously (e.g. for sovereignty, security, political reasons) and subconsciously (e.g. favouring the building up and the maintenance of a societies' culture and consequently identity). But although bordering, as a means of control involving the use of bounded geographical spaces (Sack 1986), remains important also in 21st century Europe, the border itself has to be considered an ambivalent and highly dynamic research object (Paasi 2009), which in most of the cases is not separating homogeneous spaces. On the one hand borders have been and still are actively contested and negotiated in terms of their geographical location (Haselsberger 2010). On the other hand, due to the fact that a border is not 'merely a line in space, but a social process, contingent on continuous re-imagination and re-interpretation' (van Houtum 2003, p.39) it becomes clear that also functions, roles and meanings imposed on borders have changed and are still changing over time. This paper offers a unique insight into the evolution and nature of national borders in Europe (from the building up and the existence of nation-states in the early nineteenth century till today). In doing so it unpacks the complex concept of borders and reveals their often nuanced and underestimated impacts on space in general and on cross-border cooperation activities in particular. It highlights that borders are comprised by an overlapping set of boundaries (including administrative, political, social, cultural, economic or mental) – of which all have spatial and social impacts and are influencing spatial planning processes, decisions and results – and are constantly in flux (more than might be imagined at first sight). Given the fact that borders not only constitute social units, but are also dependent on the nature of the reciprocity within the unit, different border discourses (from planning, geography and policy as well as sociology and anthropology) are introduced and discussed (cf. Wastl-Walter 2011). The innovative approach of this paper, namely the bringing together of border-related research results, provides a valuable contribution towards the understanding of the roles, functions and meanings imposed on territorial borders. Doing so this paper provides a unique overview of the future challenges of cross-border cooperation activities by focusing in particular on the overcoming of negative effects caused by the respective boundaries of a border.

#### *Gateway F*

### **TOWARDS FUNCTIONAL SPECIALIZATION OF CHINESE CITIES? A PERSPECTIVE OF LOCATIONAL STRATEGY OF MULTINATIONAL CORPORATIONS IN CHINA**

**Canfei He, Peking University-Lincoln Institute Centre For Urban Development and Land Policy, CHINA**

There has been a transformation of urban structure from mainly sectoral to mainly functional specialization in the developed countries. This transformation is inextricably interrelated with changes in firms' organization. Functional specialization is a new type of spatial division of labour and it will change the nature of economic linkages between cities and would promote the development of city regions. Functional specialization of cities would trigger information and knowledge flows between cities, which demand more face-to-face contacts. Some cities would host upstream functions of the value chain such as headquarters and research & development and become the controller while others accommodate downstream function such as processing, fabricating and integration. This paper applies the functional locations of multinational corporations in China to investigate where there is any evidence of functional specialization in China. Based on data from Fortune Global 500 MNCs during 1979-2008, this study found that MNCs have gradually expanded in China functionally and geographically. Similar functions tend to agglomerate in certain cities while complementary functions co-

agglomerate in some cities. Sequential investments led to the spatial clustering of MNCs' functions. The empirical results found strong evidence of agglomeration effects of functional and cross-functional agglomeration of Fortune Global 500 MNCs. This study also found some evidence of functional specialization in Chinese cities, with upstream functions clustering in the top tier cities of the politically and economically urban hierarchy. The functional locations of multinational corporations provide a valuable angle to examine the urban transformation.

#### *Gateway J*

### **RATIONAL CHOICE VERSUS BEHAVIOURAL FACTORS: EXPLAINING THE LOCATION OF CHINESE OVERSEAS R&D ESTABLISHMENTS**

**Shaowei He, University of Northampton, UNITED KINGDOM**

**Jinglin Duanmu, University of Surrey, UNITED KINGDOM**

**Grahame Fallon, University of Brunel, UNITED KINGDOM**

This study examines the determinants of the location of foreign research and development (R&D) establishments owned and controlled by Chinese, technology intensive multinational enterprises (MNEs). We argue that the location of these establishments cannot be fully explained by rational choice, but rather that behavioural variables also play an important role in this regard. The existing scholarly literature includes a range of empirical studies that explore the determinants of foreign R&D location, using econometric and case study methodologies. However, many of these studies centre on the locational determinants of foreign R&D establishments owned and controlled by Western or Japanese MNEs, and on testing the locational influence of rational choice-related factors such as market size, labour costs, cultural distance and R&D establishment missions. This same emphasis also prevails in some recent studies exploring the determinants of foreign owned and controlled R&D centres in China. Relatively few studies, in contrast explore either the location of Chinese, R&D related outward FDI or the role that behavioural factors play in determining such location despite the fact that there has been a surge in Chinese technology related overseas FDI and in the establishment of overseas R&D centres by Chinese firms in recent years. The current paper seeks to contribute to the development of scholarly knowledge and understanding in this area by helping to close the resultant gap in the current literature. Existing academic papers, official Chinese government and Chinese business sources are first drawn upon in order to create a set of rational choice and behavioural variables of potential relevance to the location of Chinese owned and controlled R&D centres overseas. The relative significance of each of these variables from this perspective is subsequently estimated, making use of econometric analysis. Our analysis suggests that both rational choice and behavioural variables do, indeed play a significant role in influencing the location of overseas R&D centres set up by Chinese firms. We go on to discuss the implications of these findings in terms of current and likely future developments in the foreign R&D locational strategies of China's leading, technology-intensive MNEs, whilst the resultant implications for the spatial configuration of global innovation networks, and for policy development and implementation by the Chinese and foreign host country governments are also suggested. Finally, our theoretical contribution to location choice of overseas R&D centres and foreign direct investment in general is discussed, followed by recommendations for future related research.

#### *Gateway F*

### **BORDERS AND BOUNDARIES THROUGH THE METROPOLITANISATION OF 'THE REGIONAL': CREATING NEW DIVISIONS AND MARGINALITIES THROUGH A SHIFT FROM SPATIALLY TO RELATIONALLY DEFINED REGIONS**

**Tassilo Herrschel, University of Westminster, UNITED KINGDOM**

With a growing emphasis on metropolitan areas as beacons of national and/or European (EU) economic competitiveness – questions have arisen of the territoriality of regions as part of the scalar hierarchy of spatial governance and policy. Some of this shift is reflected in debates on 'new regionalism' with its emphasis on the variability, informality and relational nature increasingly to characterise regional governance and, by implication, territoriality as well. The emphasis on city regions and metropolitan areas generally, as the areas that matter (economically) most, expressed in their communicative connectivities, produces new relational policy spaces of shared interests and perspectives. As a result, existing territorialities, including those manifested administratively, may be disrupted and 'downgraded'. Places and actors previously included in such



territories, may no longer be automatically included associated spatial strategies and policies. New inequalities emerge between (and within) urban-centric, network-based ‘virtual’ regions and conventional ‘inclusive’ regions of the conventional, boundary-defined type. This paper explores these changes and their likely implications for the example of the region of Skåne in southern Sweden, as it intersects with the virtual ‘new’ Øresund Region.

#### *Gateway B*

### **REGIONAL ECONOMIC DEVELOPMENT AND THE NATIONAL WORKFORCE: WHO GAINS FROM ECONOMIC GROWTH IN THE GULF COOPERATION COUNCIL STATES (GCC)?**

**Stephen Hill, Sohar University, OMAN**

**Adil Bakheet, Sohar University, OMAN**

Regional Economic Development and the National Workforce: Who gains from economic growth in the Gulf Cooperation Council States (GCC)? This paper looks at the relationship between the national and expatriate workforce and the processes of economic development, examining the Gulf Cooperation Council States; ie the Kingdom of Saudi Arabia (KSA), United Arab Emirates (UAE), Oman, Bahrain, Kuwait, and Qatar in general, and Oman in particular. Most of these fast growing Gulf countries also have expatriates as a high proportion of the workforce, with, for example, Emirates being just 11% of the UAE workforce. However it would be mistaken to consider these as countries of high immigration – since the expatriate workforce is typically employed on short term contracts, with no right of residence beyond that employment period. There is then a very clear distinction between the immigrant and the expatriate, with most immigration in GCC restricted to citizens of other GCC States. Moreover many GCC countries are seeking to reduce their dependence on expatriate labour because of their desire to create job opportunities for nationals – particularly young entrants to the labour market, both for their own sake and to reduce the pressure for political change. This paper will examine these efforts and pose the question of the role of the expatriate in economic development, and the closely related question of substitutability between the expatriate and national workforces. Whilst classical labour economics sees the movement of labour as equalising returns, regulation, including the delineation of national boundaries, results in a very different picture. This paper will explore the development of labour markets in the Gulf area, pointing to three recent phases: rapid expansion in the sixties and seventies drawing in large numbers of workers from abroad, the relatively slower growth period of the eighties and nineties as a period of consolidation, with inbound workers typically being low skill/low cost from the sub-continent, and the more recent period when growth has again picked up due to high oil prices, with government policies shifting towards the provision of job opportunities for indigenous young people. A review of relevant data will cast some light on the likely efficacy of this policy, as well as pointing to the costs to be paid, which may increase the current dependency on government revenues as a driver of the economy. The paper will conclude with a discussion of policy options, and consideration of the likely consequences of each.

#### *Gateway J*

### **HOW EFFICIENT IS THAI INDUSTRIAL POLICY? DEADWEIGHT IN OFFICIAL SUPPORT TO EU FIRMS**

**John Hill, University of Hertfordshire, UNITED KINGDOM**

This paper describes a methodology for estimating deadweight among European Union firms in receipt of investment assistance from the Thai Board of Investment (2005-2010). While Thailand is a relatively modest trading partner of the EU in order of rank (30th), it has become an increasingly popular destination for European direct investment. In 2010, EU firms accounted for almost a fifth of inward direct investment and 16% of projects approved for official assistance (the five year averages are 16 and 11% respectively). Following similar studies (Lenihan 2004, Lenihan & Hart 2004, Tokila & Haapanen 2012), BOI's database will be used to target a survey at the population of EU firms in receipt in official assistance, who received project approval in the period 2005-2010. A bilingual survey, to be administered online and by follow-up telephone call where required, will provide a self-reported, categorical outcome variable measured as full, partial, or no deadweight. Firm- and project-specific covariates will also be collected using the same instrument. This approach is robust to non-response bias as the industrial classification, ownership structure, location (by investment zone) of all firms, including non-responders, is known to the author. These characteristics may be used to control for bias arising

from patterns of non-response using a two-step regression approach: firstly by modelling selection into the sample, secondly by fitting a multinomial logistic model predicting the probability of reporting full/partial/no deadweight conditional on firm and project characteristics. I anticipate that fieldwork will be largely complete before the conference and that preliminary descriptives will be available for inclusion in this paper.

*Gateway E*

**THE POLITICS OF CROSS- TAIWAN STRAIT ECONOMIC INTEGRATION AND REGIONAL DEVELOPMENT IN THE GLOBAL ECONOMIC CRISIS**

**Jinn-Yuh Hsu, National Taiwan University, TAIWAN**

Two major events worked together to affect economic development and socio-political transformation in Taiwan after the KMT (Kuomintang) regained power in 2008. One is the burst out of the economic tsunami; the other is the negotiation and signing of cross-Strait ECFA (Economic Cooperation Framework Agreement) in 2010. The economic recession in the US market passed the shock waves through the production networks to the upstream subcontracting manufacturers and led to mass unemployment and investment strikes in Taiwan. In the meantime, the KMT decided to take advantage of cross-Strait economic integration with China, which surprisingly was keeping economic resilience in face of economic crisis, to enhance economic recovery and political reconciliation. In the ECFA deal, a number of preferential policies are rendered, including special tax rate, investment permission, and even unilateral, from Taiwan to China, trade for agricultural produces. Under such exceptional arrangement, Taiwanese high-technology firms took advantage of the emerging market, such as the Home Appliances Going to Countryside (Jia-Dian-Xia-Xiang) policy which was proposed by Chinese government to expand domestic demand to attack the crisis. But, two fronts of controversy are extended in Taiwan side. On the one hand, the worry of overwhelming dependency on China and the loss of political identity raised political protests from oppositional party and some anti-unification groups. On the other, the concern about social distribution issue resulted from the trade is raised by the economically vulnerable sectors, such as traditional industries, and their located regions, such as the South. The effect of the agreement will be consequential upon the politics of recognition and re-distribution.

*Gateway N*

**A VEHICLE ROUTING AND STOP LOCATING PROBLEM FOR SOLID WASTE COLLECTION IN URBAN AREAS**

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**Jen-Jia Lin, National Taiwan University, TAIWAN**

This work develops a vehicle route/stop design model for solid waste collection in urban areas. The objectives of the proposed model are to maximize the residents served at least once per working day, maximize the residents served at least twice per working day, minimize collection vehicles' pollution in moving and stopping, and minimize the impact on existing traffic. The proposed model considers constraints of routes continuity, sub-tour prohibition, relationships among served residents and stop locations, vehicle capacity and working hours, and value ranges of decision variables. The grey numbers are employed to deal with parameter uncertainties, and the model is developed as a multi-objective grey V1 programming problem. A case study of the Daan District in Taipei City is conducted. The grey weighting method is employed to solve the problem for non-dominated solutions. In comparing model solutions with the existing routes and stops, this work confirms that the model solutions perform better than the existing operations. To our knowledge, the proposed model is the first route/stop design model for solid waste collection to simultaneously consider various stakeholders needs in literature. The model supports planners and decision-makers in developing alternatives for further evaluations and detailed designs in an efficient and systematic manner.

**DOES BALANCED REGIONAL DEVELOPMENT POLICY WORK FOR KOREA? EMPIRICAL EVIDENCE FROM 1995-2010**

**JaeHee Hwang, Seoul National University, KOREA**

**SeongWoo Lee, Seoul National University, KOREA**

While achieving remarkably rapid economic growth, Korea adopted an unbalanced growth strategy for industrialization. The strategy caused that benefits of economic growth had been concentrated on a few regions. Being aware of the necessity of policy to revitalize the regions relatively excluded from the growth-pole strategy and to give impetus to sustainable development in Korea, balanced regional development has been emerged as a top priority of the government since 2003. In particular, the previous government launched a regional innovation system (RIS) targeting to create clusters of government research institutes, firms and universities in various locations outside of the capital region for the balanced regional development. The present study presents one major research questions: did the balanced regional development strategy work for Korea? To answer the question, the present study estimates total factor productivity (TFT) and GRDP by regions and examines inequality among regions utilizing Gini and Theil indexes from 1995 to 2010. This study empirically estimates whether the balanced development strategy worked out to reduce the inequality of regions in Korea. The findings suggest the regional disparity of TFT and GRDP has been widened despite the continuous policy intervention to lessen the disparity during the periods. Especially, the trend of increasing inequality coefficient implies that the policies would not reflect obstacles to achieving the balanced regional development. This paper also offers some policy implications regarding the balanced regional development as an attainable goal in Korea.

**HOUSING TENURE AND GEOGRAPHICAL MOBILITY. DOES THE LABOUR MARKET REALLY SUFFER?**

**Daan Isebaert, Ghent University, BELGIUM**

**Freddy Heylen, Sherppa, BELGIUM**

**Carine Smolders, University College Ghent, BELGIUM**

Throughout recent history, many governments across the world have encouraged home-ownership. The main motivation for this policy is the large number of positive externalities such as psychological and social outcomes, poverty reduction, financial stability for the households, etc. As a reaction to this, A.J. Oswald (1996, 1997) argues that high rates of home-ownership may imply inferior labour market outcomes. The flexibility of the labour market is affected by the occurrence of geographical mobility. When spatial frictions occur between labour markets, these could partially be resolved by redistributing the labour supply among regions. Economic agents will be attracted to regions with higher wages or a higher probability to find a (suitable) job, which will diminish the mismatch. However, whether an economic agent chooses to work in another region not only depends on the expected benefits but also on the expected costs. Moving involves search and transaction costs when selling and buying a house, commuting costs, uncertainty, costs to overcome cultural or language barriers and personal costs when leaving familiar surroundings. We investigate whether the home-owners are indeed geographically less mobile and to what extent. We attempt to explain the probability of moving in Belgium by using the micro-economic PSBH data over the period 1994-2002 and EU-Silc data over the period 2004-2007. The use of two different periods enables us to analyse the influence of policy measures after the defederalisation of the Belgian housing tax in 2002. We explain whether a household has moved during the last year, conditional on its tenure status. Furthermore, we include other determinants such as age, educational level, region and family circumstances. We also consider the possible influence of the distance moved and if it is combined with labour market outcomes. An important contribution to the topic is made by taking into account the possible manifestation of an endogeneity problem. Since the decision of a household to buy or to rent a dwelling is subject to its aversion to move in general (due to personal preferences, family ties, etc.), results could be biased when neglecting these considerations. Our results underscore the importance of tenure choice. We confirm the findings of existing literature vis-à-vis private sector renters. These are assumed to be more mobile than other types of tenure choice. Controversial is the finding that public sector renters are more likely to move than homeowners. The reason for the conflicting results could be the difference between the properties of the public renting sector in Belgium and abroad.

**Elita Jermolajeva, Daugavpils University, LATVIA****Daina Znotina, Rezekne Higher Education Institution, LATVIA**

The aim of the research is to analyse the investments in human capital, such as investments in health care, education, professional training, and other activities that foster economic efficiency of people. Training as investment in human resources has been studied by such leading economists as G.Becker, E.Denison, J.Mincer, T.Schultz. The theory of human capital shows that individuals and the society gain economic benefit from investing in people. According to the concept of G.Becker, the analysis of human capital starts with the moment when the individuals make their decisions about education, professional training, health care and other knowledge and health competences, based on evaluation of advantages and costs. An important factor for effective use of human capital is provision of people with adequate education and skills that correspond to the changing demands of labour market and future development tendencies – the progress aimed at knowledge based economy. Among 27 countries, involved in the research „Innovation Union Scoreboard 2010”, published in 2011, Latvia takes the last place – the 27th place (Estonia – 14th, Lithuania – 25th). The research evaluates indicators in eight spheres important for the development of innovation – human resources, receptiveness, excellence and attraction of research environment, funding and support, enterprise investment, cooperation of companies and entrepreneurship, intellectual property, activity of innovation, economic effects. The authors conclude that education in Latvia's situation is the most important instrument to the utmost use human resources, especially taking into account negative demographic tendency. Special attention should be paid to the education and development of those people who at the moment are in the economically active age group. There is a large offer of labour force in Latvia (39 people per one job place), which does not correspond the demand, which in its turn stimulates emigration of labour force. It is required to encourage flexibility of labour market and creation of new jobs. There are several unfavourable factors in regions of Latvia – low level of motivation to start a business, high unemployment rate, weak infrastructure, etc. The result is - low indicators for creation of new enterprises. It indicates that people are not ready to take a risk to start a business due to the existing social and economic situation. Human capital development is one of key factor for sustainable development of Latvia.

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Transport infrastructure plays an important role in shaping the configuration of spatial socio-economic structures and influences regional development. This paper analyzes the spatial evolution of China's transport infrastructure and its relationship with regional development, economic growth and urban growth since the beginning of the 20th century. First, the paper summarizes the evolution process and historic contribution of transport infrastructure in China, and then explores its function on spatial organization. Second, the paper defines regional transport dominance to evaluate the relative location of a place from three aspects: quality, quantity, and advantage, measured by density, proximity, and accessibility indices. County is the basic unit for analysis. Third, the paper researches the relationship between the expansion of transport infrastructure and economic distribution and urban growth. In conclusion, the paper explores that the transport infrastructure in China shows a unique expanding mode and unsurprisingly transportation is also an important factor to influence the locations of economic activities and cities.

**SPATIAL PATTERN OF URBAN SPHERES OF INFLUENCE IN CHINA AND ITS CHANGES, 1990-2007**

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**Deng Yu, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, CHINA**

Taking almost all cities in China (including Hong Kong and Macau) as the research object in the year 1990, 2000 and 2007, this article studies the urban spheres of influence by using gravity model. Based on overall grasp of the spatial pattern of Chinese urban spheres of influence, the spatial characteristics of urban agglomerations are paid close attention to. Urban agglomerations are national core competitive units; also they are the areas with population and economy of highly gathered. The previous study of urban agglomerations mainly focused on the aspects of development stage, hierarchy, compactness, etc. From the viewpoint of urban spheres of influence, this paper brings forward four types of spatial pattern of urban agglomerations: namely, strings of beads, pieces of rags, semi-strings of beads, and semi-pieces of rags. Then some basic features are discussed such as cities' numbers, population and central cities of urban agglomerations by using GIS and statistics method. Major findings are as follows: different spatial patterns of urban agglomerations have different degree of development and structure, and evolve under external policy and location factors. The spatial types of urban spheres of influence in China are generally stable, and the developing trends vary with different region and policy.

**LOCATION EFFICIENCY AND OPTIMAL LOCATION OF POLICE BOX AND POLICE STATION BRANCH USING SPATIAL DASYMETRIC MAPPING**

**Hyunjoong Kim, Seoul National University, KOREA**

It is a major challenge for urban planners and administrators to efficiently distribute limited public facilities and resources. Considering that police box and police station branch have played pivotal role in preventing crime occurrence, it is desirable to locate them in maximal covering locations for their service efficiency. Location efficiency of a public facility is determined by its supply depending on distance decay and its demand based on the service population. It largely affects the accuracy of analysis results that to what degree of spatial data the population can be converted. For instance, it is recommended to increase the accuracy to use population aggregated by buildings than population of administrative regions. Dasymetric mapping is a technique well suited to this house-level analysis by explaining distribution of population in a more specific and microscopic level. However, there have been very limited studies using Dasymetric Mapping to evaluate location efficiency and select optimal location of crime prevention facilities. The purpose of the present study is to estimate location efficiency of police box and police station branch, using Dasymetric Mapping with house-level data. The present study also selects optimal locations for additional police boxes and station branches and prioritizes them in consideration of their potential service population. The target area of the analysis is Seoul, capital city of South Korea. The house-level data is rasterized in 20 by 20 meters and police box and police station branch is point data, geo-coded at the ZIP code level. According to the location efficiency analysis where service areas of police box and police station branch is set to a 1 kilo-meter radius of each box and branch, 88.3% of total population of Seoul resides within the service areas. Regional deviation of location efficiency is estimated based on accessibility index. Clusters of non-service areas are identified using Getis-Ord  $G_i^*$ . Areas with lower location efficiency are largely located in suburban regions surrounding Seoul. Thirteen locations are found as optimal for additional police boxes and station branches. All of the locations satisfy the minimum service population of 30,000 residents, defined by the Urban Planning Guideline of Korea. The present study concludes with some policy suggestions that can alleviate crime incidence focusing particularly on the perspectives of police box and station branch location.

**Tomasz Komornicki, Institute of Geography And Spatial Organization, Polish Academy of Sciences, POLAND**

The primary aim of the paper is an attempt to answer the question: which of the Polish local economies were most adversely affected by economic crisis in the 2008-2009 period? The obtained findings represent a valuable contribution to a general discussion as to the level of resilience of local economies to phenomena of global nature. A measure of export volume has been made use of (based on data from Poland's Ministry of Finance) in determining the effect of exogenous factors at the level of poviats (counties, LAU1), by disaggregation into basic geographical directions of exchange. The obtained results have been referred to the variables illustrating both the scale of crisis in the partner countries (measured by changes in the level of GDP in 2008) as well as to those describing economic situation of the investigated units and their inhabitants. Poland seems to be a good research field, in view of the fact that the sources of crisis phenomena occurring there were, in the main, of external character. The studied period was characterized by a high level of internal consumption and a growing GDP. It has been asserted that the areas affected by the relatively highest decrease in export are concentrated in East Poland. Yet the general economic crisis-related threats can be identified in the west of the country. Because of the more extensive network of international links there, a drop in export may, to a largest extent, translate into the lower level of production and thus having the ripple effect on the situation of local economy (including employment). In addition, in western voivodeships, there is the lowest level of diversification of trade partners, thereby creating additional threats, being proportional, in the main, to the condition of German economy. At the same time, it has been proved that territorial distribution of export dynamics observed in the years 2007-2009 had a mosaic character. This supports the thesis that there is a strong effect of local factors on absorption of crisis impulses of a global dimension. In Poland's situation, among these factors can be mentioned the overall level of infrastructure development (especially transport accessibility) as well as the level of human and social capitals.

**Merle Krigul, Helsinki-Tallinn Euregio NPA, ESTONIA**  
**Katri-Liis Lepik, Helsinki-Tallinn Euregio NPA, ESTONIA**

In this article connections between regional competitiveness, cross-border cooperation (CBC) and innovation are analysed. Any country's or region's economic growth is determined by its capacity for competitiveness, and the nature of regional cooperation depends on the actors driving and facilitating that cooperation. Comprehension of Innovation influences the content of CBC of cities and regions. Countries support innovativeness of companies as it is viewed as one of the main tools for increasing the competitiveness of a country's economy, still, it has become a raising trend to support societal innovations connected to certain territories like regions or cross-border regions. The authors use the term „region“ as a cross-border territorial unit composed of territorial units of different countries sharing a border. More specifically, in this article it includes the Capitals of Helsinki (Finland) and Tallinn (Estonia) and the territories of Uusimaa (Finland) and Harjumaa (Estonia), separated by the Gulf of Finland. It also addresses a special CBC organisation which enhances the cooperation between them. The authors view innovation in as a process of generating novel solutions, which involve technical, social, and economic factors.. It has been argued that differences in national economic prosperity proceed from economic patterns of company strategies and governmental policies. Knowledge economists would argue that intangible, societal assets are a prerequisite for building a national competitive advantage, and that technological innovations build on societal innovation. The article analyses the processes of how the cooperation between the City of Tallinn and the City of Helsinki developed from simplistic grass-root level change of information and experience, simple Knowledge transfer towards Knowledge sharing and innovation related integration processes between the two capital regions with stress on well-being (not prosperity) of the citizens as the principal aim. The research methods include the traditional empirical research methods as well as action research methods. The strategies, developmental plans, projects' documentation and reports of the cross-border cooperation and the capital regions of Helsinki and Tallinn have been analysed. The novelty of the topic includes the treatment of the development of innovation-centred cooperation of city-regions. The notable feature of this study is its focus on cross-border capital regions. By

discussing innovation-centred cooperation and using examples from the two capital regions, the article arrives at several theoretical and practical conclusions.

*Gateway J*

## **PROCESS MANAGEMENT AS A SUCCESS FACTOR IN THE IMPROVEMENT OF THE REGIONAL ADMINISTRATION IN POLAND**

**Krzysztof Krokowski, University of Warmia and Mazury in Olsztyn, POLAND**

One of the problems of improving the functioning of public sector organizations is the inability of easily measuring the effectiveness of their actions. Among the factors that influence this are: limited choice of providers offer (government, local government); achieved a result that rarely depends on one organization (the decision is often dependent on other entities), justice (public organizations often have to provide services to people who they cannot pay for them); existing provisions of law; impact of political stakeholders and political pressure associated with the use of effective measures of the European Union. The purpose of this paper is to show considerations of applying process management solutions in Polish local administration. The study is realized within the project 'E-government for the expansion of Poland. To increase the competitiveness of enterprises with innovative reference models of processes of public administration'. Optimizing the activities of public administration at the regional level, requires the development and implementation of solutions to development management systems. Business organizations already have applied different approaches to optimization of processes. This allows to place a thesis that the implementation of the public administration of standardization processes will improve its functioning, as in business organizations. One of the concepts conveyed to the field of public management from business entities, is Process Management (PM). This kind of management in public administration is often associated with the area of Quality Management, Business Process Reengineering (BPR) and is used in the implementation of Workflow Management Systems [Palkovits, Wimmer, 2003, p 214]. The starting point for improving the functioning of the organization of the public may be the identification of the processes occurring in them and developing on this basis the reference model of the processes of public administration. This allows the introduction in the organization the change of management approach from the functional to process. Business Process Management (BPM) in terms of business organizations contains many different areas that can be transferred to the management practices of public sector entities, including public administration. The benefits of implementing a process approach in public organizations, including public administration can be divided into two groups. The first concerns the benefits from the point of view of customers of public services, such as: raising the standards of service customers (citizens); improving the quality of service, greater focus on the activities of value to the customer, eliminating organizational barriers and information. The second relates to the internal processes, such as standardization of operations, increasing efficiency of communication bands, shortening the time of execution of processes, reducing operating costs by optimizing processes and increasing the involvement of employees in their improvement. The threats of implementation of the reference modelling process in public administration include: a focus on the design from the top, at the expense of employee participation; less the importance of members of the organization and the impact of organizational culture; the risk of growth of organizational rigidity. The introduction of an approach based on the drastic changes in the regional administration in Poland is strongly constrained by existing legal provisions that restrict freedom of decision-making process performers. More useful in this regard seems to be the theory of T.H. Davenport based on a gradual evolution, a large share of workers and the use of information technology.

*Gateway J*

## **MODELLING REFERENCE PROCESSES OF PUBLIC ADMINISTRATION AT THE REGIONAL LEVEL**

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Public administration in Poland at the regional level is currently facing new challenges related mainly to pressures to reduce operating costs and new assumptions of organizational work by the introduction of the concept of e-government. An important element is the growth of citizens' expectations as to the level of service. Therefore, public authorities are forced to more efficient allocation of resources, in order to reduce cost and time of service. This situation forces the decision-makers use a common and comprehensive solutions. In practice

this may mean the introduction of common catalogues of reference process models. The solution to this situation can be applied in public organizations based on process management developed for each type of reference models administration services. The purpose of this paper is to present the possibility of modelling the reference processes in Polish public administration at regional level. The study is realized within the project 'E-government for the expansion of Poland. The increase the competitiveness of enterprises with innovative reference models of processes of public administration'. In the literature we can find different approaches to the development of empirical reference models in public administration [Karow, Pfeiffer, Rackers 2008, pp. 1614-1615]. One of them is based on two concepts [Nowosielski 2008, s.64]: planning approach - building a reference model containing a sufficient number of identified, comparable processes of public administration. These processes must be collected in a form that allows for analysis and comparison of the processes to identify the best solution, especially in terms of law; &#61485; diagnostic approach - building a reference model to ensure its use in existing conditions. This requirement can be met by experts in managing or carrying out the processes in practice. Therefore, the modelling process must be based on the data collected, as to the actual process at the office, with input from process owners. An important area of process management is the choice of modelling methodology. It should contain a detailed set of instructions that describe the conduct of the modelling process. These instructions should include, inter alia, modelling language (grammar and syntax rules of the modelling process), and modelling tools (software) that facilitate the design, maintenance and distribution of process models. The result of the construction of reference models of public administration should be: the unification the behaviour of contractors according to formulas established processes for the best; better coordination of contractors; favourable conditions for the control of the effects; greater certainty of obtaining the expected results and reduce the risk of the emergence of undesirable behaviours. In the case of public administration offices, the main limitations of the construction of reference models are: the large variability of activities in processes, resulting from the volatility of the law; the number of cases requiring individual treatment processes in individual offices and a number of processes occurring in them. Processes in public organizations, as well as in business organizations, can be improved only through the identification, detection of any irregularities (dysfunctions) and to design and implement the necessary improvements. This assumption allows to enter in the public administration solutions taken from Business Process Management, as well as to attempt to develop reference models of processes of the provided services that could be used in most of the offices of the public administration of the same type.

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## **THE GLOBAL PHANTOM EMERGING FROM THE RECONSOLIDATION SWAMP THE SUI-NAN ECONOMIC PARK AND TAICHUNG'S GLOBAL CITY IMAGINEERING**

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Through analyzing the process of Taichun's imagineering within the past twenty years, the paper proposed to figure out the characteristic of the Sui-nan Economic Park in terms of global competition and neo-liberalism development. Sui-nan Economic Park was a megaproject issued by the City Government of Taichung which proposed to transfer the original domestic airport to an economic complex zone through urban planning process at 2006. It's not the first example in Taiwan to transfer large scale of state property to become engine for the city's further development: Right after the late 1970s, Taipei had taken the lead to regenerate a military armory to a special economic zone near Taipei city centre where the Taipei 101 situated now. From then on, this pattern of regenerating became a paradigm and had been duplicated by many cities at Taiwan, including Taichung. At the early 1980s, following the reconsolidation of great amount of suburban rural land, New Taichung Administration Centre Project simultaneously emerged as a new engine for Taichung's future development. But the City Government chose to procrastinated the project and nothing had been done except an international design competition for City Hall and Council Building as a pair. Before the actual switching on from 2002, the new Mayer had ever intended to duplicate so-called the successful globalization experience of Bilbao by replacing the proposed City Hall designing with a new Guggenheim Museum designed by Zaha Hardid. Although the Guggenheim Project finally came within a straw of succeeding, but it open an era of megaprojects right at this city all aimed to facilitate the city's visibility in global world by inviting big-named architects to handle its grand scale public facilities or new land marks. No sooner than Toyo Ito first had been invited to design the Metropolitan Theater at 2004, when the Central Government approved the draft to move the domestic airport to a military airport 6 kilometres away at the end of 2005, the City Government of Taichung soon enacted the Sui-nan Economic Park Project. Not only the master plan, but also two featured proposal designated by the master planning team, the Central Ecological Park and the Taiwan Tower all were



acquiring its design by international competition. What behind them were the vigorous ambitions to build up its global image by promoting itself within the international media world. Actually the Sui-nan Economy Park Project emerged at the same time when another great amount of suburban rural private property just started to be reconsolidated for election purpose. For cities like Taichung whose suburban reconsolidation played as a major method to sustain its urban development, imagination towards globalization is the key issue to understand its urban policies because it not only should promote its citizens pride but also made for facilitating direct foreign investment; even behind the prosperity is vigorous state intervention by way of Imagineering to sustain the real speculative growth. What kind of future the Sui-nan Economy Park guarantee? When sorts of megaprojects began to exclude other necessary infrastructure projects' budget, how should the Sui-nan Project justify itself? Is it possible helping us to clarify the local reality behind the global phantom through the active intervention and selective dis-conduct both from the state?

*Gateway H*

## **TRANSPORT EVALUATION OF SPATIAL INTERACTIONS AMONG SETTLEMENT CENTRES: THE CASE STUDY OF RAIL TRANSPORT IN CZECHIA**

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**Jan Pilecek, Charles University in Prague, CZECH REPUBLIC**

The issue of evaluation of transport contacts among settlement centres is one of the main fields of transportation-geographic research which is closely related to the study of spatial interaction of centres and origins of which can be traced back to the quantitative revolution period, i.e. the 1960s. Evaluation of the intensity, structure and dynamics of inter-nodal interactions within the settlement system in Czechia at different regional levels will be based on a combination of transport and commuting characteristics. The main aim of this presentation will be to analyse rail transport as one of key travel mode in Czechia. The absence of complex information describing the real contact of nodal centres (especially at national level) is the main argument for interaction modelling (gravity modelling). Real interaction of centres will be assessed using the demand of rail transport (commuting data). The presentation focuses on evaluation of the importance of passenger rail transport in contacts between regional capitals in Czechia. Particular relations are evaluated on the basis of three selected indicators – supply of connections, real demand of rail transport. Partial goal, coming from interaction modelling at whole settlement system (point a), is to analyse selected relationships in detail, which will show the greatest difference between the real interaction and the interaction attributed by the model. It is clear that the intensity of interaction is related to the size (importance) of settlement centres which is the result of the scope of its activity at various levels. However, in a transport-geographical study it is legitimate to first closely discuss the factor of distance which makes their accessibility easier or more difficult. In geography, it is most common to represent accessibility in kilometres or minutes (the so called time accessibility). The second important factor, that influences the degree of interaction of centres, is their size because bigger and larger centres generate and attract more contacts. Size and distance (or proximity) are the most important factors which influence the intensity of interactions between centres and are used in the well-known gravity model and models based on it. Nevertheless, in reality two centres with the same population and the same distance generate a different volume of contacts. A phenomenon of geographical location is one of the reasons for this asymmetry. It is geographical (or specifically transportation-related) location that introduces significant variability and asymmetry into the relation between the size, importance, distance and interaction of centres. Another factor, that conditions the asymmetry of relations, is the differentiated attractiveness and emissiveness of centres (e.g. Rodrigue et al. 2006), which is, however, partially linked to the importance and the location of the centres. The intensity of interaction is also closely connected with hierarchical level of contacts. It is clear, that the impedance (i.e. resistance of distance) between centres decreases with higher hierarchical level of interaction. Mainly at the national and regional levels, interactions among centres are more influenced by attractiveness of centres than their mutual distance. The gravity model will be modified by emissiveness (i.e. potential to generate movements) and attractiveness (i.e. potential to attract movements) of centres (expressed mainly through labour importance and economic progressivity of centres). The calibrated model has been used to correct the transport policy of the state mainly in organization of interregional public transport and in transport infrastructure development. This contribution was prepared thanks to research project number P404/12/1035 Spatial Dynamics of Transport Relationship in Settlement System of Czechia (granted by Grant Agency of the Czech Republic). The authors are much obliged for this kind support.

## **UNDERSTANDING THE ROLE OF THE STATE: REGIONAL INNOVATION POLICIES IN THE UNITED KINGDOM**

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The focus of the paper is how understanding the role of the state in how regions are positioned in processes of change. The objectives are to examine the ways in which United Kingdom national and regional territorial politics and policy have developed in the post-war period, particularly from the 1960s, and to suggest the outcomes of those policies for the location and development of innovation. It will also examine the extent to which themes and rhetoric have changed or have stayed the same. The paper will identify major strands of government policy designed to stimulate innovation and regional development, particularly with respect to the role of the labour market and examine their relevance for contemporary regional innovation policy. Examples of national policy include landmark pieces of policy such as the 1947 The Battle for Output White Paper (with a focus on man-power), the 1972 Industrial and Regional Development White Paper (designed to adjust the prevailing national industrial structure), the 2008 White Paper Innovation Nation whose ambition was to 'champion innovation across the board' and the 2010 Local Growth White Paper. Regional policy will be explored using the case of Oxfordshire. The county is interesting because of its transition from being an 'old industrial region' until the 1970s, noted for its extensive employment in the automobile sector, as well as blankets and food industries, to becoming one of Europe's leading hotspots for high-technology industry (Lawton Smith and Waters 2011). Policy documents and measures dating from 1960s will be used to explore the interconnection between the national and regional policy agenda. In doing so, the paper will position the analysis in theoretical frameworks prevailing at the times of the policies, for example leading up to current conceptual frameworks used by academics to understand the rationale and processes relating to their design and implementation, such as clusters, regional innovation systems (see Asheim et al 2011) and evolutionary economic geography (Boschma and Frenken 2011). It will also highlight the conceptual underpinnings of the policies and measures implemented, such as market failure and systems failure. The paper will thereby provide a unique analysis of thinking and practice in innovation policies, in the light of evidence on changing industrial structures. It will conclude by providing a critique of current policies in the light of the above.

## **INDUSTRIAL RELOCATION WITHIN REGIONS OF NORTH AMERICA (USA + MEXICO) 1997-2008**

**Manuel Lecumberri, UNAM Mexico, MEXICO**

Based on market potential type equations, we first propose a method for defining massive concentrations of economic activity and population. Florida et al (2008) have used a luminosity procedure to find what they call the world Megaregions; Lang & Dhacale (2005) pursued a similar goal using urbanization data and access to main transportation infrastructure, for their U.S. Megapolitan Areas. Luminous criteria in the former and urbanization in the later are two alternative ways for estimating economic interaction among spatial statistical units. In turn, we support our estimation on market potential equations based on two models of generalized interaction: the competing destinations model (Fotheringham, 1986) and the core-periphery model (Krugman, 1991). North America (MEXICO + USA) megaregions and concentrations are delimited using 2002-2003 municipal and county data. Such regionalization allows enquiring about the (re)location of industries in North America (MEXICO + USA) within 1997-08 and 2007-08 Industrial Census (three or four digits NAICS), at three different levels of geographic observation units (GOU): countries, megaregions and concentrations. A first result is that Mexican industries share has grown during the period, with dramatic increases for a few of them. For some industries, in spite of important dispersion from USA to México, its concentration among megaregions and concentrations of both countries has increase. Several researchers have documented Mexican industries dispersion from Centre México to northern Mexican cities due to economy openness from 1985 on. Surprisingly this process seems to be now reversed: concentration among each country internal regions has increase during the period. A third result, obtained using a complementarity index (CI), is that industrial structures of Mexican concentrations and some of USA (from Centre Mexico up North to North Oklahoma-Tulsa and Northeast to Maricopa) are becoming increasingly supplementary (redundant) within, and increasingly complementary with the rest. Further research on the causes of observed relocation is now being held.

**Einar Leknes, International Research Institute of Stavanger, NORWAY**

The Impact of Interreg on Norwegian Regional Development Policy An Analysis of Europeanisation and “Nordification” of Regional Policy-Making How does the EU affect policy-making by regional governments in Norway, a unitary non-member state? This article addresses this question through examining the impact of participation in the Interreg programme on Norwegian county councils’ regional development policies. We examine 44 acts of participation by Norwegian counties in Interreg projects during 1998 - 2007, tracking their effects after project termination on both incremental policy changes and radical changes of policy direction. We find that most of the projects have resulted in policy changes by the county council and sometimes by other actors, and almost a third have resulted in radical changes in policy direction. Examining which projects have the greatest impact, we find that the county council’s ability to shape the project according to regional concerns, especially in newly formed networks, is an important mediating variable. This could indicate that regional governments are using Interreg as a channel for policy entrepreneurship, building activities in new policy areas. We found that the Interreg A projects represent a materialisation of long-lasting cooperation between Norway, Sweden and Finland on regional development in the various cross-border regions. Interreg is the main instrument for cross-border regional development and the projects are rooted in cross-border programmes that are based on county plans and regional development programmes. In many ways, the Interreg A projects represent a horizontal Nordification of the county councils’ and several other public and private actors’ regional development policies in cross-border regions. Interreg A projects are thus followed up as part of the county councils’ or other bodies’ regional development policy. Continuing collaboration with partners in Interreg B and C projects lack the institutional structure of the A projects, but cooperation in projects is still often maintained through new projects and networks. Furthermore, the project topic is prioritised by the county councils through the creation of new jobs and new policies. The impacts of the projects represent a continuation of the horizontal Europeanisation and in many cases, confirmation that there is an international dimension of county councils’ regional development policy. The study contributes to an conceptual understanding of how Interreg-projects can represent bottom up building blocks of macro-regions, while institutional arrangements like EU-policies, Interreg-programs, programme boards and border committees represent different levels of the top-down framework for such macro regions. The variation between Interreg A projects on one side and Interreg B and C projects on the other side when comes to the justification of cooperation (common geographical area versus common challenges) can shed light over how different reasons for territorial integration creates different types of regions. The findings from the study shows that Interreg as a political instrument contributes to long lasting policy change at regional level. Specific attributes attached to this instrument like flexibility, adaptability and competition for funding can be seen as tools for securing the quality and relevance of projects. Such attributes can be seen as universal mechanisms for implementation of a dynamic and modern cohesion policy.

**Helena Lenihan, University of Limerick, IRELAND**  
**Nicola Lynch, University of Derby, UNITED KINGDOM**

Business networks have been defined as groups of firms who come together to collaborate to overcome common problems, share knowledge, resources, and/or to reach new markets. Business networks which are geographically concentrated in a specific region are known as regional business networks (InterTradeIreland, 2011). This paper, through the use of a multivariate econometric model, aims to evaluate the impact that these regional business networks have on their participant firms’ performance. Empirical evidence suggests that firms reap a number of benefits from membership of such networks (Fuller-Love and Thomas, 2004). In an attempt to cultivate such benefits, business networks have been promoted by policymakers. According to Rosenfeld (1996), for example, the catalyst for business networking was the Emilia Romagna region in Northern Italy. During the 1970s and 1980s government policies encouraged cooperation amongst firms in the region. The result being that the region grew from being one of Italy’s poorest in 1970 to being the second wealthiest in 1985 (Forfás, 2004). The success of networks in the Emilia Romagna region sparked an interest in business networking from Danish policymakers and subsequently, countries such as the US, Norway, Australia, Canada, and New Zealand, began to promote network activity (Ffowcs-Williams, 2000). Irish policymakers are no

different and have also recognised the benefits to be gained from promoting business networks. This has resulted in a number of Irish network programs being introduced at a regional level. The paper's core aim is to evaluate the micro-impact (firm level impact) of regional business networks, using the case of Ireland as the laboratory to validate the framework developed. Evaluation plays an important role in policymaking circles because it provides accountability of where, and how, public funds are allocated. Additionally, it provides policy lessons regarding possible future interventions. There is however, a lacuna of literature centred on evaluations which estimate the impact of regional business network initiatives on firm performance (Huggins, 2000; Schoojans et al, 2011). This paper attempts to address this issue through the development of an econometric model to estimate the impact of regional business networks on member firms' performance. The paper is based on data gathered from a random sample of 117 firms who are members of regional business networks and 100 non-network firms (a control group profiled on the regional network respondents). The rationale for including the control group of firms is to enable the behaviour and performance of firms who are members of regional business networks to be compared to those who are not members of such networks. Only then can we estimate the true impact of regional network membership on firm growth. The study contributes to the international business network and regional studies literatures providing empirical evidence on the motivations and impact of regional business network membership on firm performance. Furthermore, the results of the econometric analysis highlight key firm and network characteristics which impact on member firms' performance. Additionally, the paper makes a methodological contribution through the development of multivariate econometric models to estimate the true impact regional business network membership has on participant firms' performance. Finally, the study has the potential to provide interesting insights for policymakers engaged in promoting regional development.

#### *Gateway K*

### **APPLYING REGIONALISATION THEORIES TO THE PROCESSES OF DEVELOPING OF A HELSINKI-TALLINN KNOWLEDGE REGION**

**Katri-Liis Lepik, Helsinki-Tallinn Euregio NPA, ESTONIA**

**Merle Krigul, Helsinki-Tallinn Euregio NPA, ESTONIA**

Regions have become the basic economic building blocks of the (global) economy. Regionalisation in the European Union (EU) is an ongoing process with increasing importance as regions perform the role of platforms for intensified competitiveness in the whole EU and also in local settings. The relevance of the current study is evident when considering the fact that Knowledge-based regions like Silicon Valley and Route 128 did not occur spontaneously; they are the result of initiatives which reached fruition after decades. Social evolution occurs through conscious intervention. Concentration of entrepreneurial talent, intellectual capital and tacit knowledge in a relatively few world-class regions gives these regions a clear competitive advantage in drawing talent and innovative firms into their orbit from emerging regions. These processes of emigration of knowledge workers from Helsinki-Tallinn city-regions are well documented in several statistical reports. The authors study the factors and obstacles in creation of a common knowledge region between Helsinki and Tallinn capital regions under conditions where a special integration-enhancing institution is part of the process. From a geographical perspective, Helsinki and Tallinn are among the closest capitals in Europe. A long-term vision of the leaders of Helsinki and Tallinn states that the Helsinki and Tallinn regions will form a united science and education area - a Knowledge Region (KR) in the future. The developmental factors of the KR are analysed in the context of regionalisation and networking theories. The research methods include theoretical research, traditional empirical research, and action research. The creation of a KR has been previously analysed mainly in the context of one country. The originality of this article includes the treatment of the developmental factors for a cross-border KR within the context of regions from different countries. Cross-border regional integration processes have been covered by several OECD reports, but not with focus on KRs. Furthermore, an empirical study of the role of a CBC organisation and a theoretical debate on the creation processes of a CB KR have not been explicitly linked to date. This article also addresses regional integration as a process of CB integration of local authorities differently than the wide-spread approach as integration between states or supra-national states. The article arrives at several practical and theoretical conclusions by comparing the theories of region-building to the cross-border cooperation organisation's activities.

**GLOBAL CLUSTER NETWORKS: FOREIGN DIRECT INVESTMENT FLOWS FROM CANADA TO CHINA**

**Peng-Fei Li, East China Normal University, CHINA**  
**Harald Bathelt, University of Toronto, CANADA**

In the literature of regional studies, it has long been argued that industrial clustering could help to build local competitive advantages. From this, it can be expected that cluster areas, compared to non-cluster regions, will be more resilient to external shocks, such as recent financial crisis. Although it is still early to make such a conclusion on clusters' resilience after crisis, in this paper we investigate the dynamics of an important aspect of clusters, external networks of local enterprises, before and after the financial crisis. Economic geographers have emphasized that trans-local linkages play a significant role for local entrepreneurs to catch up with dynamics of industries and to build social network within global professional communities. In the era of post-crisis, we are asking whether external networks of clusters will be more consolidated, and if observed how global networks of clusters will be configured. Viewing FDI affiliates of cluster firms as network linkages and using a network perspective of multinational firms, the paper first formulates a global cluster-network hypothesis suggesting that multinational cluster firms are more likely to set up new foreign affiliates in other, similarly specialised clusters, rather than investing in non-clusters, to keep up with wider industry dynamics. Second, it is hypothesized that cluster networks generate connections between various city-regions in different countries, thus supporting the formation of global city-region networks. To test these hypotheses, we investigate the spatial patterns of nearly 300 foreign direct investment (FDI) cases from Canada to CHINA between 2006 and 2010. After developing a consistent typology of city-regions and clusters for both countries and identifying relationships between the source and target regions of such investments, the observed spatial patterns of FDIs support both hypotheses. And also, the results of global cluster and city-region networks turn out to be robust both before and after the financial crisis.

**PECULIARITIES AND FACTORS OF ST PETERSBURG METROPOLITAN AREA SPATIAL DEVELOPMENT IN POST-SOVIET PERIOD**

**Leonid Limonov, Higher School of Economics-Leontief Centre, RUSSIA**

The paper presents results of the research on definition of the limits of St Petersburg metropolitan area, main features of its spatial development in post-soviet period (1991-2011) and main factors of this development, including institutional ones. For analysis of the spatial structure of St Petersburg and its transformation, the results of computer modelling of spatial distribution of population and economic activity densities are used. Interpretation of spatial transformations includes evaluation of the importance of such factors as access to land, property rights specification and transparency, land use planning and regulation, transport and other infrastructure provision etc. With this purpose a survey of experts (officials, developers, managers of transport and logistics companies, local NGO leaders, planners, academics) was conducted, using in-depth interview method. In the conclusion of the paper main findings of the research are formulated. Main problems and challenges of St Petersburg spatial development in post-soviet period are: urban sprawl (including Leningrad region areas); shortage of sites for development (sub-divided, registered and equipped with infrastructure); shortage of infrastructure capacities in the city centre; lagging in development of public transport, road network and other infrastructure; inefficient use and very slow redevelopment and revitalization of the "belt" of old industrial zones; damage to the image of the historical city centre caused by demolition of historical buildings and spreading out mediocre modern architecture; seal construction in some city areas, environmental problems. At the same time we can see growth of services and housing construction; their qualities and diversity are increasing. Institutional framework of economic and spatial development of St Petersburg metropolitan area does matter. Most important factors, influencing these processes are: weak coordination of spatial development plans and actions between St Petersburg and Leningrad region; easiness of changing planning documents and land use regulations according to the requests of influential investors; absence of real alignment of interests during public hearings and consultations with stakeholders; absence of incentives for historical heritage preservation; defective sub-division of land during mass privatization of enterprises in 1990s; high risks and transaction costs of developers; absence of clear spatial development strategy and appropriate actions of public administrations; complicated, contradictory and volatile legislation, regulations and procedures.

**Jen-Jia Lin, National Taiwan University, TAIWAN**

**Yun-Chieh Huang, National Taipei University, TAIWAN**

**Chia-Li Ho, National Taiwan University, TAIWAN**

This study empirically analyzes the influence of school accessibility on student academic achievement in a rural area of Taiwan. The sample population comprised elementary and junior high school students in Pinlin, a small village outside Taipei City, the capital of Taiwan. Data were obtained through a questionnaire survey and analyzed via linear regression and ordered logic regression for continuous grade point average and discrete letter grade, respectively. Compared with previous research, this study presents the following new findings: (1) both travel distance and travel time negatively affected student academic achievement in terms of grade point average or letter grade; (2) accessibility affected academic achievement in adolescents as well as children; and, (3) travel obstacles significantly and negatively affected child academic achievement in terms of letter grade rather than grade point average. The empirical evidence indicates that geographic factors significantly explain the academic achievements of children and youth in rural areas.

**Dong Lin, University of South Australia, AUSTRALIA**

**Andrew Allan, University of South Australia, AUSTRALIA**

There are robust debates regarding how employment decentralization affects commuting patterns with large cities in recent decades evolving from monocentric to polycentric spatial structure. One major reason driving these debates concerns whether polycentric spatial development in mega cities provides increased opportunities to improve and optimize workers' commuting patterns, specifically by shortening workers' commuting distances and their travel times. This paper presents a review of debates from western countries and discusses the implications of a spatial mismatch hypothesis for spatial restructuring in China's mega cities.

**Louis Liu, National University of Singapore, SINGAPORE**

While export-oriented industrialization has become a well-known strategy for promoting industrial growth in a latecomer region, whether local firms can catch up with transnational corporations (TNCs) is still in question. What is the scope for local upgrading strategies so that the latecomer region can improve competitiveness? The global value chain literature emphasizes the powerful role of TNCs and the patterns of chain governance in defining local upgrading opportunities. The literature on regional development focuses on the influences from the institutional-spatial contexts of firms in facilitating the process of upgrading. Drawing upon the global production networks (GPNs) approach, this paper brings together these two strands of literature by using the concept of strategic coupling to explain the dynamic local upgrading in latecomer regions. I argue that latecomer regions strategically couple with the global economy in different ways. The variety of coupling leads to different consequences for nurturing or constraining local upgrading efforts. It is not fully predetermined by the patterns of value chain governance, but is also subject to the changing institutional-spatial contexts of key actors: local firms, TNCs and state institutions. This paper furthers to make a conceptual contribution by developing a fourfold typology of strategic coupling: captive, cooperative, reciprocal and absorptive coupling. In doing so, this paper stresses multi-scalar forces and interactive effects among key actors in producing local upgrading. By way of illustration, this paper introduces the example of the Pearl River Delta (PRD) in South China which has been upgraded from an agricultural backwater into one of the worlds' leading manufacturing hubs. This example profiles the progress of industrial upgrading and the evolution of strategic coupling in the PRD in the past three decades. Starting with captive coupling, the regional trajectory of upgrading has gradually become

divergent among different industries based on respective institutional-spatial contexts. In the electronics industry, captive coupling is reinforced whereby TNCs still dominate the pace of upgrading. In the apparel industry, cooperative coupling has been developed as local private enterprises have taken over the dominant role. In the automotive industry, reciprocal coupling has been developed between local state-owned enterprises and global auto makers because of the strong intervention of China's central state. There is potential for the emergence of absorptive coupling in some individual cases, while not at a regional level. Empirical investigations find out that local supply networks, domestic markets and competitive dynamics within GPNs are three important assets which underpin local firms to leverage the power of TNCs. More critically, successful cases of local upgrading largely derive from the synthesis of those assets, rather than completely rely on one single asset. Local upgrading does not necessarily challenge the positions of TNCs. Instead, they may develop more synergy with TNCs by utilizing those assets. Different with the developmental state literature, state institutions in the PRD are playing a dialectical role that sometimes pursue regional upgrading in a shallow form, particularly in the apparel industry. Drawing upon the example of the PRD, this paper demonstrates the causality between strategic coupling and local upgrading in such a latecomer region. It suggests regional policy makers to devote more attention to nurturing local upgrading, such as fostering indigenous innovation, regional assets and the local entrepreneurship of synthesizing the assets, as an ultimate solution for improving regional competitiveness.

*Gateway K*

## **CHINA OPTICS VALLEY IN MAKING: PUTTING EVOLUTIONARY ECONOMIC GEOGRAPHY TO A TEST**

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**Michael Dunford, University of Sussex, UNITED KINGDOM**

**Robert Hassink, University of Kiel, GERMANY**

Evolutionary economic geography (EEG) has attracted much attention in the most recent decade because it offers a set of useful concepts for explaining the changing economic landscape. However EEG has also been subject to vivid debate and criticism, since it is currently narrow both in theoretical foundation and empirical evidence. The existing EEG, highly influenced by New Regionalism, generally focuses on local factors (endogenous local technologies and institutions), but explicitly or implicitly neglects the effects of larger scale, because EEG has drawn insufficiently on traditional ideas of geographical scale. EEG empirically concentrates on the western contexts, largely European countries, with little attention to countries outside Europe. China has quite different socio-economic, institutional, political conditions than Europe where EEG originated. China has already become the world factory, the industrial clusters in this country not only provides labour-intensive products for global consumers, but also produces high-technological goods largely for national market. China may then constitute a critical test of the empirical reach of the West-based EEG beyond its empirical basis in Europe. It is thus time to systematically examine whether and how West-based EEG actually works in various empirical settings. This paper seeks to apply EEG onto a Chinese context, aiming to see whether and how EEG proves fruitful in a different geographical context than it was developed. We examine the usefulness and limitation of EEG and then develop a revised theoretical framework for explaining the cluster evolution in Chinese context. The revised theoretical framework is used to examine the evolution of China Optics Valley, a national recognized competitive industrial cluster of optical industry in Wuhan, China. Wuhan is the birthplace of the optical technology in China that originated in the Maoist time, but has declined for a long time after the opening-up and economic reform. Local states and local universities, research institutes, together national state, have made much effort to develop the industry in the end of 1990s, with a hope to re-energize to this city. As this local cluster grew, the increasingly number of multinational companies joined this emerging cluster the last half of 2010. Starting from this industry's roots, the relationship between the formation and development of China Optics Valley and systemic socio-economic and institutional changes at various geographical scales (global, national and local) is examined. The analyses demonstrate that the formation of China Optics Valley benefits a lot from the historical legacy of the planned economy in which Wuhan became one of optical research centres, and is largely driven by local factors before 2000, and the high growth entering the new millennium is pushed by economic and institutional actors from multiple geographical scales. We highlight that the process of local industrial evolution is actually the process of strategic coupling of multi-geographical scales, but the ways and timings of multiple scalar strategic coupling during local industrial cluster development process depends on local conditions. The study raises concerns about the usefulness and limitation of the west-based EEG and also

shows that the existing EEG has to be considerably refined when used in the context of increasingly globalized China.

*Gateway L*

**HOW MAGIC IS CINEMA?: ASSESSING THE EFFECTS OF AN ARTISTICALLY SUCCESSFUL REGIONAL CLUSTER IN CINEMA, PAULÃO-NIA, BRAZIL**

**Julio Lucchesi Moraes, University of Sao Paulo, BRAZIL**

**Aldo Do Carmo Jr., Erasmus University Rotterdam, THE NETHERLANDS**

Can artistic production foster the flourishing of cultural values and add them to cultural capital? Until the present moment, a significant part of the international bibliography has dedicated itself to the comprehension of the theme within a wider theoretical framework of the creative cities. Much of this discussion, though, is based upon the examples of larger cities, such as London, Toronto, or Bilbao. It's highly reckoned, moreover, that many studies on the area focus only on the implementation of creative policies, but there's still a considerable gap in academic analysis dealing with the evaluation of such projects. In this sense, our paper, analyzes the case of the small Brazilian city of Paulão-nia, where in few years the local government managed to build an entire cultural cluster for cinema production, from its inception in 2006 to being co-producer of the film with highest box-office ever in Brazil, in 2009. Despite sound achievements of the PÃlo Cinematogr fico de PaulÃ-nia in terms of cultural impact and nationwide reputation, a pressing question is whether its success is reflected in daily life of its citizens, and its effects in the local economy. The question is relevant since the local government is the PÃloa's major direct financier. Although we present a series of economic data from the local economy in its relation to the audiovisual sector, our article is mainly concerned with assessing non-economic outcomes. Our focus is to comprehend how (and if) local citizens got involved in the institutional framework, evaluating the political and social difficulties in the initial and on-going stages of the project. To answer all these questions we have not only revisited the classic texts on the creative cities and clusters discussion, but also analyzed reports and surveyed local citizens to account for the local cultural, social, and economic contributions of the cluster. We have managed to interview more than 100 inhabitants, addressing questions related to their personal involvement with the PÃloa Cinematogr 'fico de PaulÃ-nia and their set of values, opinions and expectations about the past, present and future of the project and its contribution to the local and national context. Finally, we believe, that our article can contribute to the state of art in empirical researches in the academic fields of culture and creative clusters and regional studies, providing a qualitative methodological framework future researchers.

*Gateway A*

**SPATIAL PATTERN AND INDUSTRIAL STRUCTURE ANALYSIS ON THE COUPLING DEGREE OF REGIONAL ECONOMY AND ENVIRONMENT IN CHINA**

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**Fen-Jun Jin, Key Laboratory of Regional Sustainable Development Modelling, CAS, CHINA**

There are coupling relationship between regional economy and environmental system. On the one side, the social economy system explored and processed resources from natural system, and discharged pollution back to natural system. On the other side, natural ecological environment system provides resources and space for social economy activities, and feeds back with the natural disaster or environmental pollution events. It is important to explore the quantity relationship between economy and environment system. Given more existing researches focusing on the time level, it is necessary to carry out the quantitative assessment research on the interaction between social economy system with ecological system and environmental systems on the spatial levels. In this paper, the comprehensive assessment indicators for regional social economy system and environment system were constructed firstly. Then, the coupling degree between regional economy and environment system was calculated. With the researching on spatial patterns analysis of coupling degree, it can be founded that Chinese territory could be divided into four types, including economy-environment harmonious area, economy-environment rivaling area, low coupling degree of economy-environment but with potential risk area, and low coupling degree of economy- environment but relative safe area. Based on the industrial structure analysis of four types of area, it can be found that the areas whose coupling degree was between 0.2-0.3 is also the agglomeration areas of polluted industries. Because of their industrial characters of high pollution and low value-added, these areas will be the high environment risk area in future. At last, this paper made a short



discussion on the limit of coupling model in the research on interaction relationship between economy and environment.

#### *Gateway M*

### **FARMER PARTICIPATION IN RURAL TOURISM DEVELOPMENT: A COMPARATIVE STUDY ON CASES FROM GREECE AND CHINA**

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**Stella Kostopoulou, Department of Economics, Aristotle University of Thessaloniki, GREECE**

Rural tourism is worldwide considered to be an important tool for achieving economic and social development and regeneration, particularly in areas where traditional agrarian activities have declined. The aim of this paper is to examine the farmer involvement in rural tourism development, focusing on a comparative study of cases from Greece and China. The paper first reviews major stakeholders in different types of rural tourism development in China, based on a small-scale survey in suburb areas of Beijing and cases from Chengdu, land use issues, interest sharing mechanism, information technology and skills, farmers' attitude, are examined. It highlights issues and factors hampering the involvement of rural communities in tourism. In comparison, case study on a women agro-tourism cooperative nearby Thessaloniki, is used to illustrate the contribution of the use of internet to women's cooperatives development and the contribution of women's cooperatives to local development in Greece, results indicate that neglect of farmers' right to development, insufficient supervision and lack of skills impede farmer involvement in rural tourism development in China.

#### *Gateway B*

### **EVOLUTION OF REGIONAL WAGE GAP IN BRAZIL (1996/2009)**

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**Lizia Figueiredo, Cedeplar/UFGM, BRAZIL**  
**Luiza Dulci, Cedeplar/UFGM, BRAZIL**

We estimate mincerian equations for the metropolitan regions of Brazil, for each year in the period 1996-2009. We followed Duranton & Monastiriotis (2002) methodology for analysing the evolution of regional wage gap among regions in Brazil. Duranton & Monastiriotis (2002) methodology first estimates Mincerian equations for each year and each region (of UK, in their case). The second step is to calculate the coefficient of variation of the returns of all components (gender, education, regional fixed effects – the coefficient of the regional dummies, experience) for each year. For them, a decrease in the coefficient of variation would imply a decrease in regional dispersion, similar to the concept of sigma convergence of the economic growth literature. A third step is the calculation of a linear trend for each return for each region in the whole period. The aim is to observe if the change in the return was inversely related to its original value, inspired by the idea of beta convergence, also from the economic growth literature. If, for example, regions with lower (higher) returns for education were facing the highest (lowest) increase in it, this would imply a decrease in regional inequality. Due to strong heterogeneity in Brazilian labour market, we add other variables in our specification: migration condition, occupation category by skill, sector of activity, unionization, informality. The sample includes the period 1996 to 2009, using data from PNAD (National Household Survey – covering around 100.000 households). The regions are the main metropolitan areas covered by this survey – Belém, Fortaleza, Salvador, Recife, Rio de Janeiro, São Paulo, Belo Horizonte, Curitiba, Porto Alegre and Distrito Federal. We also estimated the coefficient for the regional dummies, the regional fixed effect. Our preliminary results show that, in Brazil, the wage is being more determined by individual characteristics, since regional fixed effects are decreasing everywhere. The returns for education and experience are stable in this period; after falling, the gender gap has also reached stability. Unfortunately, the stability is also observed for race discrimination. With these observations, we can conclude that individual inequality is facing a centrifugal effect, the regional one; stable effects, from human capital, and that gender gap and race discrimination still remains- although in lower patterns. The above portray does not imply change in regional inequality. For assessing this, we estimate and observe the coefficient of variation and the relationship between the change and the initial value of the returns of the wage determinants and of the dummy coefficients. Regional inequality is still falling, due to the regional fixed effect, the decrease in the gender gap and the change in race discrimination. The forces in the opposite

direction were the returns for education, since its growth was higher in areas with already high education returns, and the returns for experience.

*Gateway M*

## **RESHAPING THE TERRITORY - CREATIVITY, REGIONAL DYNAMISM AND SOCIAL INCLUSION: THE EXPERIENCE OF INHOTIM MUSEUM (BRAZIL)**

**Ana Machado, Cedeplar/UFMG BRAZIL**

**Fabiana Santos, Cedeplar/UFMG BRAZIL**

**Marco Crocco, Cedeplar/UFMG BRAZIL**

Creative economy can be understood as a network of activities that differ from the other economic ones due to the presence of the symbolism, aesthetics, copyrights, in addition to the use of information and communication technologies. It is a privileged locus for small firms, many concerning only the individual, which produce materials, ideas and actions in the field of arts and cultural events. Given these characteristics, individuals, including the ones that suffer from deprivation, are more likely to become social agents, as defined by Sen, being able to actively shape their social reality, rather than being passive beneficiaries of social policies. In this respect, urban places, specially small and middle-sized towns and cities, may be particularly benefited by creative industries since their local amenities and quality of life subject to a minimum scale of urban amenities and services make them attractive to the creative class and consumers. Local “amenities”, as defined by Inteli (2011), “constitute a set of unique characteristics of the territories, both natural and manmade, with an aesthetic, social and economic value, and can be classified in natural, cultural, symbolic and built assets”. Moreover, these places are still to be “built”, in the sense that there are potentials to be explored that can lead, on the one hand, to local empowerment and development and, on the other, to the structuring and/or strengthening of a more balanced polycentric spatial system, while preserving the local lifestyle and environment. We believe that small and middle-sized cities have a role to play in the creative economy, although in different forms to big cities. As a matter of fact, it is the interpenetration of creative industries, creative spaces and creative talent that gives rise to new sources of socio-economic growth and to sustainable development. Such interpenetration, nonetheless, “depends largely on the specific governance systems and institutional arrangements of the territory” (Inteli 2011). These comments implies that inclusive, innovative, creative-based strategies for local development must depart from the recognition of the importance of the territory as a social construct and the nature of the existing spatial system. Having these concepts in mind, we aim at comparing two different territories where are located two important cultural assets, the Guggenheim Museum in Bilbao and the Inhotim Museum in Brumadinho, Brazil. Departing from the analysis of the regional and socioeconomic impacts of these two cultural assets, we intend to evaluate the spillover effects at the territorial level and the capacity of these equipments to sustain medium to long term inclusive, innovative and creative-based strategies of development. The main contribution of the paper is to bring evidence on the relevance of such strategies to sustainable development considering contrasting spatial systems and cultural and economic settings. The Inhotim Museum, located in Brumadinho - a municipality of the Metropolitan Region of Belo Horizonte, state of Minas Gerais, Brazil – is the largest Contemporary Art Works Museum in open air. Moreover, the beauty and biodiversity of its gardens were recognised in 2010 by the National Committee of Botanical Gardens, which awarded to Inhotim the official title of Botanical Garden. Differently from Bilbao, the Inhotim Museum is located in a small town, Brumadinho, part of the Metropolitan Region of Belo Horizonte (RMBH). A recent study of the RMBH has shown the considerable unbalances and inequalities within the metropolitan region territory, calling for an “inversion of priorities” (in investments and public policies) to mitigate these problems. Differently from the Bilbao’s experience, whose region was already undergoing a process of crisis and needed new alternatives of economic growth, Brumadinho is still enjoying the benefits of the commodities boom, given the large iron ore reserves in its territory. Without doubt this has had important impacts in the community, the cultural and natural heritage and the environment. As it will be explored in the paper, it raises a first type of question on whether the mining activity is a curse or a blessing for the region, given its effects on economic growth, productive diversification and public policies.

**EMERGING MEGA-REGIONS IN CHINA: A COMPARATIVE PERSPECTIVE WITH THE EU AND U.S.**

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With the acceleration of urbanization after the economic reform in 1978, especially since the turn of the century, cities in China are developing from independent, self-contained entities into more dispersed, multi-centred mega-regions. This paper uses Chinese urban statistics data from 2008 and EU and US mega-region data to identify mega-regions in China and analyze the spatial planning strategies that under-pin them. Both demographic and economic evidence support the emergence of mega-regions in China. However, urban infrastructure, services and transportation facilities in Chinese mega-cities are still not as well developed as comparable US and EU examples. In addition, this paper looks at a variety of international experiences, comparing the effect of spatial planning strategies on mega-region development world-wide and drawing practical policy lessons which can be applied to improve Chinese regional development outcomes.

**SOLID WASTE MANAGEMENT: ARE BOTTOM-UP SOLUTIONS UP-SCALABLE: THE PHNOM PENH, CAMBODIA AND AYUTTHAYA, THAILAND CASES**

Chutthapit Maneepong, School of Politics And Global Studies, Arizona State University, USA

Vilas Nitivattananon, Urban Environmental Management Field of Study, Asian Institute of Technology, THAILAND

Samonphorn Suttibak, Kasetsart University Chalermphrakiat Sakonnakhon Province Campus, THAILAND

Gina Chhun, Arizona State University, USA

Contemporary environmental management literature asserts the advantages of stakeholders' participation in the design and operation of infrastructure-led projects, justified in terms of sustainability and local economic benefits. On the contrary, the engineering-based metropolitan solid waste literature stresses the benefits of comprehensive large-scale systems for garbage separation, decomposing, recycling and reuse. Under this model, urban communities rely on local government efforts, frequently operated by private concessionaires, for solid waste management. The paper will examine two cases of community based solid waste management in Phnom Penh, Cambodia and Ayutthaya, Thailand. The Phnom Penh case involves a small non-government organization, CSARO; while the Ayutthaya project is based on a network of 8 local schools. The key finding is that most current bottom-up projects deliver community benefits and are technically practical, but do not operate on a cost-recovery basis at current scales. However, if these projects were up-scaled utilizing a market-based model, financial sustainability is possible. Up scaling would enable collection of adequate volumes of high-value waste, commercial scale composting, and aggressive marketing. Benefits of such a hybrid model will be outlined, e.g., reduction of conventional solid waste treatment, creation of useful products such as compost, localized employment creation, and lower labour costs.

**NORDIC GREEN ENERGY CLUSTERS: TESTING THE RESILIENCE OF THE GERMAN MODEL**

Åge Olav Mariussen, Bothnia Atlantica Institute, FINLAND

The global economic crisis has led to a trajectory shift with relative decline in neo-classical economies such as USA, UK, and growth in BRICS countries, with the coastal regions of China as the new winners. The implications for Europe are an equally clear divide. The European losers are the winners of yesterday, the neo-liberal UK, relying heavily on a financial industry cluster in London, as well as regions and countries like Ireland, Portugal, Hungary and others which relied on provision of favourable conditions for Foreign Direct

Investments or FDI. These regions are now losing out in the new competition with the low cost advantages of China, Vietnam, Brasil and other BRICs. The European winners are regional and countries like Germany, Austria, Finland, Denmark, Holland and others who apply the "German model". The German model of regional development builds on coordination between regional development, education policies and R&D. Industries are carefully supported with regional polytechnical and university level education. This is integrated with locally embedded R&D and innovation. This enables local industries under threat from new global competition to follow strategies of "climbing the ladder" of the value chain, and diversifying its economy through related variety – type of strategies into products and services which still are competitive. And at the same time, it makes it possible for the regions to accumulate "sticky" knowledge, embedded in the labor market. In this context, off-shoring to China only means that firms are reorganised, and reappears, with more value added and sophisticated products. The paper presents a study of the development of two Nordic green energy clusters: the wind energy cluster in Vaasa, and the solar energy cluster in Northern Norway. The Norwegian PV industry is now facing a fierce cost based competition with Chinese solar industry plants. The case in point is the REC factory and the related small cluster in Glomfjord in Nordland, producing wafers, integrated with panel production and R&D in Narvik. This is somewhat paradoxical, because REC in Glomfjord emerged as a regional policy success story, where the existing chemical industry and a municipality (Meløy) with access to cheap hydroelectric energy was able to initiate a local innovation system which, 10 years ago, was fast-growing and highly globally competitive. Today, however, the local industry seems to have severe problems in restructuring its own production into higher value added and competitive products, such as mono-wafers. The Vasa case illustrates a German strategy of cluster development in Finland, with a combination of electrotechnical and mechanical industries. Here, educational policies and University policies have been coordinated in a way which has enabled the region to replace corporations moving elsewhere with new industries, and innovate into related areas.

#### *Gateway Q*

### **EVIDENCE, POLICY AND THE POLITICS OF REGIONAL DEVELOPMENT: THE CASE OF HIGH SPEED RAIL IN THE UNITED KINGDOM**

**Pedro Marques, University of Kiel, GERMANY**

**Ranald Richardson, CURDS, Newcastle University, UNITED KINGDOM**

**Andy Gillespie, CURDS, Newcastle University, UNITED KINGDOM**

Geographers have often reflected on the impact of their research on policy making. Contributions usually focus on the (ir)relevance of research topics or on the pressures to 'publish or perish' that discourage academics from engaging with applied work. In this paper we will focus instead on the difficulty in engaging with the political process, even when the evidence appears robust and its policy implications relatively clear. We use the example of high speed rail and its impacts on territorial inequalities, to reflect on the decision making process in the UK, where the government is currently considering building a new high speed line. We argue that despite fairly strong evidence suggesting that high speed rail is likely to deepen inequalities between the regions in the UK, currently this project is still being hailed as a strategy to spread economic activity and 'rebalance' the British economy. We identify some of the reasons for this perverse outcome.

#### *Gateway G*

### **IDENTIFICATION OF AREAS WITH POTENTIAL FOR PROMOTING INNOVATION PROCESSES IN MEXICO**

**Elvia Martinez-Viveros, Centro de Investigación en Geografía y Geomática Ing Jorge L Tamayo, MEXICO**

**Camilo Caudillo-Cos, Centro de Investigación en Geografía y Geomática Ing Jorge L Tamayo, MEXICO**

Over the last two decades innovation has been recognized as the leading force of economic growth. There is a growing interest in analyzing the role of space and place in innovation and in explaining regional development through this process. The claim is that spatial proximity favours interactions between actors from firms, academy, government and civil society. Information and knowledge (and specifically tacit knowledge) flow through these networks giving rise to the emergence of innovations. It is also frequently stated that globalization and localization processes feedback each other while the first tends to reinforce the economic growth of regions

and places with greater innovative capabilities, hence contributing to widen the regional inequality gap. Prosperous regions and places, inserted in increasing returns economies, pose a major challenge to the insertion in innovation systems of peripheral or marginal ones. This challenge might be coped with by means of planning, which promises the possibility to construct a balanced regional development through purposeful men's actions. In Mexico there is a wide development gap between poor and wealthy regions and the availability and access to all kinds of resources is marked by inequality. Relevant innovation processes in this country are hard to identify. However, one first step for adhering to the planning promise is to identify where innovation capacities converge, paving the road for the implementation of participative bottom-up processes, involving local social actors interested in defining innovation strategies and initiatives aligned with their regional capacities. Framed in the abovementioned arguments, this research project first stage contributes to a territorially differentiated identification of innovation capacities in Mexico. Works in this line are centred in the identification of the spatial convergence of qualified human capital, productive potential in dynamic economic activities and social capital; as well as different variables that typify these places' contexts. The underlying assumption is that in such places an environment prone to information exchange and knowledge transfer can be generated in order to catalyze the emergence of local innovation systems. Results from conglomerate analysis based on data of the economic units of the Mexican Economic Census 2010 are presented firstly. Then, a global spatial autocorrelation index is obtained and local indexes pointing to the specific places where the autocorrelation degree is of significance are calculated and represented in a base map. Afterwards, in an attempt to explain conglomerate patterns a spatial econometrics regression model is applied using dependent variables related to human capital, social capital, productivity, poverty and access to public services, among others. It is worth mentioning that these results counterpoint to traditional zonings used in public policy design. In these zonings the geographic space is divided by artificial borders that allegedly separate homogeneous areas containing independents and timeless objects and outcomes. Although our results are preliminary and general, they invite planners and policy makers to focus in a spatial conception centred in the space's structure (heterogeneity) and in its relational character.

*Gateway ESS1*

## **REGIONAL PLANNING AND CHANGE IN MULTI-ACTOR SYSTEMS**

**Monika Matusiak, Poznan University of Economics, POLAND**

**Ida Musialkowska, Poznan University of Economics, POLAND**

The article considers the implications of multi-agent systems and multi-level governance approaches for the creation of development strategies on regional and local level. The afore-mentioned approaches are understood as representing territorial and institutional dimension of the planning process, respectively. Strategy as a document that plans regional change needs to include the cooperation of public authorities on different levels but also to involve other actors who are independent, have local point of view and do not have full knowledge concerning the development of the regional system as a whole. Yet, their actions are crucial for regional change to happen, as the impact of the decisions taken by public authorities is often not significant enough to influence regional development path. Moreover, participation is distinguished from mere consultation, where the first means active involvement in the strategic process from the very beginning and taking part in the decision-making. On the other hand, consultation is based on presenting ideas elaborated by public authorities, sometimes with the help of external consultants and asking for opinion. Such a division has significant consequences for the behaviour of the actors who can accept a strategic proposal or share the authorship of it and subsequently adapt their own behaviour, as well as the actions of the institutions they represent, to the new scheme. Therefore, multiple agents, both in vertical as well as in horizontal dimension, need to be involved in developing all kind of strategies, both in local and in regional dimension, for these strategies to be effective and lead to real changes in the behavioural patterns of the actors. The authors analyze the higher than average participation patterns in two such cases: the preparation of Culture and Tourism Strategy of the City of Poznan and Regional Innovation Strategy for Wielkopolska Region in Poland. In both those cases the participative approach to the strategic process has initiated behavioural changes in the actors and institutions involved. Taking the above into consideration and in unchanged external conditions, regional change can happen if the strategic actions are well defined, based on sound analysis and correctly implemented as well as if enough actors are persuaded to implement the changes and adapt their behaviour. Moreover, the influence of those actors must be big enough to influence the regional system and therefore have the features of social innovation. A thorough analysis of behavioural patterns based on multi-agent approaches can then help to define possible consequences of strategic actions and decisions.

**Ronald McQuaid, Employment Research Institute, UNITED KINGDOM**

It has been widely established in the UK and other developed countries that men commute longer than women and that fathers travel furthest to work while mothers travel least. This paper models a wide variety of factors that affect commuting times including gender, presence of children and working hours (part- and full-time work). It finds that of particular importance to the length of commute are the worker's age, having children, the age of their youngest child, occupation, weekly pay, and mode of transport (with public transport being associated with longer commutes). The region of residence was important for men and women working full-time but not for part timers (except for women in London), while ethnicity and owner occupation were associated with commuting length for full-time men only. The results suggest that while gender, working hours and childcare responsibility are often inter-related, it is useful to disaggregate their effects when modelling or developing policy.

**Jose M. Mella-Marquez, University Autonoma of Madrid, SPAIN**

**Asunción López, University Autonoma of Madrid, SPAIN**

The contribution of headquarter activities in terms of value added and employment is relevant, particularly in cities where those activities are highly concentrated. Moreover, the way of measuring of this contribution by the official statistics services is controversial. For the specific case of the city of Madrid, the methodology employed by the official statistical services (National, Regional and Local Accountings) does not reflect faithfully the contribution in GVA and employment activities from headquarters to the economy of the city. This is because the labour apparent productivity of headquarters is supposed to be the same than the aggregated productivity. That fact is in open contradiction with the provision of strategic functions (management, marketing, technical and administrative services) and the average wages of the workers in headquarters, which are -according to the same sources- higher than the corresponding to the enterprises as a whole. For that reason, this phenomenon has been denominated -in this paper- 'apparent paradox', because workers in headquarters, with the same productivity levels than the average, receive higher wages than the average, using the same data sources. The 'apparent paradox' is based on the unrealistic assumption that the net operating surplus of headquarters activities is zero. The methodology that is described in this paper takes into account that wages differences reflect differences in productivity, discarding the mentioned hypothesis of nullity of net operating surplus. Therefore, it allows us to calculate a more accurate estimate of the value added by headquarters located in the city of Madrid. As the application of this methodology requires data not provided by the official sources, that have been collected through a survey addressed to thousand firms with establishments in Madrid. For each firm, this survey provides us information about the remunerations by departments and territories, as well as the value of the overall average wage and the difference in wages between different groups of employees. Applying the observed wage differentials to the GVA for employee estimated by the Municipal Accounting, it is possible to get an estimate of the value that each employee brings to the company, according to the functional area and territory where he works. This estimated GVA per employee on the departments that integrate the headquarters and the information about the employment of the firms located in Madrid belonging to the different sectors make possible to calculate the GVA generated by Madrid headquarters. Finally, as the production and use of the services provided by the headquarters do not necessarily coincide, it is possible to identify the exchange (export and import) of this kind of services between the different establishments of the firms and between the cities where they are located. These flows of export and import of headquarters services have an impact on the urban/regional economies that the National / Regional / Local Accounts do not reflect and that we have denominated headquarters effect. Using this methodology, we have estimated that the GVA provided by the statistics services of the city of Madrid could be undervalued up to 18%. As this GVA is partly used by the establishments located in the city (the rest is exported), the headquarters effect calculated with the proposed methodology is something more than 3% of the GVA estimated by the municipal accounting.

**HUMAN CAPITAL, CREATIVE CLASS, AND GROWTH IN THE MEXICAN REGIONS AND CITIES**

**Miguel A. Mendoza, Unam, MEXICO**

**Marcos Valdivia, Unam, MEXICO**

During the last decades, urban dynamics in cities has shaped strongly regional growth and development in Mexico and other similar emergent countries in Latin America. Nowadays, regional growth dynamics in these countries cannot be explained fully without understanding spatial interaction among cities and urban dynamics within cities. Urban structure of cities in Mexico, as well as in other countries of Latin America, has evolved from the prevalence of one mega metropolitan area (Mexico City) to a more complex system of cities since the process of economic liberalization took place. In particular, Mexico has experienced the emergence of medium-sized cities with strong urban dynamics whose growth, in most of them, is explained importantly by the new conditions of economic localization that North American Free Trade Agreement (NAFTA) brought to Mexico. At the same time, the "old city" (Mexico City) has changed its economic specialization from a strong manufacturing centre to a city economically driven by services and finance. The purpose of this paper is to study whether these changes are driven by the spatial concentration of human capital and the active role of a creative class in urban centres across metropolitan areas in Mexico.

**PATTERNS OF CROSS-BORDER MOBILITY AND THEIR IMPLICATIONS FOR THE CONFIGURATION OF CO-ORDINATION PROCESSES IN TRANSNATIONAL COMPANIES AND PRODUCTION SPACES**

**Alejandro Mercado-Celis, Universidad Autónoma Metropolitana-Cuajimalpa, MEXICO**

**Bruno Gandlgruber, Universidad Autónoma Metropolitana-Cuajimalpa, MEXICO**

International mobility for work-related reasons has been prevailing in spite of the introduction of new technologies of information and communication and of the high cost pressures in international competitive environments. So face-to-face-communication and personal control (geographical temporal proximity) are still central elements for coordination in multinational organizations. In order to get a grip on the tendencies in cross-border mobility and their impact on the configurations of international companies and production systems, we analyze the distinct complex patterns of these types of mobility particularly in companies that are based in Germany or in Mexico with production activities in the other country. Through documentary analysis and personal in-depth interviews with mobile workers and human resource decision makers we are able to characterize different patterns of mobility and their specifications in each of the selected companies in terms of preparation, duration, objectives, etc. and relate them to a group of criteria that try to explain similarities and variations according to different forms of coordination in companies and production systems. We approach the former by applying the concept of 'worlds of production' proposed by Storper and Salais to the firms and regions involved. This paper is a product of a broader research with main hypothesis is that cross border labour mobility as coordination mechanism is of increasing importance. Based on identifying the (shifting or stabile) patterns of cross boarder personnel mobility as coordination mechanism the research evaluates the main explaining factors and develop an explanatory model which could be tested in further, more standardised studies. The design and methodology follows a double approach of hypothesis testing and of generating a full explanatory model. With a comparative case study design (main axis of comparison: profit – non-profit-organisations, Germany-Mexico location of headquarters and of activities , contingent situation of organisations, institutional embedding of local centres) influencing factors of patterns of change in cross border personnel mobility are evaluated. Methods concentrate on ego-centred and organisational network analysis and structured interviews.

**Tian Miao Julie, University College London, UNITED KINGDOM**

Industrial and science parks of various kinds have been relied on heavily in China to boost innovation and leverage regional development. Nevertheless, due to defective political audit and poor data availability in China, the real contributions of these artificial clusters to achieve the government goals remain unclear. This paper thus aims to assess the role of science parks as instruments of innovation promotion and regional development in China, assisted by the emerging school of innovation system theory. More specifically, this study explores the development of the optoelectronics industry in the so-called Optics Valley of China, Wuhan (OVC), and investigates the effects of geographical proximity and different ownerships on companies: 1) internal innovation resources, 2) external networking activities, and 3) innovation performances. The results show that in general, contrary to the initial predictions, the tangible input and output linkages of companies in OVC are dominant by national level transactions over both the local and the international levels, regardless the companies' locations and ownerships, which implies an oblique position of Central China in the global value chain. On the other hand, the intangible local networks between the companies and the research and higher education institutes are marginal, while the companies' interactions with the local government are crucial for their survival. Regarding the effect of companies' ownerships, it is surprising to notice that the state and collective controlled companies surpass the private ones on all the above three dimensions. For the added-value of geographical proximity, it is found that the clustered companies exhibit marginally better innovation performances and deeper local embeddedness than those scattered ones, but the significant differences existed among the clustered companies suggest that the origins and develop trajectories of the science parks should be taken into consideration when evaluating their contributions. Through the lenses of the innovation system theory, companies on the science parks are no long identical to each other and doing innovations on a linear model, so by no means this is just old wine in the new bottle.

**Valentina Mini, Institute For Economic Research - University of Lugano, SWEDEN**

Particular emphasis has recently been placed in spatial economics and regional science on the territorial endogenous determinants of economic activity and competitiveness (among the others Ottaviano, 2008; Rodriguez-Pose, 1998, 2009). However, the uneasy manageability and costs of microeconomic data has favoured empirical investigations at the aggregate rather than disaggregate level. We believe in micro-level data analysis to observe and estimate firm-level heterogeneity influence and the territorial role to explain the regional competitiveness. In order to extract the relative variability of firm specific versus spatial specific factors, we employ multilevel techniques. In this paper, we adopt multilevel analysis methods to investigate the spatial variability of firms productivity across the regional territory in a Switzerland canton. Following this way, the paper proposes and tests the possibility to incorporate a spatial dimension in the evaluation of firms' productivity growth using multilevel model, tailored to deal with economic competitiveness approach. The estimation uses exclusive micro data at firm-level from the manufacturing and services industry of the Tessin Canton (CH) on three time periods (1995-2000, 2000-2005, 2005-2010). The database is created on the ad hoc electronic survey driven in spring 2011 within 1207 firms working on the local areas. The sample is stratified by sector, firms' size and region. The analysis is based on the sent-back fulfilled questionnaires. We expect that, after controlling for firms' characteristics, the spatial features are crucial to explain productivity and output growth. In addition, we think that territorial externalities have a central role in explaining economic competitiveness. Finally, to properly capture the variability of the data, it is important to allow for both spatial mean and slope effects. Considering the general framework of interest, this work offers two principals contributions: one based on conceptual issues, the latter founded on the methodological perspective. We assume that regional context conditions influence the competitive performance of firms and this effect differs from different kind of firms (quantitatively assessed). From the methodological point of view, we demonstrate how research on regional economic competitiveness can benefit from multilevel modelling (MLM) – also known as hierarchical regression system - that generalizes ordinary regression modelling to distinguish multiple levels of information. Finally, the results will offer the chance to think about policy implications using the reference to the complex multilevel governance context. Some contributors suggest that structural reforms are required to



provide institutional coherence as a guarantee for successful sub-national policy development. We'll use our result for better understand this point of view within the current policy strategy debate.

*Gateway L*

## **CREATIVITY, DESIGN AND THE URBAN ENVIRONMENT: THE TRANSFORMATION OF THE NEIGHBOURHOODS OF LA CONDESA AND ROMA IN MEXICO CITY**

**Maria Moreno-Carranco, Autonomus Metropolitan University-MEXICO**

Increased attention has been given to the production and consumption of design at the neighbourhood level. Richard Florida's thesis of the creative class, which positions the creative class as the motor of urban regeneration and economic growth, has generated both acceptance in policy making and controversy in academic debate. Cultural industries are a characteristic site of discussion, equally in relation to production and consumption as in their reciprocal relationship of symbolic and material manifestations. Design is produced and consumed in specific places; furthermore these activities contribute to particular ways of place making. This work will concentrate on the neighbourhoods of La Condesa and Roma in Mexico City. An area often described as the local SOHO where new ways of cultural production and consumption are transforming the urban space. New spaces of consumption are emerging simultaneously with spaces of production and innovation in areas such as advertising, film, architecture, marketing and graphic design. The urban dynamic of the area has been profoundly transformed in the last decade from being mainly a low density residential area to a design production and consumption district; traditional businesses are disappearing while "creative offices" and design stores proliferate. As a consequence of the rebirth of the neighbourhoods and their redensification, buildings are being upgraded, public spaces are being improved, semi-public spaces are on the rise –such as restaurants, coffee shops and bars-, and real estate prices have skyrocketed. The neighbourhoods are attracting Bo-Bo (Bourgeois-Bohemian) youth at the same time they are undergoing a process of gentrification that manifests in the displacement of traditional and long time residents. Furthermore, the redensification of the neighbourhoods and their economic growth has also brought urban problems at the community level. On the one hand lack of parking availability for neighbours, insufficient urban services, increasing traffic, on the other the proliferation of restaurants and bars and their use of public spaces such as sidewalks and street parking are often points of conflict with long time residents of the area and neighbour associations. In this paper we aim to analyze the transformation of La Condesa and La Roma in the last decade, its economic restructuring in creative and service oriented firms and design consumption markets, and the complementary infrastructure of public and semi-public spaces that are used both for recreation and work-related meetings. In doing so, we will also analyze the impact of these transformations in the lives of residents and traditional businesses that are being affected by these changes. What are the new dynamics generated by this transformation?, Who is designing?, Who is selling?, Who is buying?, how is the life of the inhabitants being transformed?, who benefits and who does not? Those are some of the questions we will address.

*Gateway CSS1*

## **SUBJECTIVE WELLBEING AND HAPPINESS INSIDE A CITY REGION - A CRITICAL OVERVIEW**

**Philip Morrison, Victoria University of Wellington, NEW ZEALAND**

Until very recently our understanding of the quality of life in a place was based primarily on secondary data, often from census aggregates and/or direct physical measures of the local environment. From these we inferred external or indirect measures of wellbeing. With the growing availability of sample survey data we now have at our disposal an increasing range of subjective measures that are, by contrast, internal or direct measures of wellbeing as expressed by individuals themselves. Both external and internal measures of wellbeing are now widely used in the social indicator and quality of life literatures and are being vigorously debated in public policy forums as possible outcome measures. Subjective wellbeing has gained the attention of economists as the 'economics of happiness' much of which has close links to conceptual developments in positive psychology. Sitting in the wings are the human geographers and regional scientists who, with some notable exceptions, have been slow to involve themselves in academic research on wellbeing. Their absence is surprising because they are uniquely positioned to point out the relevance of context in understanding human behaviour. Understanding spatial variations in wellbeing within and across regions poses many challenges both theoretical and

methodological and a number of these will be familiar to geographers and regional scientists. I highlight a several of these by reviewing the global effort to comprehend the geography of wellbeing.

*Gateway CSS1*

**LIVELIHOOD DECISIONS UNDER THE SHADOW OF CONFLICT IN THE CHITTAGONG HILL TRACTS OF BANGLADESH**

**Syed Mansoob Murshed, ISS-Erasmus University, THE NETHERLANDS**

**John Cameron, HDRC-Bangladesh, BANGLADESH**

**Muhammad Badiuzzaman, HDRC-Bangladesh, BANGLADESH**

We analyze rural household livelihood and children's school enrolment decisions in a post-conflict setting in the Chittagong Hill Tracts region of Bangladesh. The innovation of the paper lies in the fact that we employ information about current subjective perceptions regarding the possibility of violence in the future and past actual experiences of violence to explain household economic decision-making. Preferences are endogenous in line with behavioural economics. Regression results show that heightened subjective perceptions of future violence and past actual experiences of conflict influences current consumption, increases child enrolment and encourages risky mixed crop cultivation. The trauma emanating from past experiences combined with current high perceptions of risk of violence may induce bolder and riskier behaviour in line with prospect theories of risk. Furthermore, a post-conflict household-level Phoenix or economic revival factor may be in operation, based in part on greater within group trust.

*Gateway D*

**REGIONAL CHANGE AND RESPONSE: AN EXAMINATION OF DEVELOPMENT TRENDS IN NEW ZEALAND'S RURAL REGIONS AND SMALL TOWNS**

**Etienne Nel, University of Otago, NEW ZEALAND**

**Michelle Thompson-Fawcett, University of Otago, NEW ZEALAND**

In parallel with the experience of many OECD countries rural New Zealand has undergone significant economic, social and institutional changes in recent years. Globalization, the pursuit of neo-liberalism and the gradual transition to a post-production and multi-functional landscape has had profound implications on rural livelihoods, demographics and the economies of small services centres. This paper examines the key catalysts driving rural and small town change in New Zealand, with specific reference to the regions of Southland and Otago. Using as a lens regional data sets stretching back nearly 100 years the paper overviews both the nature of economic and demographic change in these areas and discusses the key catalysts driving change. The last section of the paper overviews national, regional and local responses to these shifting dynamics, placing particular emphasis on various local initiatives which are emerging in response to both economic marginalization and demographic change. The results clearly indicate the rural regions in New Zealand have undergone intense changes which have selectively advantaged and disadvantaged different regions. The regional landscape has altered profoundly, and not all regions have been able to maintain their former economic status. At the local level an inspiring range of local initiatives are emerging, but their long-term sustainability is questioned.

*Gateway C*

**PLANNING 2.0: THE USES OF THE WEB IN THE MOBILIZATION OF LOCAL COMMUNITIES IN URBAN AND ENVIRONMENTAL ISSUES**

**Douay Nicolas, Université Paris-Diderot (PRES Sorbonne Paris Cité), FRANCE**

The aim of this presentation is to explore new forms of social mobilization in urban areas that use the Internet technologies. The development of online social networks offers new possibilities of expression and protest. Web 2.0 is transformed into a digital public space complementary to the traditional physical public space especially when this one is particularly controlled. Two main cases studies will be discussed. 1. The Chinese Bloody Map

of real estate that is particularly representative of these changes. Published in October 2010, this map uses cooperative knowledge of Internet users to list real estate developments that led to physical violence. These can range from simple protest repression to self-immolation. The checked version of the map shows 85 events and the open version 199 cases. The diffusion of the news of this map in the Chinese and international medias helped to put this social issue on the political agenda related to urban development and real estate in China. 2. The Hong Kong Citizen Map , using an interactive website, the South China Morning Post published on line a collaborative map to expose attacks on the environment reported by members of the public.

*Gateway E*

## **THE FOUR MOTORS FOR EUROPE, LESSONS FOR LATIN AMERICA FROM AN INTEGRATION OF NON-CONTINUOUS TERRITORIES**

**Jose Nino Amezcuita, Eupolis Lombardy, USA**

The four motors for Europe is the integration of highly developed regions; trying to create a synergy to develop their territories. In that sense, to analyze the incentives and objectives of this integration help to understand why it can be adapted those concepts to the Latin America reality, regardless the development level of the territories. Since an academic and practical point of view; during the last quarter of the twentieth century was observed the renaissance of the geographical aspects, in the political as well as the economic sphere. However, as these kind of considerations exist, it becomes mandatory to understand the differences and similarities between the places where it will be applied these concepts. Thus, it is undeniable the influence that Europe has in Latin America new territories construction; and their own political-administrative structures. Therefore, it is important to understand how these territorial integrations could be seen as an example for a more fragmented and bigger space than Europe; observing that that the difference plays a positive incentive to generate these articulations. The paper document presents a general description of the four motors for Europe process; analyzing that this kind of integration goes further than a continuous space. Also, the text studies the motivation, economic and political, that influences the construction of this type of organizations such as supranational integration, borders dissipation and territorial entities reinforcement. Then, it is redefined the functions of the different territorial levels governments; existing some functions transferred to the territorial entities as well as a flexibilization on the foreign policies of the nations which try to built a bigger territory. On the other hand, Latin America has two different aspects to analyze. Firstly, the urban primacy. Even if European regions have important cities (in the case of study, Stuttgart, Milan, Lyon and Barcelona), the counter-power between regions and cities still being more equilibrated. However, Latin American countries have developed a reinforcement of municipalities which helps the huge capitals to develop their-self in a better way than the other territories. Also, this reinforcement of municipalities helps the intermediate cities to obtain different tools to achieve their objectives. In the opposite side, the intermediate territorial level, even on the federal states, seems to be weaker and punished. The second aspect is the fragmented geography. It is undeniable the complicated geography that the continent has. That is the reasons why integration, even inside the countries, has been quite difficult. However, the experience of the four motors for Europe seems to be a possible answer to integrate in a flexible way the Latin-American territories. Then, this kind of practices will not be applied just for the wealthy territories, such as the big urban capitals, but also for the stagnant zones; promoting the intermediate territorial government.

*Gateway K*

## **ALLIANCE PORTFOLIO SETS: DOES SPATIAL EMBEDDEDNESS STILL MATTER?**

**Leon Oerlemans, Tilburg University, THE NETHERLANDS**

**Joris Knobens, University of Pretoria, SOUTH AFRICA**

The actor composition of inter-organizational ego-networks (alliance portfolio set) is largely ignored in research on Territorial Innovation Models. To fill this gap, we explore with which sets of external actors (i.e. alliance portfolios) firms maintain inter-organizational knowledge links. Subsequently, we analyze the differences in innovative performance between firms engaged in different alliance portfolio sets also taking into account taking their geographical dimensions. Four alliance portfolio sets emerged all of which have positive effects on a firm's innovative performance in comparison to the 'go-at-it-alone' strategy. After controlling for actor composition and tie depth, however, their geographical composition is found to be unrelated to the innovative performance of firms.

**Raquel Ortega-Argiles, University of Groningen, THE NETHERLANDS**

This paper discusses some examples of European regions which have successfully developed integrated place-based policy frameworks building on a smart specialisation way of thinking. Smart specialisation is a new policy concept which originally emerged from the sectoral growth literature and it has recently been applied to the EU regional policy, in particular, in the context of the reformed EU Cohesion Policy. The combination of different industrial policies (e.g. cluster strategies; sectoral cross-fertilisation) laboural policies (e.g. Skill to Till matching) and innovation (e.g. innovation vouchers) policy measures and policy instruments framed into different regional contexts are introduced as a potential examples for an implementation of Smart Specialisation strategies. Aspects such as different prioritisation processes adopted in different European regions with the aim to identify priority policy areas or the promotion of technological diversification via entrepreneurship policy related to specific sectors or activities are illustrated

**Fenghua Pan, Beijing Normal University, CHINA**

Location of large companies' headquarters has been an important issue in regional and geographical studies, as headquarters are the commanding centres of the economy. It is of particular interests to investigate the headquarters' distribution in China, a fast growing transition economy. However, little attention has been paid to the understanding of spatial pattern of headquarters of public companies, which dominate China's economy today. Using a comprehensive dataset of Chinese public firms, this paper seeks to find out the spatial pattern of public companies' headquarters and its evolution over time. It is found that most public companies are located in Guangdong, Zhejiang, Jiangsu, Beijing, and Shanghai, accounting for half of total public companies. Beijing, Shanghai and Shenzhen are the top three cities in terms of the number of public companies' headquarters. Shanghai and Shenzhen are the cities in which China's two stock exchange markets are located, which is an important reason why these two cities have so many headquarters. The result also suggests that, headquarters of the public companies are inclined to be proximate to political centres at different geographical scales. Beijing, as the capital of China, houses the most headquarters of public firms, and the provincial capital city usually accommodates the largest number of headquarters within its province. Among public companies in Beijing, Shanghai and other capital cities, the state-owned firms constitute a large proportion, while for those in cities of Jiangsu, Zhejiang and Guangdong, more public firms that are privately owned. Recently, more and more companies located in the inner land of China got listed, and it has slightly changed the spatial pattern of the headquarters of public firms. Moreover, headquarters of public firms are agglomerated in particular areas within each city, especially in CBD. The data also highlights frequent relocation of public headquarters. Most relocated headquarters are moving from the west to the east and from small or medium sized cities to large metropolitan areas, among which Beijing and Shanghai are the most popular destinations. Finally, concerning the companies from different sectors, it is found that, headquarters of manufacturing companies are more scattered than those of service companies, while service company headquarters are quite agglomerated in metropolitan areas in east China.

**DELINEATING THE IMMIGRATION PATTERNS AND SOCIOECONOMIC INTEGRATION OF SUB-SAHARAN AFRICANS IN GREEK SOCIETY**

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**Christos Chalkias, Department of Agricultural Economics and Rural Development, Agricultural University of Athens, GREECE**

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The number of migrants pouring into Europe has increased tremendously, with the Southern European countries hosting a significant proportion of the new waves of migrants. The latter are comprised primarily of irregular migrants and/or transit migrants who are in search of host countries offering relatively satisfactory employment opportunities and often better living conditions compared to their countries of origin. African migration has been an issue of concern for most of the European countries, especially in the last years. More particularly, the worries have been more important among the southern European states. A reflection of these concerns is the fact that the European Union and the African Union have held a series of meetings to address issues relating to regular and irregular migration between the two regions. In the last two decades Greece has attracted a large number of migrants due to its geopolitical position, the improved socioeconomic situation and the fact that it is part of the European Union. Greece is a major destination country for migrants seeking to take up residence in Europe. Consecutive migration flows have tended increasingly to polarize migrant groups and nationalities into dualistic schemata of 'older migrants' / 'newcomers', regular/ irregular, socially mobile/ socially immobile, integrated / excluded, etc. African migration flows have recently augmented in Greece, representing at the same time an interesting example of how irregular migrants are marginalized and considered as a security threat for the receiving society. The late expansion of sub-Saharan African migration flows to Greece necessitated the exploration and delineation of their characteristics and their integration prospects in the labour market. The limited employment opportunities for skilled migrant labour in the Greek labour market pose important barriers to the more educated migrants. The over-education of many African migrants reflects their low capacity to integrate to the Greek labour market. The gradual expansion of their existing social networks and social capital contributes to their placement to better employment positions. The paper draws material from a survey research which was carried out in the period June / July 2011 and - within the current context of economic recession - it aimed at the systematic study of sub-Saharan African migrant flows to Greece and migrants' integration opportunities in Greek society. More particularly, 532 questionnaires were filled in by different African nationals. Specific attention was given to the differentiations concerning their housing patterns, their spatial distribution, their employment patterns and their socioeconomic aspirations. Moreover, given the diverse characteristics and trajectories of the different African migrant groups, the paper elaborates on the factors (e.g. knowledge of Greek language, skills, education, social bonds, historical conditions, etc.) which impact upon their participation to the labour market. Those quantitative findings will be complemented by qualitative evidence collected through semi-structured interviews carried out in winter 2011-spring 2012. The paper will conclude with some of the research findings which illustrate the diverse patterns of African migrants' integration as well as some policy recommendations regarding the improvement of their socioeconomic status in the Greek receiving society.

**WHY OWNER-OCCUPIERS CHOOSE RENTING FOR THEIR OCCUPANCY?**

**Jonghoon Park, Seoul National University, KOREA**

It is possible for households to rent a house while owning their own. In this study, we categorize three housing tenure status: owner-occupier, home owning renter and renter. Many homeownership studies have focused on owner-occupier and renter, but much less known is home owning renter. As the number of households who reside in rental house while owning their own house another region increases, we need to know why owner-occupier decides to live in the rental housing. The purpose of this study is to investigate factors affecting household tenure choice of home owning renter in Seoul Metropolitan Area in Korea. We utilize 2% micro data from the Korean Census of Population and Housing. We apply bivariate probit model to control selection bias that could be incurred by sample selectivity from a chain of housing tenure choice and housing sub-tenure choice. The present study first estimate factors that affect owner-occupier, and second estimates what factors

affect owner households to make home owning renter. Statistically significant covariates to affect the decision to rent for homeowners are closely related to the educational opportunities for their children. We found that the middle age household group who has school age children more likely to choose rent than other age group. Higher educational attainment and higher level of job show higher probability to rent a house. The family who has children less than eighteen more tends to rent house while owning another house in other region. Moving household compared to non-moving has a higher probability to rent house. High land price, financial independence rate and private education institute of a region positively is statistically significantly related to home owning renter. However, among three area characteristics, presence of private education institute is most important factor to identify home owning renter. This study concludes with some policy implications regarding the preference change of home owners by diverse demographic and socio-economic characteristics.

*Gateway J*

## **KNOWLEDGE DYNAMICS AND COMPETITIVE STRATEGIES IN THE NUCLEAR INDUSTRY SUPPLY CHAIN IN WEST CUMBRIA, NORTHWEST ENGLAND**

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

**Gail Mulvey, University of Cumbria, UNITED KINGDOM**

**Keith Jackson, University of Cumbria, UNITED KINGDOM**

Knowledge dynamics and competitive strategies in the nuclear industry supply chain in West Cumbria, North-West England One of the more enduring aspects of theories of regional change has been the role and significance of tacit as opposed to codified forms of knowledge as a basis for regional competitiveness. The knowledge base and the capacity to learn are commonly viewed as critical to the competitive advantage of firms and regions. It is also widely argued that tacit forms of knowledge are embedded in local and regional systems and less readily transferred between different locations, organisations and social contexts. Studies have shown how global companies recognise the significance of such knowledge and seek to position themselves strategically within networks of regional clusters of activities in order to access this resource. Local and regional economies therefore represent arenas within which different sources of knowledge interact. This process whereby different forms of knowledge combine is mediated through networks of firms, institutions and actors at a local level. This paper aims to illuminate these processes by examining the interactions between global and local firms in the nuclear industry supply chain in West Cumbria in North-West England. Sellafield Ltd is the dominant employer in the area with a workforce of around 10,000 as well as a local supply chain built up over many previous decades involved in facilities management, construction, IT, and extensive work in decommissioning activity. However, recent changes in procurement have opened up the local supply chain to global competition. This has created a situation where the competitive advantage of local firms has been challenged by new entrants bringing with them new sources of global knowledge and corporate power. This restructuring of local supply chains has raised questions regarding the resilience of local firms in a locality that is highly dependent on the nuclear industry. Evidence is drawn from in-depth interviews with owners of local small and medium-sized businesses and executives within large multinationals conducted during April - May 2011. The analysis demonstrates the interplay between different firms and institutions as they develop strategies to exploit their own particular sources of knowledge competitiveness. These processes are interpreted as a partial undermining of local tacit knowledge and an attempt to part-codify this experience driven by the demands of a more highly formalised tendering process. The case study illustrates the tensions that can arise from the coexistence of collaboration and competition in local supply chains. The paper concludes by considering the implications of these changes for our understanding of global competitiveness and the resilience of local economies that display high levels of dependency on a narrow range of firms or industries.

**THE POLITICS OF STATE RESCALING, SCALE PERIODIZATION AND LOCAL POLITICAL STRATEGY: EXPLORING THE CHANGING GOVERNANCE OF A GLOBAL CITY-REGION**

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**Mark Goodwin, School of Geography, University of Exeter, UNITED KINGDOM**

Recent discussions on state rescaling have pointed towards the need for a more systematic carving out of the topic through highlighting the socio-spatial relations of state spaces as well as drawing attention to scalar politics and state practices, as each arguably has a territorial jurisdiction, reach and influence. Within this context, Brenner (2009) has called for a greater focus on the ‘periodization’ of state rescaling in order to i) better differentiate rescaling effects from other dimensions of state spatial restructuring and ii) to focus on the key processes of scaling and rescaling rather than simply charting the changing scales and associated structures of governance themselves. Consequently this paper seeks to trace how the ongoing rescaling of governance in a global city-region (London) is connected to a set of political strategies which – over time - have ‘ruptured’ and ‘rewoven’ the scalar structures of economic governance that exist. It is illustrated that successive governments have used institutional reorganisation and rescaling as a means of delivering different political strategies related to the primacy of politics at a national scale. However, whilst the state can be the generator of such strategies, it cannot be the guarantor as processes of rescaling may be locally contested. In turn, this raises interesting questions over the autonomy of local actors and the inclusivity of subsequent arrangements.

**A THEORETICAL AND EMPIRICAL APPROACH TO NON-LINEAR PROCESSES OF LEARNING AND KNOWLEDGE CREATION IN MICRO AND SMALL ENTERPRISES. EVIDENCE FROM MEXICO’S CENTRAL REGION**

**Luis Peralta, El Colegio de Tlaxcala, MEXICO**

**Edgar Hernandez, Universidad Autonoma De Tlaxcala, MEXICO**

Both the use of knowledge embodied in cutting-edge products, sophisticated processes or other innovative and commercial assets and its origins, sources or environment of creation ought to matter to local production systems and their territories’ development. The relationship between both categories of analysis (creation and transformation of knowledge) is central to this paper mostly in localities where its agents such as governmental agencies, educational and research institutions and firms seem to be isolated from each other, generating on the one the hand, a kind of partial learning and knowledge about local production conditions in appearance, and on the other hand, effects which contribute little significance both socially and economically. Nevertheless, the main objective of this work is to offer some alternative observations to the hypothesis of Lundvall and Lorenz (2010), which establishes that those economic sectors and territories highly based on tacit knowledge might be those same localities which experience difficulties in developing practices which are more efficient and codified. This paper looks to theoretically and empirically approach the particular ways or manners in which micro and small entrepreneurs in Mexico’s central region learn from an environment where local institutions work separately. Our interest is focused on the “how” and “where” previous entrepreneurship learning took place, and if it was converted into knowledge expressed in organizational, productive and economic assets. The authors establish some initial queries: Is this learning-knowledge base the ongoing formula for running these micro and small enterprises? Has this original learning-knowledge base moved up to more descriptive or codified business formulas? If this learning-knowledge base has been applied effectively to actual businesses: Does it make any difference to other similar micro or small enterprises? If not, which conditions changed this original base? The aforementioned could guide this work to identify if these packages of experiences, learning and knowledge gathered by micro and small entrepreneurs could lead to an evolution business base highly differentiated from other enterprises, or if these fade out in time. Some essential insights could be drawn from this regarding central hypothesis, asserting if progress to more efficient business practices and some economic sectors’ development is based on other elements of local production systems rather than learning-knowledge base. Through one hundred of interviews, this work has empirically approached micro and small enterprises established around commercial, service and manufacturing sectors in two of Mexico’s central region localities. Partial findings could lead to recommendations being made for public policy to accompany specific learning-knowledge bases in this region.

**NEW INTERNAL MIGRATION DESTINATIONS: AGGLOMERATION ECONOMIES VS AMENITIES FORCES IN SHAPING THE STRUCTURE OF CITIES AND REGIONS**

**José Francisco Pérez De La Torre, FES Acatlán-UNAM, MEXICO**

**Marcos Valdivia, CRIM-UNAM, MEXICO**

**Luis Quintana-Romero, FES Acatlán-UNAM, MEXICO**

During the last decades, economics and urban dynamics in cities has shaped strongly regional growth and development in Mexico and other similar emergent countries in Latin America. Nowadays, regional growth dynamics in these countries cannot be explained fully without understanding spatial interaction and agglomeration among cities. One important feature of this process are the migration flows, specifically, interurban migration. In this sense, Mexico has larger urban concentrations, where the economic structure and demography had changed since the 80's: tertiary activities commands nowadays much of the modern urban growth while at the same time manufacturing industries have moved toward other regions. Nevertheless, there are few insights about the transformations of working mobility between Mexico's cities. This study fills on this gap by studying the dynamics of workers across metropolitan areas between 2000 and 2010. Our research tries to explain the main forces that are driven Mexican interurban migration through evaluation of agglomeration economies. In the agglomeration economies discussion, there are two principal explanations based on endogenous agglomeration: localization and urbanization economies (amenities). The former rely on the economic and labour structures, while the last rely on urban development of the sites. In this sense, we evaluate these two types of forces that are triggering the migration flows, under a heterogeneity context to get an explanation to the Mexican case. In our study we are working with census data at municipality level linked with industrial census data at census tract level. Besides, we construct an appropriate data set of economic characteristics (labor, wages, etc), urban amenities (i.e. restaurants, cinemas, shopping centres, etc.) and other types of urban endowments (such as parks, metro stations, schools, etc.) at census tract level. Given the spatial pattern of migration flows we use an empiric strategy based on ESDA (Exploratory Spatial Data Analysis) to show the spatial configuration of the phenomena and then we use spatial econometric models to controls the spatial dependence. Our modelling strategy incorporate two innovations: 1) explicitly controls spatial dependence and 2) it explains new migration destinations. The main results of the research show that the interurban migration during the period 2000-2010 can be explained by the emergence of new agglomeration economies. Specifically, size market and access market trigger Mexican flows to new destinations, but in other sites the workers are encourage by amenities forces. The tension of these two forces would suggest that the interurban migration flows in Mexico are heterogeneous and it is necessary to establish an hybrid model combining these two types of forces.

**MAKING ENVIRONMENTAL CHANGE STICK: USING SOCIALLY EMBEDDED LEADERS AND STATED NORMS TO DELIVER SUSTAINABLE BEHAVIOUR CHANGE**

**Kristine Peters, Flinders University, AUSTRALIA**

Environmental behaviour change is directly challenged by slow uptake and a tendency to backslide, which diminish the effectiveness of government legislative and policy interventions. This is particularly a problem in small business, which despite stating support for green practices, routinely engages in environmentally unfriendly actions. In Australia, small business comprises 96 percent of all businesses, highlighting the need for strategies that engage small businesses in pro-environmental behaviour. Small business owners are fiercely independent, poorly connected to reliable information sources, and resent government interference. Significantly, they are primarily motivated by issues that affect their immediate financial position and personal time, neither of which derive direct benefit from an investment in improved environmental standards. Behaviour change interventions that target small business are challenged by the lack of homogeneous groups to which policy makers can direct social marketing programs, and small business owners tend to be disconnected from influential business networks. Referencing research that sought to understand the mechanisms of successful interventions with a challenging demographic (small businesses) and a challenging behaviour (environmentalism), this paper describes qualitative research that effectively engaged this difficult-to-reach cohort. Underpinned by social capital theory, particularly the work of Granovetter (1973) and Burt (1992) who described the need for inter-group connections to accelerate learning and innovation, the research examined three cohorts of small businesses: a group with strong social capital connections; a group with loose social



capital connections; and small businesses with no social capital connections. The results indicate that two factors contribute to successful behaviour change: the role of norms as established by socially embedded leaders operating within local networks; and paying overt and on-going attention to the role of learning to change attitudes and generate new behaviours. The paper will discuss the practical application of these findings in the Australian context, describing the institutional framework for local economic development, the factors that contribute to the development of social capital in small business, the role of government in developing and supporting business groups, and the features of local business associations that have successfully maintained strong bonding social capital at the same time as they bridge group boundaries to introduce new ideas. Based on the Australian experience, the paper will consider the transferability of the findings to different cultures, and explore the potential for application in rural and remote areas, for regional competitiveness, and for behaviour and attitudinal change in fields other than environmental. Finally, the paper will suggest areas of future research that will contribute to an improved understanding of the specific mechanisms of socially embedded leadership and normative function in delivering behaviour change.

#### *Gateway Q*

### **LOCAL AND REGIONAL DEVELOPMENT AND POLICY IN THE UNITED KINGDOM**

**Andy Pike, CURDS, Newcastle University, UNITED KINGDOM**

**John Tomaney CURDS, Newcastle University, UNITED KINGDOM**

The UK is marked by entrenched and persistent regional inequalities and longstanding efforts to address these. This paper describes these inequalities and analyses their causes and assesses the efforts to mitigate them in England. The paper notes the institutional instability and frequent changes in policy that characterise local economic development policy in England and the extent to which this might be a contributory factor in the persistence of inequality.

#### *Gateway I*

### **ATTRIBUTES OF SOCIAL CAPITAL IN CZECH PERIPHERIES**

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**Viktor Květoň, Charles University in Prague, CZECH REPUBLIC**

The concept of social capital has been broadly applied in a wide variety of contexts and manners and with diverse meanings, especially in last twenty years. In Czechia, interest in this concept has significantly increased within the geographical research of peripherality. It's due to the fact that, in the post-totalitarian period, the transformation (transition from a totalitarian to a democratic political system, economic and societal changes – generally transition from centrally planned to market-oriented economy), and its consequent natural processes (hierarchization, concentration, suburbanisation, etc.) has started to change dramatically and led to a selective territorial development and polarization between core and peripheral areas. Existing research has then showed that the social capital can be seen as one of the determinants in the polarization of space and as an instrument in the activation of the endogenous development potential of regional/local communities in Czech peripheries. The paper's primarily focus is on selected attributes of social capital in Czech peripheries. In a more detailed way, the paper has following aims: Firstly, attention is directed at defining the terms peripherality and peripheral areas in Czechia; Secondly, the paper briefly presents and discuss the concept of social capital (definitions, typology of different forms, methods of measuring – examples of indicators used), introduce the definition and the conceptualization of this concept which we have adopted for our subsequent empirical demonstrations; Further, the paper contains, based on statistical data, an analysis of the territorial differentiation of social capital at the district level of Czechia using principal component analysis; Finally, the paper explores and analyzes, based on individual-level survey data, various social capital indicators (encompassing three common dimensions of this concept: social networks, trust and civic norms and values) in different types of peripheral areas (internal and external/borderland). It seeks to explore how the various indicators of social capital relate to each other empirically at the individual and the aggregate level and what differences among peripheral areas exist, in terms of the level of social capital. We verify and reaffirm the assumption that the peripheral areas differ from one other in the sense of a dichotomy between continuously settled and resettled areas (the post-World War II removal of German-speaking population and the subsequent, insufficient resettlement by largely Czech population had a substantial impact on the levels of social capital in these peripheral areas).

**THE RESOURCE CURSE AND REGIONAL DEVELOPMENT: DOES THE DUTCH DISEASE APPLY TO LOCAL ECONOMIES? EVIDENCE FROM CANADA**

**Mario Polèse, INRS. University of Quebec, CANADA**

**Michael Simard, INRS. University of Quebec, CANADA**

Historically, rich resource endowments have been a mixed blessing for national economies, spawning an important literature on the so-called 'resource curse' and the associated Dutch Disease: high exchange rates driven by resource rents, undermining the long-term competitiveness of national economies. This paper provides evidence that similar mechanics apply to local economies, looking at 135 Canadian urban areas over a thirty-five year period (1971-2006). We find a strong relationship between specialization in resource industries (respectively, in extraction and in primary resource transformation) and higher wages. The findings point, in turn, to a negative relationship with relative labour demand and with education levels. Evidence of a crowding-out effect (for non-resource manufacturing) is weaker. The findings suggest that the overall negative impacts on growth are more often associated with primary resource transformation (manufacturing) than with resource extraction per se. We conclude that local economies dominated by large plants (or mines) and high-paying blue-collar jobs, requiring relatively little education, face particular challenges.

**IMPLEMENTATION OF THE PARTNERSHIP PRINCIPLE: CASE OF THE CZECH REPUBLIC**

**Oto Potluka, University of Economics Prague, CZECH REPUBLIC**

The purpose of this paper is to discuss the process of long-term governance through the partnership principle applied in the case of the EU Cohesion Policy. The paper is dedicated to barriers of implementation of this principle in the Czech Republic. This country has been chosen because of its centralized public administration and its influence on implementation of the partnership principle. I have worked with the low application of the partnership principle as the core problem and a strategy for solving it. Thus the paper is not oriented at general analysis of advantages and disadvantages of this principle. There is a vast number of literature concerning the advantages of the partnership and participation. The study is aimed at solving of defined problems with implementation of this principle and strengthening the principle in the Czech Republic. The research is based on problem tree and objective tree methods. First I defined set of problems concerning implementation of partnership in the Czech Republic. The second step followed – I choose the core problem. I worked with the low application of the partnership principle as the core problem. I compared causes and effects in the third step. Last step was based on swapping the problem tree into the objective tree by defining the situations when problems are being solved. To get more appropriate picture of the situation, the methods and results were discussed with stakeholders, mainly with NGOs' representatives and Managing Authorities of the European Social Fund programmes in the Czech Republic. Findings – I found twelve main problems causing the low application of the partnership principle in the Czech Republic. I divided these causes into three main groups. The first one is low experience of stakeholders with partnership, the second one is unfriendly legal environment for the partnership principle and the third one is competition among potential partners and communication among them. Research limitations/implications – The research was oriented only to the side of problems of the implementation of partnership principle. For establishing a complex strategy, there is still need for deeper analysis of strengths of the principle. Generally, I worked just with weaknesses from the SWOT analysis. Practical implications – The conclusions may be useful not only for the scientific purposes, but have also practical political decision-making potential. The paper provides valuable information for political decision-making at both the national and regional levels. The study recommended legal changes for improvement of application of the partnership principle, especially in the field of financial relationships among public administration bodies. The second group of recommendations is oriented at improvement of day-to-day management of partnership principle at the regional and local level.

**CAPABILITY APPROACH FOR WELL-BEING EVALUATION: A CASE STUDY IN MAGELANG REGENCY, CENTRAL JAVA, INDONESIA**

**Retno Widodo Dwi Pramono, University of Gadjah Mada, INDONESIA**

**Johan Woltjer, Groningen University, THE NETHERLANDS**

This paper presents result of a research, which uses Amartya Sen's Capability Approach (1993, 2000) to inductively devise a set of criteria for evaluating the well-being and quality of life of economic groups in a detailed case study of Magelang near Indonesian city of Yogyakarta, examining how the spatial characteristics of a place might offer opportunity, freedom and capacities to its people. The fundamental conception of wellbeing in the capability approach is based on a set of attributes and on the level of 'freedom to choose between various valuable states of 'being' and 'doing', which is in Sen's conception called as 'functioning' to represent activities that can be potentially done by an individual or to represent certain characteristics (e.g. profession, social or economic status, or feeling) attributable to an individual. The approach is tested through action research with local stakeholders to define the extent to which their locality offers them adequate capabilities to develop. With the author, about 200 participants evaluate the changes in the agro-economic opportunities and the supporting asset base. Analyzing participant's evaluation on their quality of life, the research distinguishes between five types of assets: individual tangible assets, public tangible assets, individual intangible assets, social institutional assets, and economic institutional assets. The research also finds that in evaluating their quality of life (well-being, happiness), people evaluate assets in terms of their availabilities and accessibility and in terms of the level of opportunities given by them. They evaluate development in well-being by saying that their current quality of life is "better", "worse", or "not so much different" from earlier days, depend on the kinds of assets they have and the levels of benefit they may get. Synthesizing the findings, the paper proposed a framework called Capability Index (CI) for well-being evaluation may be used in regional development planning, which contains a set of procedures designed to be able to measure an improvement/extension of the level of freedom to choose achieved by individuals in, or the community of, a region, through a development process. Two main variables included in CI formulation are people's perception of the levels of assets availabilities and accessibilities, and people's perception of the levels of opportunities (facilitation, help, or constraints) given by assets so that a community may perform or have potential functionings. The framework is tested to survey the level of well-being and contributing factors of local population of 6 villages (450 household respondents). The result supports that CA is relevant to evaluate well-being, while the frameworks can consistency operationalize it. Based on all findings, the paper suggest that it may be develop to be used to strategically guide planners in priority setting and creates greater awareness of the constraints and opportunities available to people, particularly to understand the extent to which land use, public facilities, infrastructure and amenities are contributing to quality of life and opportunities.

**INDUSTRY AND DEVELOPMENT ZONES IN MEXICO'S REGIONS**

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**Jorge Isaac Egurrola, Facultad De Estudios Superiores Acatlan, Unam, MEXICO**

The last thirty years have represented a cycle of transformation of political, economical and organizational links for Mexican economy. Particularly, in the Mexican industry, we have witnessed the relocation, reconstruction and emergence of new relations in the regional industrial activities. As a result of the North American Free Trade Agreement (NAFTA), it was expected a delocalization of the Mexican industry towards the Northern border. The analysts considered that this process could be positive, because it would help to increase Mexican economy's competitiveness. However, the results are, so far, a higher concentration of the industrial activity in traditional industrial regions, and a very low economic performance. This process has been accompanied by a smaller share of the State in the economy, thereby delegating their ancient parcels of driving and economic planning to the market. The problem is that the market, by itself, has not been able to guarantee the necessary conditions for sustained economic growth, much less generate new poles of regional development. On the contrary, in recent years, regional inequalities have been intensifying, and the traditional nuclei of development as the State of Mexico and the Federal District, have been losing their economic significance, and there are not new growth centres to compensate such a fall. The result is a productive emptying which threatens to delay indefinitely the economic growth. In this work, we analyze the problem of the destruction of poles and

productive chains in the Mexican regions, and we propose the necessary measures to enable the growth of the economic activity and restore the conditions of growth in the traditional poles of development.

*Gateway K*

**A COMPARATIVE STUDY OF THE BALTIC REGIONAL HIGHER EDUCATIONAL INSTITUTIONS IN REGIONAL DEVELOPMENT**

**Garri Raagmaa, University of Tartu, ESTONIA**

One of the central questions in economic geography is why some regional economies manage to renew themselves, whereas others remain locked in decline. Several evolutionary economic geography related concepts have been used for analyzing regional adaptation. Not only firms and industries but also development policies as well as broader institutional environment have to be analyzed. Knowledge is an increasingly important part of regional development and the role of higher education institutions (HEI) has come to be vital. Concepts of regional innovation systems (RIS) and triple/quadruple helix combine the idea of innovation as a collective process of knowledge transfer between networked actors, considering that geographical proximity is conducive to the transfer of new knowledge as it facilitates personal relationships. The overall aim of this paper is to describe the role of regional HEIs in the framework of the RIS, in parallel with other regional knowledge transfer institutions: R&D units, business advisory services, and their interaction with local/regional authorities comparatively in three Baltic States. There are two controversial opinions about HEIs outside old university centres: first that this is just waste of resources and another one that regional economy needs desperately HEIs for economic restructuring and maintaining its competitiveness. Nordic experience has proved that HEIs may be important drivers pushing forward regional development, since a regional centre with a university is better off in respect of occupational and demographic development. Thus, we have a good reason to study the Baltic non-metropolitan HEIs, which have exist only last 10-15 years, and their impact to regional resilience. The main research questions will be: What is the role of Baltic regional HEIs in generating/transferring knowledge and other benefits to their regions? What are their common and differentiating features? What policies have been applied for strengthening regional innovation and how regional HEIs have been involved in these policies? The paper analyses recent available and comparable regional statistics about population, enterprises, R&D, HEIs, vocational institutions for overall description and for the regional HEI classification in the Baltic States. We also carry out a comparison of policy documents and analyse what kind of RIS: territorially embedded, regionally networked, or regionalised National Innovation System can be found in the three Baltic States.

*Gateway E*

**CONSTRUCTIONS OF 'REGIONAL' INEQUALITY IN EUROPE AND CHINA: WHAT CAN WE LEARN FROM EACH OTHER?**

**Alasdair Rae, University of Sheffield, UNITED KINGDOM**  
**Gordon Dabinett, University of Sheffield, UNITED KINGDOM**

Comparative studies of 'regional' inequality in Europe and China are fraught with difficulties, for a number of important reasons. For example, the question of scaling 'regions', the problem of differential development, and discourses surrounding regional inequalities can take on different dimensions in the European or Chinese contexts respectively. Yet we can potentially learn from one another in a number of important ways, as seen in a recent joint report from the European Commission's Directorate-General for Regional Policy and China's National Development and Reform Commission. The spatial and demographic context may differ between Europe and China but the statement that 'regional policies ... play a significant role in reducing the regional development disparities and promoting a coordinated regional development' (DG-REGIO/NDRC, 2010, p.12) will surely resonate with both European and Chinese policy scholars. Given the potential for positive knowledge exchange therefore, this paper attempts to do three things. First, we seek to provide a more descriptive account of the historical trajectory of regional development (and inequality) in Europe and China, with reference to important regional policy instruments. This is a necessary first step for a subject in which the fundamental object of study (i.e. the 'region') can take on different meanings and in which EU-China dialogue between is rather limited. Second, we seek to develop an account of regional inequalities which allows us to comment meaningfully on the extent to which regions in Europe and China have experienced similar development trajectories, despite their obvious differences. The intention here is to go beyond previous empirical studies (e.g.

Heidenreich and Wunder, 2008; Kanbur and Zhang, 2005) to provide an analytical learning framework. Finally, we make some suggestions regarding the potential for future learning in studies of 'regional' inequality in Europe and China, and how notions of 'spatial justice' can be understood and operationalised in different contexts.

*Gateway L*

## **THE ROLE OF REGION IN HISTORY**

**Sulevi Riukulehto, The University of Helsinki, FINLAND**

The concept of region has not played an important role in traditional historiography. During the last 20 years the new directions of so called regional history have been raised in various discourses such as in European regionalism, in the analysis of globalization, and in the histories of mentalities, everyday life and in the history of *heimat*. Five different discourses can be differentiated. However, the historians still omit a coherent conception of the region. In this paper I introduce a framework in order to include the concept of the region into historical analysis. The specificity of the region is pursued by way of three auxiliary concepts of geography, institutions, and identities. Geography, institutions, and identities are not parallel categories. The things do not divide between institutions, identities, or geographic facts. Although the concepts have originated in different discourses and although they belong to different theoretical backgrounds they are useful to define the reasonable place for the concept of region in historical analysis. They may help us to understand how the region is formed. Traditionally, theorists have made listings of criteria that have to be fulfilled in order to recognize a place as a region – or as a (nation) state as the authors put it in the 18th and 19th centuries. The same kinds of criteria have also been presented in regional connection. The natural geographical facts (area, topography, vegetation, population) are indispensable for the region. If the region does not have area there probably cannot be the region either. (The discourses of virtual regions go beyond this presentation.) On the other hand the geographic facts do not necessarily make the region. Whatever area is not a region. The region is formed only in its institutions (as an institutionalizing process) and in the identity of its inhabitants. They influence each other reciprocally. If we could create an identity for the region from nothingness it would immediately find representations in institutions, too. Or, if we would forge new institutions artificially for the region they would immediately start to form regional identities, as well. The institutions obviously have influences in geography. For example, the institutions of forestry have certain impact on vegetation through cuttings, irrigation, and trenching. The final outcome can be a rich and vegetative forest like in Finland, or an eroded ground like in Iceland. As far as we omit the philosophic-mathematical definitions of identity with all of their conceptual extension, the identities do not influence the geography directly but through institutions only.

*Gateway L*

## **CREATIVE CLASS, ATTRACTIVENESS AND LOCAL DEVELOPMENT: THE ITALIAN CASE**

**Paolo Rizzi, Università Cattolica Del Sacro Cuore, ITALY**

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

The purpose of the paper is to test the relationships between Creative Capital, attractiveness of towns and territories and local development. The concept of creativity is the topic of a vast literature in recent years (Cohendet-Grandadam-Simon; Cox; Florida; Gloor; Kea; Landry; Unctad/Undp), and is measured with different types of quantitative indicators based on creative enterprises, work force and value added of the creative sectors (Kea; Unctad/Undp; Istituto Tagliacarne). This paper presents the results of an empirical analysis that has chosen to focus on the creative milieu, mainly investigating the mechanisms that enable the attraction of human capital, investments and tourists at the local level. In addition to the individual and the collective sphere, a change of scale is crucial to the milieu. Historically in the cities where it was encouraged the circulation of ideas among intellectuals, thinkers and artists, the sites responsible for meeting and exchange of knowledge were the coffee that, unlike the literary salons of aristocrats and high bourgeois, made possible contamination between social classes (Zukin). Then from the cosmopolitan city the centre of gravity of the exchange of ideas has shifted in small towns, who inaugurated the era of urban renewal after the industrial crisis, such as Manchester, Glasgow, Bilbao, Lille. Milieu today means a public environment increasingly characterized by elements that promote an innovation or culture-oriented atmosphere. The analysis of Landry defines some elements essential to characterize a creative milieu as a place capable of containing hard and soft aspects, ie physical infrastructure

(logistics, construction, facilities) and intangible (social and value system). One of the main challenges to the economy of creativity is the ability of networking between the local and the global, ie the roots to the place but at the same time the openness and the ability to communicate with the rest of the world (Currid). Also the social recognition and the sense of belonging represent the essential characteristics for the formation of a creative milieu, with a clear relation with the Social Capital concept. After the analysis of the literature on the creative process and the main national and international reports on the creativity, we measure the weight of Cultural and Creative Industry (CCI) in Italy, conducted at the regional and provincial levels. The Cultural and Creative Capital is then placed in connection with four key indicators: attractiveness (in terms of Foreign Direct Investments, Tourists, Residents and Graduates), GDP, Social Capital and Quality of Life. The first statistical analysis and econometric regressions show the positive role of Creative Capital on the regional or local development and the quality of life, as well as a positive relationship with the various indicators of attractiveness. While Social Capital is not tied so strongly and clearly to the creative capital, confirming the theoretical predictions. Indeed, Social Capital fosters the emergence of strong ties between members of homogeneous groups in terms of emphasizing the cultural processes of stability and reciprocity (Putnam, Coleman), but can be an obstacle to the circulation of innovative ideas, particularly from outside. While the creative capital represents weak ties that are more open, and facilitate new combinations of resources and ideas (Florida). Ultimately, the Creative Capital theory seems a useful approach to local development as a factor associated with the territorial attractiveness, innovation and the opening of territorial systems in the dynamics of growth, but in contrast to models of Social Capital which emphasize the network between the actors and the relationality.

#### *Gateway I*

### **SUSTAINABILITY OF THE MONGOL OIRAT LANGUAGE IN THE SINO-TIBETAN FRONTIER REGION**

**Gerald Roche, Nationalities Department, Qinghai Normal University, CHINA**

The pastures of the northeastern Tibetan Plateau are inhabited predominantly by pastoralists speaking the Tibetan Amdo dialect. However, in small pockets of Henan County, Huangnan Tibetan Autonomous Region, Qinghai Province, communities still speak the Mongolic Oirat language. This article examines the historical circumstances of the language's origin in the region, and seeks to uncover the factors that enabled it to be maintained across three centuries. To this end, local topography, patterns of culture, and systems of privilege are examined. In light of the Oirat language's rapid decline over the past half century, the article also explores how the factors that sustained the Oirat language over the past three hundred years might be deployed to sustain it in situ among future generations. Methodologically, this paper is based on an ethno-microhistorical approach, which combines broad-scale historical research based on secondary sources with community-based ethnographic fieldwork.

#### *Gateway K*

### **WHAT DO (SMALL) FIRMS WANT FROM ACADEMIA? ANSWERS FROM THE PORTUGUESE REGION OF CENTRO**

**Carlos Rodrigues, University of Aveiro, PORTUGAL**

Academia is commonly regarded as a prominent source of inputs needed to increase the capacity of firms to innovate and thus compete in the context of the so-called knowledge economy. Accordingly, the promotion of strong collaborative linkages between the production and the academic worlds is a cornerstone of economic development policies worldwide, independently of the territorial scale of innovation governance. The design of these policies tends to mirror a straightforward approach to the role academic research can play in providing firms with the knowledge needed to increase their innovative capacity and competitiveness. The developments occurred in totemic sites, such as the Silicon Valley or Cambridge, become an irresistible source of inspiration for policymakers and thus serve as model to be reproduced everywhere, independently of the geographies of context. The development of productive links between academia and firms, accordingly, is often regarded as something that can be automatically ignited. However, there is plenty of evidence showing that the relationship between the two spheres is far from being easy to foster, let alone automatic. Hence, one can argue that the gap between policy design and policy delivery is likely to be hardly diminishable. This is particularly true in

territories that lack the framework conditions existing in the totemic sites mentioned above. Nevertheless, prompted to surf the waves of an encouraging public policy and instigated to cope with a predominant idea about the role higher education play in society, academic organisations operating in those less advanced contexts tend to dedicate significant resources to develop an infrastructure directed at the transfer of knowledge to firms, namely those located in the surrounding areas. Having in mind that in those contexts productive systems tend to be characterised by the predominance of small-sized firms belonging to traditional sectors of activity, a mismatch between the supply of and the demand for academic knowledge can be expected to occur. This paper investigates the extent of this mismatch, by means of a search for answers to the question: what do small firms, operating in traditional sectors, demand from academic research? The paper will focus on the Portuguese region of Centro, whose productive structure is predominantly made of SMEs operating in the so-called traditional sectors (e.g., ceramics and glass, metal products, furniture), but showing a fairly high capacity to enter and compete in the global markets (according to the CIS- Community Innovation Survey 2008, 63% of the regional firms considered themselves as innovators). The research draws on data concerning one of the three universities existing in the region, namely the University of Aveiro (UAVR). Since its creation in 1973, the UAVR has inscribed regional engagement in its mission statement, emphasizing the contribution to regional firms' competitiveness. Accordingly, it has developed a stout infrastructure dedicated to knowledge and technology transfer over the years. As such, the UAVR can be seen as a paradigmatic example of a higher education organization operating in a less advanced region but well prepared to interact with the regional world of production. A diversity of information sources will be used in order to know more about the demand for academic research in the region, such as statistics, namely those made available by the CIS 2008 and the industrial liaison office of the UAVR, interviews with relevant agents, and some documental sources. The research reported in this paper has an exploratory nature. In the near future, there are plans to extend the research to the whole higher education system in the region and, in addition, to endeavour in a comparative perspective involving other European and non-European (namely Asian) regions.

*Gateway K*

## **INSTITUTIONS, SOCIAL NETWORKS AND COGNITIVE FRAMES: MICRO-FOUNDATIONS OF INNOVATIONS**

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**Nadja Damij, School of Advanced Social Studies In Nova Gorica, SLOVENIA**

The most efficient way for any organisation, region or nation to adjust successfully to immense challenges posed by the global environment and to participate successfully in the international division of labour is by enhancing its innovative performance. Their success or failure of social settings essentially depends on topography of their social fields, being more or less conducive to continuous innovations. Although we can observe clear geographical patterns in distribution of innovative performance, it is important to note that this distribution is not determined by geographic or similar factors, but is culturally, socially and politically established. This is not only a theoretical assumption, but is an axiom on which we can develop analytical tools for the analysis of systems of innovation and can also be a basis for purposeful action. Variety of social forces, especially institutions, social networks and cognitive frames have in the past been repeatedly confirmed as relevant in determining the rich variety of economic outcomes, from competitiveness of economies, formation of prices, levels of inward foreign direct investments, access to labour market, economic success of different social groups etc. These three forces and their ever changing constellations are forming the relational topography of social fields, making them more or less conducive to innovations. Social fields of innovations are therefore continuously structured by social forces that increase stability in social interaction. How do social forces shape specific social fields of innovation? First, institutions exert their influence by limiting the scope of actions, encouraging some and discouraging others. For example, governmental intervention for establishing new firms and generating spin-offs, support services for innovations, networks of technology parks and technology transfer entities, or top-quality universities is generally supportive to adapting to global trends by generating high innovation performance. Secondly, social networks position individuals and collectives in the social space thus limiting ties with specific nodes and encouraging others. In functioning systems of innovation we can identify high levels of university-industry cooperation, inter- and intra-regional cooperation of producers with customers, and mutual trust. Social networks are 'lubricating'; project-based organizations thus resulting in higher innovative performances. Third, cognitive frames provide the necessary mental tool-kit which allows interpreting relevant strategies such as introduction and nurturing of firm-based innovation systems, absorption of new knowledge and expenditure for research and technological development. These interpretations are highly relevant because in complex environments we cannot foresee all possible combinations and formalize them as

rules. These scripts contribute to the desired structuring of social fields by suggesting social action in spite of uncertainty of outcome.

#### *Gateway I*

### **INTERNATIONAL LAND ACCESSIBILITY AND MOBILITY OF POLES**

**Piotr Rosik, Institute of Geography And Spatial Organization, Polish Academy of Sciences, POLAND**

The purpose of the paper is to present some results of ongoing research on international land potential accessibility that has been carried out at the IGSO PAS in Poland in 2011-2012. The project leads to development of methods of calculating international potential accessibility indicator of the area of Poland. The importance of land accessibility at the international level is visible at the border-adjacent areas in particular. The potential accessibility indicator consists of three components: self potential, internal potential (national component) and external potential (international component). The international component is modified in three ways. Firstly, assuming no barriers at the borders. Secondly, assuming real legal, economic, psychological and infrastructure (border waiting times) barriers at the borders which have an impact on both the attractiveness of masses and waiting times at the borders. Thirdly, assuming that all the countries in the whole Europe are in the Schengen area (no waiting times at the borders). The origins in all three cases are Polish municipalities (gminas) or districts (poviats). The destinations cover the whole Europe. The population and GDP are the destinations'; attractiveness. The road and railway travel times between key nodal towns are taken into account. The travel purposes that shape the distance-decay curve are shopping, commuting, business and tourism and freight transport. The paper also focuses on the barriers to land transport for Poles while crossing the Poland's borders. The analyses takes into account changes in flows of persons across seven segments of the Polish national boundary. Inclusion of Polish territory in the Schengen treaty zone in 2007 turned out to be a more significant event for the magnitude and structure of the cross-border traffic than the membership in the European Union in 2004. Poland's accession to the Schengen zone created the conditions for free movement of people between Poland and other Schengen area states, particularly Poland's neighbouring countries"; Germany, Czech Republic, Slovakia and Lithuania. However, this led also to new problems and new legal rules for crossing Poland's eastern border (with Ukraine and Belarus) and northern border (with Russian Kaliningrad Oblast). Barriers to the movement of Poles on Poland's eastern border result from restrictions on the right of a citizen to enter a given country (visas) and rules of border petty trade. In 2011 the legal framework for foreign travels of Poles to eastern neighbours includes visa-free travel to Ukraine and visa obligation and lack of local border traffic agreements (LBT) with Belarus and Russia. However, legal barriers remain interdependent with other types of barrier (economic, infrastructure and psychological). At the eastern boundary of Poland among the economic barriers are living standard differences, differences in fuel, alcohol and tobacco products prices and foreign exchange rates. Psychological barriers are fear of other culture or way of living and linguistic barrier in particular.

#### *Gateway L*

### **METROPOLITAN CULTURAL DISTRICTS OR URBAN PLAYSCAPES? EVIDENCE FROM ITALY**

**Francesca S. Rota, Politecnico E Università Di Torino, ITALY**

**Carlo Salone, Politecnico E Università Di Torino, ITALY**

Culture is recognised as an important factor for economic development and the attractiveness of regions and cities. In mature economies, in particular, culture-based initiatives have been widely adopted as a strategic tool to reposition to the world economy the declining industrial systems. In Italy, for instance, successful and renowned branding initiatives have been developed to reinforce and promote the cultural dimension of several traditional industrial districts specialised in agri-food (Chianti, Langhe-Roero, Bra etc.) and fashion/textile (Milan, Biella, Prato, Montebelluno etc.) industries. However, in Italy the adoption of culture-related initiatives has not been limited to the industrial policies only. Rather, a very important application of the culture-based paradigm has been the displaying of urban revitalization plans and programs supporting the creation of museum cultural districts and metropolitan cultural districts. The former type of districts is pursued above all to the so-called "cities of art", like Venice or Florence, incredibly rich in historical monuments, tradition, palaces, churches, museums, and inclined to show themselves to both tourists and residents. The latter is pursued by the cities striving for being "cities of culture", i.e. cities that do not possess an abundance of historic and artistic



resources, but are able to generate culture or, more easily, to host artists, composers and creative people, who all need a place to work and distribute their works. Starting from this definition, almost every city can buck for becoming a city of culture. It “just” has to support the agglomeration of artistic capital and cultural organizations in specific portions of the urban space. Yet, the use of the cultural district as a tool of urban regeneration is also complicated by some – often unknown or ignored – threats. In the paper, the cases of two quarters in Turin (Italy) that have experienced in the last decades policies for the cultural district are analysed in order to put some light on some of these threats. As a result, the analysis provides evidence that the requirements and necessary conditions for building a metropolitan cultural district are not only difficult to be found anywhere, but they also vary greatly in space and time. Under certain conditions, initial positive conditions can thus degenerate facilitating the emerging of negative effects such as episodes of spatial injustice, gentrification or the creation of stereotyped “playscapes” celebrating the urban “movida”, with very little cultural content. This result is quite important since it suggests a greater attention to the historic-evolutionist dimension of metropolitan clusters.

*Gateway L*

## **CONTEMPORARY ART FESTIVALS AND THE CITY: OPPORTUNITIES AND THREATS OF UNCONVENTIONAL CULTURAL POLICIES. THE CASE OF PARATISSIMA IN TURIN**

**Carlo Salone, Politecnico e Università Di Torino, ITALY**

**Francesca S. Rota, Politecnico E Università Di Torino, ITALY**

The paper deals with the effects produced on (and within) the city by urban policies for the contemporary art. Although it is a long time since scholars and practitioners have focussed on the role of art as a key vector of urban and regional development, the way the relationship between the art and the city is developed has recently changed. On the one hand a more complex approach to cultural policies has been introduced: from an almost exclusive focus on the demand (mainly interpreted as consumption of cultural services and cultural commodities) to an integrated view that takes into consideration also the offer (associated to culture-related economic activities and the presence of exponents of the creative class). On the other hand, new practices of production and diffusion of culture have gained popularity and economic relevance. For instance, bottom-up initiatives contrasting traditional public initiatives, often resulting in the top-down creation of quarters and architectures hosting cultural functions. Consistent with this, the paper investigates a specific type of cultural event: the “unconventional” festivals of contemporary art. Although greatly diversified, these cultural events have in common the criticism towards the way the institutionalised “art system” encodes the artistic expression and commodifies both the art products and the artists and the ambition to creating an alternative “art circuit” of production and fruition. More than institutionalised events (important world art fairs, namely), unconventional art happenings have in fact the possibility to generate new urban spatial practices within the city, often in ways that are either unexpected or unintended. Especially when the art works are displayed in the public space, the urban space and its actors behave so much proactively that the art practice goes far beyond the aesthetic and economic dimensions and assumes a more social and political meaning. Unsurprisingly, sometimes these initiatives can also contribute to mould or reinforce the local identity, or even to generate spaces of urban resistance. A reason for this is that unconventional art practices tend to assume a more open, innovative and democratic format than their institutionalised counterparts, giving larger space to the proposals and initiatives of everyone. This is, for instance, the case of Paratissima, the happening exhibition of contemporary art yearly organised in Turin (Italy) by a local independent association to coincide with Turin’s most renowned international contemporary art fair Artissima. As showed by the results of an interview-based survey with several kinds of actors (artists, organisers, sponsors, visitors, residents, etc.) involved in the 2011 edition of Paratissima, this exhibition seemed to be able to generate unconventional ways of exhibiting, selling, and consuming both the art practice and the city, and to use them to create – or, better, to reinforce –, a specific “sense of place”. Yet, as the paper aims at demonstrating, this positive effect is often limited to specific portions of the urban space and specific groups of urban actors. Moreover, if the unconventional dimension of the event is not constantly reproduced in new and innovative ways, the positive impact of the event risks to decrease or degenerate.

**POSITIVE AND NEGATIVE FEATURES OF INEQUALITY OF REGIONAL SOCIAL AND ECONOMIC DEVELOPMENT (THE CASE OF UKRAINE)**

**Olga Shevchenko, National Institute For Strategic Studies, UKRAINE**

Since independence (1991) the development of Ukraine demonstrated the sharpening of social and economic problems in all regions. Special attention should be paid to the inequality of regional development. The disparity in some indexes is huge: gross Regional Product per capita (4,0), monthly average wages (1,6), unemployment rate (5,4). Only 5-6 regions among 27 are highly-developed, and 2-3 have constantly low indexes of development. Inequality is based on the definite disproportions of natural resources, human and productive potential as well as on the lack of spatial development and allocation of productive forces. Inequality has both positive and negative features. Positive features mean that inequality causes the differentiation of socio-economic structure of regions, maintains the strength and further development of complicated economic system, promotes free floating of resources and capital. The different levels of regional development are the levers which coordinate economies of regions and keep each of them as highly organized system, providing free floating of capital and working forces. Negative aspects of inequality are the following: gradual decrease of population, decrease of quality of human capital, irrational use or incomplete use of potential of natural resources. During last years inequality has grown. Thus, it could be said that non-regulated disparity causes the escalation of the next threats for economic unity of the country: - the gradual creation of two types of regions – lowly- and highly-developed because there is a definite link between depression and disproportion and there are logical chains: “depressive – less developed – need to be granted” and “highly-developed – not interested to give help to other regions”. As a result, in the both cases regions are not interested to form the consolidated economic space. Among other risks of the increasing inequality are: - the decrease of quantity of profitable business units and thus, the tax base of regions, restriction of the amount of productivity and increase of unemployment rate; - not sufficient amount of funds for investment and construction in less-developed regions; - the disparity of incomes and outcomes per capita caused by the incorrect state budget transfer policy; - the loss of co-operational links between regions and weakening the interest in the common productive and marketing activity; - the reduction of intensity of productive links in the country, neglecting the internal problems of the country; - the orientation on outside sale markets in forming the productive and marketing strategy for enterprises, increase of negative balance of foreign trade; - the escalation of social strain. The inequality highlights vividly all mistakes of the regional policy. Local authorities are not stimulated to build up their own productive potential. With the aim to prevent the transformation of inequality in real breakdown of the consolidated economic space it is reasonable to take the complex measures: 1) to differentiate the methods of direct and indirect influence on the economic indexes. Direct levers should be applied only to restricted list of indexes: amount of investments, financial activity of enterprises, budgetary-tax indexes, and social sphere indexes (i.e. number of employed citizens). Their equalization is able to improve the indexes of real sector, service sphere, financial and social sector. Indirect levers are reasonable to be applied to industrial and agricultural output, construction, export-import of goods and services, consumer prices, unemployment rate, personal income; 2) to differentiate the stimulation and maintenance methods for regions: direct state promotion should be given only to regions which are not able to solve the problems of structural transformation; the ascent of state adjustment should be moved from the direct state financing to indirect instruments of stimulation the regional development (taxes, credits, some benefits); 3) to measure the inequality and evaluate the probability of it transformation in the breakdown of reproduction proportions; 4) to work out the algorithm for effective use of the inequality in order to develop the country or overcome (at least smooth) those disparities which cannot be used effectively; 5) to create the conditions for coordination of the oppositely directed interests of regions and the state by the following instruments: - to deepen the productive cooperation among the enterprises of the separate region; - to intensificate the interregional change of goods and financial resources; - to accumulate the funds for transport corridors' construction; - to create a common investment activity for enterprises and service organizations; - to widespread the modern forms of interregional economic integration and cooperation for common exploration of resources and for solving the territorial problems. This cooperation will be able to stimulate highly-developed regions to support other regions and activate the economy in less developed regions, and from the other hand, to provide the incentives for less developed regions to activate their economy.

**Maciej Smetkowski, EUROREG, University of Warsaw, POLAND**

The paper offers an analysis of factors underpinning regional development in Central and Eastern European countries (CEECs) in the period before the global financial crisis which began in 2008. The first part of the study summarises the results of the quantitative analyses of certain regional development factors which were selected based on the literature of the subject. They were then confronted with the results of qualitative case studies which offered more detailed insights into development mechanisms at the local level. In the final part, the paper makes an attempt at the evaluation of external intervention in regional development, which seems particularly significant in view of the impact of the EU Cohesion policy on the development of the new Member States. Based on quantitative surveys, it can be concluded that the factors which were the most significant in improving the position of a given region as compared to the national average included: a large share of people employed in the market services sector, considerable number of university students per capita and a high share of individuals conducting business activity (sole traders). This could be viewed as proof of the important role of urban/metropolitan dimension in development processes. Other important factors also included labour productivity in industry, which could point to either completed restructuring processes or to the development of more capital-intensive manufacturing sectors. Thirdly, there was a favourable labour market situation manifested by high employment figures and low rates of registered unemployment. On the other hand, the significant role of agriculture in the economy was a factor with a negative impact. The major factors which dynamically affected robust GDP growth as compared to the national average included a falling share of public services in gross value added (and, though less so, in employment), coupled with increased labour productivity in this sector. A rebours, this could suggest the development of sectors with a greater role in shaping the region's competitiveness externally, i.e. market services and manufacturing activity. This corroborates the strong influence that increased labour productivity in these sectors has on improving the overall situation in the regions (in case of industry this is better visible in regions outside the capital city region, whereas in case of market services it is more easily discernible when capital city regions are taken into account). The decreasing number of people employed in agriculture was also advantageous for development processes, not in consequence of a steep increase in labour productivity in the sector but rather as a result of the non-agricultural branches of activity becoming stronger. Quite interestingly, the parallel falling share of market services in GVA also helped improve the situation in the regions. This could be attributed to the decreasing significance of the so-called "simple services" (such as trade, warehousing, storage and communication, hotels and restaurants). At the same time, the situation improved notably in those regions which were attractive in terms of migration, or at least did not record any migration outflows. Based on 10 case studies of relative regional success in terms of the pace of economic growth in the identified types of regions (excluding metropolitan regions), there was an observably distinct prevalence of exogenous factors (with their foundations in neo-classical theories) over endogenous factors (i.e. those proposed by endogenous growth theories) in development processes. The former were primarily associated with the influx of inward capital (mostly from abroad), a process which was quite frequently facilitated by good transport accessibility, especially in relation to the capital city. In addition, these regions recorded an influx of the population in the form of suburbanisation processes and also driven by the attractiveness of the local labour markets and the presence of higher education institutions. The minor role of endogenous factors could be explained by insignificant agglomeration effects due to the small population of major city in the analysed regions. Secondly, the innovation in the surveyed regions was low, as a consequence of modest R&D expenditure and the tertiary education system focused on socio-economic sciences and humanities rather than technical, sciences. This was further compounded by the fact that, to date, such initiatives by the public authorities as the establishment of business incubators or technological parks were relatively few and far between. Thirdly, the level of enterprise in the regions was also relatively low, and the local SME sectors tended to operate in the shadow of big companies, the linkages with which were not well developed. It should be noted that the role of structural and functional factors was also significant, particularly those associated with the different development levels of the analysed territorial systems, and a relatively high adaptability of the existing economic structures, fostered by an adequate stock of human capital and well-developed secondary schooling. Efficient public authorities were a factor of an even greater importance as they would implement development strategies tailored to the regional context, supported by the relatively well-developed (considering the size of the analysed cities) institutional environment. Another condition fostering regional development was external public intervention, although it can be concluded on the basis of some of the analysed regions that this was not a sine qua non of successful development. Moreover, the role of such intervention was largely limited to the demand effects since the funds were expended on addressing the needs of

the local population rather than on boosting economic development processes, which – according to some respondents – was not the primary responsibility of the local governments.

*Gateway O*

#### **FINANCE, CRISIS AND POST-SOCIALISM: ON CONCEPTUAL ISSUES**

**Martin Sokol, Canterbury Christ Church University, KENT**

This paper aims to explore links between finance, crisis and post-socialism from a critical economic geography perspective. The paper argues that the on-going global financial and economic crisis creates a good opportunity to reflect on the multitude of previously neglected links between the rise of finance-led capitalism in the West and the collapse of state-socialism in the East. The paper suggests that this requires a fuller (mutual and mutually beneficial) dialogue between geographies of finance and studies of post-socialist transformation – hopefully leading to a better understanding, and perhaps a re-conceptualisation, of the post-socialist condition and financialised capitalism alike.

*Gateway KSS1*

#### **INFORMATION AND COMMUNICATION TECHNOLOGIES(ICTS) AND INDUSTRIAL CLUSTERS: OPPORTUNITIES AND SPREAD**

**Zhouying Song, Institute of Geographical Sciences And Natural Resources Research, Chinese Academy of Sciences, CHINA**

**Weidong Liu, Institute of Geographical Sciences And Natural Resources Research, Chinese Academy of Sciences, CHINA**

It is now widely recognized that new information and communication technologies (ICTs) are getting more and more important for firms to achieve competitiveness in the era of internet. Indeed, new opportunities are taking place both to create new ventures and to modify the existing business. Such recent advances have initiated debates on the changing of spatial organization of firms and industrial activity. The literature reveals that ICTs is critical to the spatial transformation of industrial activity, due to the ICT's capability to reduce transaction costs, to transfer, collect and manage a great amount of information, and to reduce space and time barriers. It is against such a background that this paper takes industrial clusters in China as case studies, to look into the impacts of ICTs on spatial organization of industrial clusters. The authors argue that ICTs has been a key factor in spatial transformation of clusters, by improving the performance of logistic and network processes, marketing and customer relations processes, and innovation development processes. The application of ICTs tends to lead to dispersed concentration of industrial clusters, and we distinguish three ideal-typical models of clusters with very different implication in terms of relevant evidence.

*Gateway E*

#### **PRODUCTION OF DEVELOPMENTALIST SUBJECT THROUGH RURAL DEVELOPMENT: TOWARD FOUCAULDIAN RETHEORIZATION OF SOUTH KOREAN DEVELOPMENT**

**Jung Won Sonn, UCL University of London, UNITED KINGDOM**

**Dong-Wan Kim, UCL University of London, UNITED KINGDOM**

This paper uses Foucauldian concepts, governmentality, and apparatus to understand how the state can use an organizational technology to penetrate everyday life and internalize hegemonic discourse. Specifically, this paper uses the Saemaul Movement, a rural development initiative in South Korea in the 1970s, to analyze how the state's creation of a pseudo state organization called Saemaul Leaders made the discourse of developmentalism inscribed in peasant's bodies and souls. We propose that there was a unique combination of discourses, which we call developmentalist governmentality, that the Saemaul Movement was one of the important apparatuses that made the developmentalist governmentality diffused into everyday work and life in rural areas. This paper claims that organizational technology plays a critical role in the diffusion of hegemonic discourse in rapid structural transformations such as the industrialization of South Korea.

**A FINNISH PATHWAY TO REGIONAL LEADERSHIP: FROM NETWORK MANAGEMENT TO LEADERSHIP RELAY**

**Markku Sotarauta, University of Tampere, FINLAND**

In urban and regional development studies, there is a lack of studies focusing explicitly on leadership in spite of the fact that the new forms of governance call for policy actors to produce results in an ever more complex environment. Additionally, there is a mismatch between policy recommendations for local and regional development and knowledge of how to deliver change. This paper analyses the institutional context of the Finnish 'regional leadership pathway' from regional policy-networks and their management (90's) to a need to develop knowledge leadership for continuous strategic adaptation (10's). Network management and strategic leadership are compared in the context of a regional innovation journey. Strategic leadership is discussed as a force to direct evolving processes in desired directions while network management appears more as a way of implementation narrowly focused policy initiatives. Thus, leadership is seen here as a force in time instead of as a leader-follower relationship in the here and now. As regional development is embedded in interplay between intention and emergence in time and a regional innovation journey is a way to conceptualize regional development efforts, leadership also requires a temporally sensitive conceptualization. Therefore, a concept of leadership relay is introduced. It is discussed as a sequence of events with identifiable main phases and key actors carrying out the processes. The main thesis is that different actors with different strategies play leading roles in achieving desired outcomes. City of Tampere (Finland) is used as case in point to highlight how the development context has changed in time.

**LEADERSHIP RELAY FOR RESILIENT REGIONS**

**Markku Sotarauta, University of Tampere, FINLAND**

This paper seeks to investigate how regions cope with continuous uncertainty and external shocks. It sheds light on the issue of adaptability underpinning regional resilience from the point of view of human agency. The paper, and the project it is based on, draws upon two theoretical debates. First, resilient regions (Pendall et al 2010; Pike et al 2010) that is embedded in the evolutionary economic geography (Boschma & Martin 2007) and, second, rapidly emerging body of research on leadership in local and regional development (Collinge et al 2010; Sotarauta et al 2012). Earlier studies on resilient regions have focused on building understanding in the concept and carrying out meta-analysis on the theoretical and empirical perspectives of it (Pendall et al 2010; Hassink 2010; Simmie & Martin 2010), resilience of the labour market (Chapple & Lester 2010), the ways industries cope with external shocks and bounce back (Treado 2009) and co-evolution of policy and self-organising development for future resilience (Sotarauta & Srinivas 2006). By focusing explicitly on the dynamics between resilience, self-renewal capacity and leadership the paper adds the conscious and intentional work to strengthen resilience into this body of research. As regional resilience is embedded in interplay between intention and emergence in time and an adaptive cycle is a way to conceptualise it, leadership also requires a temporally sensitive conceptualisation. Therefore, a concept of leadership relay is introduced. It is discussed as a sequence of events with identifiable main phases and key actors carrying out the processes. The main thesis is that different actors with different strategies play leading roles in achieving desired outcomes. Earlier studies (Sotarauta & Mustikkamäki 2012) show that leadership may be a relay in which key actors are engaged in a task or activity for a fixed period of time and then replaced by other actors with different constellations of power, knowledge and capabilities. These theories challenge macro, top down and linear views of regional development and respective policy making and thus they provide a longitudinal empirical study on long-term adaption processes with a solid ground. The assumption is that the observable adaptive changes in regions are complex and contradictory processes in nature that may appear dramatic and radical but that from long-term perspective are less revolutionary than they may seem. There is a need to study gradual transformation, 'creeping change', that denies the possibility of an optimum state and highlights constant search as a core in any adaption process and hence, a punctuated equilibrium kind of change, where radical innovations take place between institutional reproductions, is not a viable option to study adaptation (cf Streeck and Thelen, 2005). This paper approaches adaptation processes as series of incremental changes that may in time lead to changes that appear as abrupt by the contemporaries. Resilience is not therefore associated with easily measured, short-term, 'pop-up' recovery (Pike et al 2010). This paper introduces the theoretical and methodological choices of a larger project that aims to investigate the adaptation processes (adaptive cycles) underpinning regional transformations. The main

research questions are: (a) How do leadership facilitate and/or hamper adaptive cycles, and (b) how do key actors (and who are they) influence the course of events and aim to construct self-renewal capacity for resilience.

*Gateway M*

### **WORLD CHAMPIONSHIP SKIING SCHLADMING 2013 - IMPACTS OF INDUCED TOURISM ON LOCAL DEVELOPMENT: A MICRO DATA BASED ANALYSIS**

**Michael Steiner, University of Graz, Department of Economics, AUSTRIA**

**Michael Wagner-Pinter, University of Graz, Department of Economics, AUSTRIA**

The World Championship Skiing Schladming/Austria 2013 is one of the largest international sport events attracting attention in the short term and tourism demand in the long term. According to empirical forecasts a focused strategy of touristic policy can generate an increase of 3 percent over trend of the demand for touristic production leading to additional returns for the region. Usually these returns are measured in terms of macroeconomic and highly aggregate indicators such as growth of (aggregate) employment and gross regional product. By using a micro data set representing the firm/employment/household structure of the organizing region the paper will analyze the impact on different sectors of the region, on employment differentiated by qualification and income, the change in relative position and the increase in income according to different groups of income. It hence can give a more detailed analysis of the expected returns of the event-induced impact of tourism on regional development.

*Gateway CSS2*

### **GOVERNANCE FAILURE? WHY HAVE MAJOR AND FLAGSHIP PROJECTS LARGELY ELUDED THE CITY OF BRISTOL, ENGLAND SINCE THE LATE 1980'S?**

**Robert Stevens, Sheffield Hallam University, UNITED KINGDOM**

Over the last 25 years major and 'flagship' projects have become a mainstay of city redevelopment programmes and governing regime/ coalition policy agendas. They are viewed as a key constituent characteristic of 'city competitiveness' and 'place re-branding' strategies. These strategies have arguably become the leading edge of the globalised neoliberal shift from urban managerialism to urban entrepreneurialism. This shift has meant- especially for places in advanced western economies- that the key objective of governing regimes/ coalitions is to create the appropriate urban landscape, to produce dynamic spaces. These must be comprised of mixed use hi-end land uses and entrepreneurial high-spending high skilled populations, so as to attract the footloose companies, business tourists and high income households defined as necessary for 21st century urban competitiveness. Major and 'flagship' projects take a pivotal role in this policy and development repertoire: their successful implementation is viewed- both internally and externally- as a sign of urban dynamism, urban entrepreneurialism and governance success. In Bristol, England the 1980's had been marked by a time of political division, civil strife and municipality-business mutual antagonism. Several observers have written about Bristol's failure to secure regeneration funding during this period. However, a new business led governance organisation, the Bristol Initiative, was set up in 1989 and has directly influenced development and policy agendas in the city ever since. Subsequently, from 1989 Bristol became an archetypal entrepreneurial city with a governing regime/ coalition comprised of a group of well-known local developers, businesspeople, academics and politicians. This governing regime/ coalition has been closely involved with all ensuing proposals, strategies and schemes, including the most recent i.e. the West of England local enterprise partnership (UK government new regeneration mechanism) and the Bristol 2050 strategic agenda. However, recently Bristol has arguably been characterised by a lack of confidence: one feature of this being a debate about why- despite some notable major projects implemented- the city has been so relatively unsuccessful in achieving the many plans and ideas for major/ flagship developments its governing regime/ coalition has put forward over the last 20 years. Non-state actors have recently blamed the political process and local government for these failures. I focus empirically on the governing regime/ coalition of Bristol over the last two decades: its 'visions'; its 'initiatives'; its leading actors, stakeholders and organisations. I outline a range of development applications and regeneration/ redevelopment projects that have been proposed: such as an large scale Arena, various major sports Stadia, a light rail system and major retail and commercial redevelopment. The paper (a) asks the question as to what 'entrepreneurial urban governance' (often referred to in the USA in the 1980's and 1990's as

‘privatism’) has actually achieved in a major English city when measured by the ‘flagship’ project yardstick; and (b) operationalises this conceptual question by examining governing regime/ coalition enthusiasm for flagship/ major project- based development agendas in that city.

*Gateway A*

**THE IMPACT OF MACRO-ALGAE CULTIVATION AND PROCESSING ON THE ECONOMY OF THE WESTERN ISLES: A COMPUTABLE GENERAL EQUILIBRIUM ANALYSIS**

**Kim Swales, The Fraser of Allander Institute, UNITED KINGDOM**

The paper uses a dynamic Computable General Equilibrium model of the Western Isles economy to identify the impact of the cultivation and processing of macro-algae on the local economy. The analysis focuses specifically on labour market effects, including wage setting and migration implications.

*Gateway M*

**COMMUNITY COMMITMENT TO TOURISM DEVELOPMENT IN SMALL TOWNS: THE OTAGO REGION’S “WORLD OF DIFFERENCE”**

**Michelle Thompson-Fawcett, University of Otago, NEW ZEALAND**  
**Etienne Nel, University of Otago, NEW ZEALAND**

As the tourism industry expands in New Zealand, many small towns are choosing to use it as a way of developing their economies and keeping their communities alive. A primary purpose of tourism development in any region is to enhance the quality of residents’ lives by offering economic, social, cultural, recreational and other benefits. Hence it is crucial to maintain awareness of the impacts and ramifications that tourism development is actually having on the multiple communities within the settlements concerned. When appropriately designed for the locality, tourism may help stabilise communities in a phase of economic or social decline. It will certainly transform the lives of residents in many ways, but with both positive and negative consequences. These impacts of tourism-related growth are often more noticeable in smaller settlements, particularly as a result of intermittent fluctuations in population. The research reported here uses case studies from the Otago region, New Zealand to ask what impact tourism has actually had in small towns - particularly in terms of social and community outcomes - and questions how effective resulting participatory processes have been in connecting local communities to regional strategies for tourism development. Tourism evolves differently in each place, and recognition must be given to the important role that inhabitants have in advancing and contextualising their own tourism industry. The facilitation of grassroots participation in local community planning in the Otago region provides an exemplar of how decentralised approaches can empower residential communities and foster commitment to regional tourism development. The results demonstrate that involving multiple local voices and networks also enables the community to take some responsibility for the management of tourism planning in their vicinity and puts residents in a powerful position.

*Gateway J*

**THE EVOLUTIONARY PERSPECTIVE OF REGIONAL RESILIENCE: EVIDENCE FROM EUROPEAN REGIONS**

**Francesco Timpano, Università Cattolica Del Sacro Cuore, ITALY**  
**Giovanni Guastella, Università Cattolica Del Sacro Cuore, ITALY**  
**Stefano Marta, Università Cattolica Del Sacro Cuore, ITALY**

The concept of regional resilience is of increasing importance both in Academia for research purpose and in the policy arena for the determination of regional development policies and strategies. Given its innovative nature, regional resilience still needs both a strong theoretical framework and an empirical evidence of the main concepts characterizing it. This paper aims at addressing both the theoretical and empirical issues by providing a synthetic but meaningful conceptualization of the idea of resilience that is also used to describe the performance of European NUTS II regions. The first part of this paper analyzes the strengths and weaknesses of both the

equilibrium-based and the Evolutionary Economic Geography (EEG) concepts of regional resilience, highlighting the rationale for a shift from the neoclassical towards the evolutionary approach. The need to consider and analyze a regional economic system as a dynamic and continually changing process, going beyond the idea of equilibrium, leads to the emergence of the EEG perspective of resilience (Pendall et Al, 2008; Simmie and Martin, 2010; Pike et Al, 2010). A key concept characterizing this EEG approach is the idea of “panarchy” and in particular the four-phase Adaptive Cycle Model (ACM). This model is based on the idea of adaptive capacity and includes four different phases of development: reorganization, exploitation, conservation and release. Building on this framework the second part tries to operationalize the ACM. Provided that a complete examination of the cycle is hindered by the lack of adequate historical data at the European regional level the empirical strategy proceeds in two steps. In the first we attempt to identify different stages of the cycle and to group regions accordingly, based on productivity data. In the second we use employment data to construct a measure of performance to be related with resilience. Resilience is further characterized into four interconnected dimensions, namely income equality, diversification, affordability and business environment. The econometric strategy allows to understand how these dimensions impact on regional performance and how this impact changes across the different stages of the cycle. The empirical evidence depicts regional economies as complex systems, the evolution of which is in turn determined by path-dependent and place-dependent factors. In accordance with the EEG approach different factors become important in different stages and places. Path dependency, history, “lock-in” processes matter, asking policies to be more territory-linked or, in other words, more place-based.

#### *Gateway A*

### **TRANSITION TOWARDS LOW CARBON TRANSPORTATION: THE EXAMPLE OF THE DEVELOPMENT OF ELECTRIC BUS IN CHINA**

**Xin Tong, Peking University, CHINA**

As parts of the effort to reduce carbon emission, China is embracing the development of electric vehicle for the transition of automobile industry. Unlike in other nations, where automakers are leading the push for electric vehicles, in China the effort is being led largely by the state-run electric companies that operate the national power grid. China State Grid has invested to build the charging infrastructure for plug-in gasoline-electric hybrids and all-electric vehicles, and setting technical standards. This effort has been echoed from local governments who are trying to upgrade the local bus system. The great scale of the electric bus market has attracted numerous automakers to enter, particularly the emerging enterprises. This paper illustrated the three-win model among State Grid, local government, and electric bus makers in the development of urban public transportation infrastructure in China.

#### *Gateway J*

### **ECONOMIC EFFICIENCY OF THE MEXICAN METROPOLITAN REGIONS BETWEEN 1998 AND 2008**

**Alejandra Trejo Nieto, El Colegio De Mexico, MEXICO**

Nowadays metropolitan spaces are key territorial references for analysis and action. They are of critical economic, social and political importance. Three decades ago the Mexican urban structure was characterized by the existence of a principal city, Mexico City, where the national government, the largest concentration of population, industry, services and infrastructure seats. However the urban system has become more complex. The restructuring has taken the form of the emergence of several cities with qualities of metropolitan areas. These metropolitan agglomerations concentrate more than 70% of the productive capacity and therefore the largest part of the economic growth is expected to originate in the metropolises. This creates challenges for these regions, such as the need of jobs and capital accumulation but it also offer the best opportunity to expand economically and improve the quality of life for the population. Yet, productivity, profits and efficiency are distributed heterogeneously among metropolitan areas. The most mobile factors of production, capital and technological knowledge, are dominated by a few urban centres, thus other cities are left with obsolete physical capital and the less qualified labourers. Presently, the country faces the challenge to extend the urban development benefits to all cities and inhabitants. The need of competitive and efficient metropolis is relevant to this aim. A profound knowledge and diagnosis about the specificities and differences among metropolis is called



for. However there has been a relatively scarce recording of productivity and efficiency in cities and metropolitan areas in Mexico. This paper attempts to add evidence on the issue of disparities in efficiency levels among the metropolitan economies in the period 1998-2008 by examining the differences and evolution of technical efficiency. I analyze the technical efficiency of the 56 metropolitan regions in Mexico by means of data envelopment analysis using economic censuses data for 1998, 2003 and 2008. In the paper I will present information to characterize, delimit and classify functionally the metropolitan zones in order to guide further analysis as well as competitiveness projects and programs that support their performance and participation in the global and local scenes.

*Gateway E*

## **REGIONALIZATION IN SWEDEN**

**Yo Tsuchida, Nihon Fukushi University, JAPAN**

This presentation intends to make clear validity of the concept Multi-level Governance when considering mutual relation among central, regional and local government through examining Swedish case. The concept multi-level governance is understood here as a system in which governments of various tiers execute policy cooperatively with primary local government (in following commune) for basic unit. Based on such understanding it intends to argue system and role of multi-level governance worth to support indigenous development of each area been put under influence of economic globalization. Characteristic of strategy of Swedish government is that regional area is put as focus point for its competition strategy along with policy of EU. Under the strategy of Sweden to raise competitive power through high-tech industry it •fs been stressed importance of university and research institution and transportation infrastructure to strengthen regional industrial base. On the other side in the local development policy so far executed been discussed establishment of regional government and its relation with commune following to transition of priority from one putting importance on location of branch factory to one which supports development of local indigenous power. Characteristic of local economy in Sweden is that each local industry has strengthened direct connection with global wide economic activity including one in European countries and for commune it •fs become important subject to enrich infrastructure which connects its industry with worldwide economic activity as well as networking of local industry and so on. In the situation in which region has become focus point also for national strategy it •fs become important subject how to connect national policy including plan for nationwide infrastructure with strategy of commune having authority on utilization of land and so on. The presentation examines Swedish multi-level governance paying attention to its role to coordinate between policies on one hand one as realization of infrastructure executed nationwide scale and on the other hand one by local government toward indigenous development. Structure of presentation is as follows. First it examines, with Swedish competition strategy and local development policy for starting point, the process through which Swedish multi-level governance has been formed through reorganization of political system including establishment of regional government and background and characteristic of the process. One of main characteristics of Swedish multi-level governance is its aim to synthesize policies by tiers of governments with region for unit. Second it examines policy and financial system of university and research institution and transportation infrastructure through examining historic development of local development policy. What characteristic here is that planning and realization of infrastructure by central government is proceeding side by side with reorganization of government agencies with regional area for unit and institutionalization of regional government and devolution of some authority to it under the strategy aims to raise competitive power toward knowledge economy. On the other side those above are proceeding in parallel with reformation of public sector government through market mechanism. Third it examines multi-level governance on regional level through examining on one hand state of local economy and policy of commune and on the other hand system for coordination among local governments on regional level toward realization of infrastructure. It can be said as good example of local strategy envisaging indigenous development based on inherent character of each area and system of multi-level governance which support it. Fourth it intends to make clear subject to realize multi-level governance useful to develop local strategy toward indigenous development through summarizing characteristics of Swedish from international perspective.

**ALTERNATIVE TOURISM DEVELOPMENT: GIS BASED ASSESSMENTS FOR SUPPORTING REGIONAL DEVELOPMENT DECISIONS**

**Viktor Varjú, CRS Centre For Economic And Regional Studies of HAS, HUNGARY**

**Andrea Suvák, University of Pecs, Faculty of Business and Economics, HUNGARY**

**Péter Dombi, University of Pecs, HUNGARY**

Tourism based on natural givens is often chosen as a development perspective in peripheral rural regions that lost their one-time good position. Alternative tourism can be a compromise between development activity and the protection of natural and cultural landscape. The benefits and impacts of ecotourism are well known. The potential benefits are generation of financial resources, appearing of new jobs and promotion of environmental learning for local level (for protected area) and for macroeconomic level as well. Negative impacts are environmental degradation, economic inequality and instability, negative socio-economic and cultural changes within local community. Drava-river is a border-river and its regions are quite underdeveloped in both countries. In Croatian side the Drava-“region” is far from the attractive Croatian coastline, together with the Hungarian side where the underdevelopment refers to historical and geo-political issues. Alternative tourism can be a solution for regional development. Supporting the decision making and development planning process two methodologies were developed. The first assessment identifies the areas which have the highest potential in complex physical geography while the second analysis serves to delimitate different tourism zones sorted by different target group preferences. The presented methods and analyses are adequate to assess the givens of a certain region and delimitate thematic zones from the point of view of tourism development serving the decision making at the level of local and regional spatial strategic planning/regional development as well. The methods were carried out in a socially and economically peripheral region with deconcentrated tourism potential. The outcome of the analysis is an evaluation work, mapmaking and formulation of recommendations for the decision makers, who design an alternative tourism development plan for the South-Western part of Hungary. As the research and GIS based landscape analysis results show, the Drava-river (especially on the Hungarian side) and its region is highly attractive from the point of view of landscape and eco-tourism due to the low-key development and the natural protection actions. On the other hand on both sides, touristic suprastructure is lacking. Due to the flexibility of the two methods developed in this project they can be applied for the spatial appointment of touristic investments, once the overall strategy for the whole region is prepared. The methods provide important complements to (and in some cases even challenge) existing delimitations of tourism zones. A complex and comprehensive approach is needed during the planning to ensure coordination, synergies and the channelling of economic benefits and achievements throughout the region. Because of their objectivity and flexibility, the methods can be used in other types of areas as well.

**CRIME AND TERRITORIAL GOVERNANCE IN MEXICO IN THE FACE OF DEMOCRATIZATION AND GLOBALIZATION**

**Basilio Verduzco, Universidad De Guadalajara, MEXICO**

**Maria Basilia Valenzuela, Universidad De Guadalajara, MEXICO**

Somewhere on the Mexican territory, the space of flows associated to globalization, in this case illegal flows of drugs and undocumented immigrants converge with the presence (or absence) of the State. Somewhere else, within the confines of intertwined policy arenas, there is an ongoing collision of political actors and discourses arguing about issues such as, which are the proper policies, goals, organizational structures and policy rationalities needed for a viable governance scheme that will bring security to population and respond to all sorts of pressures and external demands. In the midst of a transition to democracy, the State in Mexico is struggling to preserve its relevance as an entity serving broad social interests such as economic growth, equality, freedom, sovereignty and social well being. Ten years after giving a definite step into its transition to democracy, Mexican society is witnessing high rates of violent crime and state structures are not responding to popular demands. Political actors have failed to achieve legitimacy for the public policies needed to face the situation. Foreign governments, international organizations, nongovernmental organizations and interest group leaders are voicing their concerns and are very critical of policies and practices. Government agencies are finding it difficult to get away from old practices in the fields of planning and crime protection. During the past five years, the war on crime, particularly organized crime and drug traffic, declared by the Calderon administration (2006-2012) has resulted in more than 40,000 deaths and the existence of many regions where government has virtually lost

control over the territory. In this paper we analyze this governance challenge by looking into specific public policies to provide crime protection and bring stability to all the regions of the country. We call this policy goal 'the production of secure spaces', and argue that in order to get some progress an integrated effort -governance scheme- of security policies and urban and regional planning initiatives is needed. We analyze three crime prevention policies implemented in Mexico over the past five years which are good examples of the failures to bring territorial governance in a country within the context of transition to democracy and globalization. Drawing on this analysis, we conclude that Mexico constitutes a good case of how the State is having problems to remain itself as a relevant institution that may provide universal protection to its citizens in a context of democratization and globalization.

*Gateway KSS1*

## **LOCK-IN OR LOCK-OUT HOW STRUCTURAL PROPERTIES OF KNOWLEDGE NETWORKS AFFECT REGIONAL RESILIENCE?**

**Jerome Vicente, Lereps, University of Toulouse, FRANCE**

**Joan Crespo, Crem, University of Rennes, FRANCE**

**Raphael Suire, Lereps, University of Toulouse, FRANCE**

Literature largely acknowledges that the existence of localized knowledge networks is, among many others, one of the significant factors of regional performance in so-called "knowledge-based economies". Whatever the taxonomy, from industrial districts to innovative clusters (Moulaert & Sekia, 2003), and the hypothesis and results refinements, researches converge on the idea that some regions draw their performance better than others from their ability to home dense networks of complementary and interacting organizations (Owen-Smith & Powell, 2004; Graf, 2011). Largely evidenced, such a move toward a relational approach of regional performance (Boggs & Rantisi, 2003) has led, particularly in Europe, to a massive development of clusters policies based on incentives for collaboration and networks development (Martin & Sunley, 2003). Nevertheless, behind the large consensus on the role that play knowledge networks in regional performance, few researches have pursued the reflection toward the long term evolution of regional innovative structures, except some very recent works. Papers of Suire & Vicente (2009), Simmie & Martin (2010), Menzel & Fornahl (2010), Crespo (2011), and Boschma & Fornahl (2012) constitute noticeable exceptions, as well as the mark of a burgeoning and promising research field for understanding how some performing regions can decline in a given moment of time while others are able to renew and sustain their growth in a disturbed economic environment. Such a questioning is nowadays of a growing interest as the macroeconomic context is featured on one hand by chronic instability, financial and economic crisis, and on the other hand by rapid technological cycles, environmental considerations and new growing consumers paradigms that challenge global but also regional policies. Regional resilience, clusters life cycles and clusters long term viability are the concepts that have recently tried to invest this questioning. These concepts converge towards a common attempt: understanding the evolutionary process through which a regional ecosystem of organizations and institutions succeed in maintaining its growth path by disconnecting its cycle to the cycles of technologies when these later declines. While some regions can have difficulties to cope with technological and market decline, even if they were performing during the maturity stage, some others reorganize resources and networks in order to leave a path for entering into a new related one. Trying to go beyond the neoclassical view of resilience as a mechanic return to the equilibrium after exogenous and external shocks, all these burgeoning researches try to capture the endogenous mechanisms of adaptability (Pyke et al, 2010), viewed as the ability of the actors and their social agency to anticipate, evolve, and so adapt to disturbed and cyclic economic environments. To deal with this questioning, we propose to combine a multidisciplinary theoretical analysis that discusses the critical factors of network resilience, with an evolutionary economic geography framework (Boschma & Frenken, 2006; Martin & Sunley, 2007) that focuses on an out-of-equilibrium approach of regional science. Networks have been of a growing interest in social sciences since a couple of years (Borgatti & Halgin, 2011). They are at the heart of well-known theoretical researches in Sociology (Uzzi, 1997, Borgatti & Everett, 1999), Economics (Jackson & Wolinski, 1996), Geography (Glückler, 2007; Ter Wal & Boschma, 2009) and Management Sciences (Powell & Grodal, 2005), with a high level of absorption of results coming from physics and complex systems theories (Albert & Barabási, 2002; Newman, 2003). Considering that networks can be represented by a set of three basic primitives (the nodes, the ties that connect the nodes, and the resulting relational structure), networks theories give a simple but a useful representation of social agency in a static sense, and are recently more focused on a dynamic purpose (Ahuja et al, 2012). Obviously, on a one hand, theorizing regional resilience only through the dynamics of knowledge networks can be viewed as a highly deterministic and *ceteris paribus* approach, and in a sense it is. But on the other hand, networks have been central in many guidelines and white books for regional

policies during the last years (OECD, 2007, 2009; European commission, 2008), and their weakness in certain regions has been interpreted by policy makers as the primary reason of their low performances. So if institutional, political, cultural as well as macroeconomic conditions matter for regional resilience, our aim is more focused on a better understanding of the mechanics and dynamics of the networks that have concentrated the attention of policy makers. Our purpose is to draw simple but empirically interpretable signatures of local networks that give interesting properties for favouring the conditions of regional resilience.

*Gateway KSS1*

## **THE EVOLVING GEOGRAPHY OF KNOWLEDGE NETWORKS: EVIDENCE FROM THE EUROPEAN MOBILE PHONE INDUSTRY**

**Jerome Vicente, Lereps, University of Toulouse, FRANCE**

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Cluster life cycles have acquired a growing interest in the literature (Suire & Vicente, 2009; Menzel & Fornahl, 2010; Boschma & Fornahl, 2011). Clusters are not seen as static units any more, but as complex structures that may follow different trajectories or paths through time (Martin & Sunley, 2011). In fact, their emergence, decline and renewal underlay the continuous change in the geographical organization of economic activity. Consequently, clusters should be studied beyond their impact on performance and innovation in order to understand the drivers of their long-term evolution. Economic geographers have pointed transport costs, resource construction and resource availability, agglomeration (des)economies, information cascades or spin-offs among others, as explicative mechanisms to understand agglomeration and dispersion movements (Krugman, 1991; Ellison & Glaeser, 1997; Boschma & Wenting, 2007; Suire & Vicente, 2009; ). On their side, industrial economists have studied how industrial organization changes along its lifecycle. They have underlined, among others, changes in entry-exit dynamics, reduction of uncertainty, changes in innovation processes and competitive behaviours (Klepper, 1997; Moore, 1991; Abernathy & Utterback, 1978; Anderson & Tushman, 1990; Rogers, 2002). However, much less attention has received the relation between both, i.e. the interplay between the changing geography and the industrial and technological cycles (Audretsch & Feldman, 1996). Following the Brian metaphor (Arthur, 1989; Arthur, 1990), an univocal association between the industrial and geographical cycles is usually done. Nevertheless, neither all clusters in the same industry follow the same evolution, nor the industrial or technological evolution is independent of territorial features. The knowledge about the factors explaining these differences, i.e. cluster resilience, is still scarce. We consider that resilient clusters are those that manage to follow the growth stage of a technology and dissociate from it when the technology declines (Suire & Vicente, 2011; Crespo, 2011). The resilience of clusters depends on the structure of the organized proximity of co-located actors (Torre & Rallet, 2005). The ability to impose and defend industrial standards, the capacity to absorb the fail of key nodes, and the capacity to construct related varieties to overlap growing industrial cycles depends on their topology of interactions. In that sense, we aim to use some simple statistical measures about the network structure, such as degree distribution, assortativity, path length, connectivity or organizational ecology (Borgatti & Halgin, 2011; Ahuja, Soda & Zaheer, 2012) in order to identify which properties are relevant to sustain cluster resilience through time. To do so the syres EUPRO database is used (an improvement of the original CORDIS database (Scherngell & Barber, 2009)). It contains all projects funded by the EU-Framework Programmes (FP1-FP6) from 1984 to 2010. We have selected the projects on the mobile phone industry through a keyword research. The database contains information about the projects (description, partners, start/end dates and project funding) and about the participant organizations (meaningful unit division, localisation and type of organisation). So both technological waves and geographical distribution are available. Using social network analysis, the different European clusters in the mobile phone industry are identified. We elaborate several indicators about the structural properties. The application of panel econometrics methods let us explain which properties are relevant for cluster resilience, i.e. which structures enhance sustainable trajectories and which ones reveal fragile clusters that will decline with industrial shifts. We expect that two statistical signatures characterize resilient clusters: the distribution degree (core/periphery) and the correlation degree (assortativity) (Suire & Vicente, 2011), embedded in the global technological field by the role of gatekeepers (Rychen & Zimmermann, 2008) and by its pertinent enrolment in the different knowledge phases.

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The role of transport in the process of economic development and integration remains an area of controversy in both the economics literature and policy-making. The theoretical literature following the work on the new economic geography (Fujita et al, 1999) implies that there is no a priori certainty in whether improved accessibility will lead to convergence or divergence in economic performance. Despite this policy makers have emphasised the importance of investment in transport infrastructure as an instrument of both economic growth and cohesion. Pre-eminent in this thinking has been the role of high-speed rail which has been seen as enabling a significant shift in transport supply equivalent to the introduction of a completely new mode of transport. This belief has been to the fore in both European transport policy and in the rapid development of high-speed rail in China. As originally conceived high-speed rail (HSR) was seen as a means of improving accessibility between core cities in the distance range 400-600km (Vickerman, 2012). In Europe evidence from Spain, France and the UK has shown that it may also have a role in enhancing intra-regional integration in the distance range up to 200km (Garmendia et al, 2012). A similar situation can be identified in China where HSR is seen as one of the elements in the long-term development of the Pearl River Delta area, enhancing the integration of Hong Kong with Guangdong. This paper aims to embed the development of HSR in the wider process of integration which has been a major objective of policy in Europe and is clearly seen as an objective of policy between the Hong Kong SAR and the neighbouring areas of Mainland China. Two case studies will be used to illustrate the issues: the link between London and Paris and Brussels via the Channel Tunnel; and the development of a high-speed link between Kowloon and Guangzhou via Shenzhen. The Channel Tunnel Rail Link provides both a complete high-speed route between London and Paris and Brussels and a regional high-speed service between London and a range of towns in Kent. The line is part of the North-European HSR network linking Paris, Brussels, Cologne, Amsterdam and London. In France the Nord-Pas de Calais region has introduced regional services using the high-speed line (TER-GV) to provide better integration of the coastal towns with the regional centre of Lille. There is a historic rail link between Kowloon and Guangzhou. Although it is relatively slow in the Hong Kong SAR, as services compete for space with local commuter trains, upgrading in the Guangzhou-Shenzhen part transformed it into one that allows trains to run at 200km/hr. Nevertheless, the rail link did not realize its full potential of integrating the Hong Kong SAR and the rest of the Pearl River Delta region. Meanwhile, the expressway expansion was taking place rapidly since the 1990s (Loo, 1999). The Chinese plan for a national network of HSR included a line from Guangzhou to Kowloon (via Dongguan and Shenzhen) which will reduce travel time to less than one hour. This will also enable HSR services from Hong Kong to major cities in Mainland China. The proposed HSR services will reduce the Beijing-Hong Kong time from 24 to 10 hours. Realisation of the Guangzhou-Kowloon line is expected to be vital to the further economic integration between Hong Kong and Guangdong (and the Mainland as a whole). In both cases there are major centres of population likely to benefit from high-speed city to city communication and intermediate areas which may benefit from greater integration into the higher level centres, but may also find themselves increasingly excluded by the new high level links. Garmendia et al (2012) have shown how dedicated shorter distance HSR services can create completely new travel opportunities with major impacts on regional labour markets and on residence-workplace location and choice. The scope for this, and its likely impacts, both positive and native will be examined in these cases. Both cases also show the possible consequences of using improved transport as a means of removing the barriers which international borders imply.

**Richard Wakeford, Organisation for Economic Cooperation and Development – OECD, UNITED KINGDOM**

Land is a finite natural resource, at the heart of sustaining life on Earth. The most versatile land is coming under ever greater pressure from urbanization and from increasing global demands for food, energy and other products. Nowhere are the challenges greater than in China, given the size of its population, its relative lack of versatile land and the challenge of delivering water. In all countries in the 21st Century, however, achieving

more from land should be high on government agendas. Given global trends, public policy makers will increasingly need to apply governance tools more effectively to achieve “sustainable intensification” – in which every element of the landscape delivers its full and appropriate contribution to the ecosystems services people depend on. The products of these ecosystems services include food, water (for people and businesses), energy (from biofuels), forest products (construction timber, biofuel and carbon sequestered), minerals, biodiversity and scenic attractions. Natural factors of geography, geology and climate determine the potential for each piece of land to deliver some or all of those services. But land uses are also significantly influenced by legal rights, regulations, taxes and subsidies flowing from the decisions of national and local governments. The pace and direction of urbanization and infrastructure investment also flow partly from government measures, such as national, regional and local planning and zoning rules. The OECD Rural Policy Review of China, published in 2009, emphasized the unexploited potential for rural economic diversification, capitalizing on land-based natural, cultural and energy resources. It referred to the environmental threats putting that potential at risk, and to government administrative systems and sectoral segmentation that hamper sustainable development. It recommended rural tax reform, better quality local government and place-based policies – with land-use, service delivery, economic diversification and environmental protection properly covered by a reformed rural governance system. Another OECD Review, of Guangdong Province in 2010, called for better spatial planning tools to stem urban sprawl and loss of cultivated land. Policy analysis in the United States and Europe (especially densely populated countries like the Netherlands) suggests that competition between land uses is increasingly contested. In the US, for example, biofuel crops have displaced food across a swath of the Midwest. Recognizing the threat to rural land of urban sprawl, the German Government established a programme on sustainable land management, to identify better built development practice. The UNITED KINGDOM Government’s Foresight studies on land use and food futures provided a research-based picture of the long term land management challenge – both nationally and internationally. There have been few studies of the effectiveness of different instruments in improving the delivery of ecosystems services. But the OECD has observed the green growth development potential of rural land-based assets, not only in providing essential products for city dwellers but also in protecting the world from climate change. The Rural Working Party has therefore commissioned work on land use governance – which should start in 2013. The governance perspective reflects the fact that many administrations operate in a silo approach, with each department focusing first on the needs of its own sector. So far, there has generally been sufficient land for agriculture, forestry, mining, energy extraction, nature conservation and carbon sequestration, alongside urban development and infrastructure. More demands are being made, however, as a result of the increasing wealth, size and impact of the global population (and consequent demands for food, water and energy consumption), as well as technological advances and changing weather patterns. This year’s Rio + 20 conference will reinforce the need to accommodate growth within sustainable development principles – in particular, protecting forests and biodiversity, and reducing greenhouse gas emissions. If poorer nations are to grow out of poverty while protecting the global environment, sustainable intensification of land use will be needed - i.e. not just more food per hectare but more biodiversity and more carbon stored too. How can governments encourage sustainable intensification? What will influence owners and tenants to deliver the combination of private and public goods needed? Government tools will be crucial, alongside market drivers, whether:

- Regulation and enforcement;
- Incentives through taxation and subsidy;
- Influence through leadership.

Different nations approach land use rights, regulation, tax and subsidies in different ways. It has been difficult to consider these as a complete package, given a lack of recognized valuation methods for ecosystems services. But that is changing with work such as Nicholas Stern’s report on climate change, Pavan Sukdev’s contribution on the economics of biodiversity and the capability of valuing ecosystems as in the UNEP work for the UK Government. Drawing on examples from around the world, OECD research will explore the individual and cumulative effects of regulatory and fiscal incentives in delivering the sustainable intensification of land use needed if we are to meet the increasing global demands for natural resource based services.

**SPATIAL COMPETITION AND COOPERATION BETWEEN HIGH-SPEED RAIL AND AIRPORTS IN CHINA: PRESENT AND FUTURE**

**Jiaoe Wang, Institute of Geographic Sciences And Natural Resources Research, Chinese Academy of Sciences, CHINA**

This paper is devoted to a statistical and GIS method to analyze the spatial competition and cooperation between High-speed rail (HSR) and airports in China with the latest data in 2010 and the planned data in 2015. First, the paper designs a GIS method to evaluate the spatial coverage surrounding the HSR stations and airports in 1 and 2 hours based on the road network. Considering that airports are usually far from the city centre, this paper uses their longitude and latitude location for analysis. Second, the paper explores and simulates the spatial coverage in terms of land area, population and GDP of HSR stations and airports in 2010 and 2015. Results indicate: (1) HSRs are mainly distributed along economic corridors in East China and Central China, particularly concentrated in the east of Beijing-Harbin Rail and Beijing-Guangzhou Rail. Since the HSR is linear and constructed along developed areas with better road transport, so its service market around the rail station in 1 hour and 2 hours is also spatially continuous; (2) Airports are constructed in large, middle, small "C" sized cities and the service areas are spatially dispersed; (3) Almost all large cities enjoy the service from HSR and airports, for example all large cities with non-agriculture population over 200 million can enjoy the airport service in 1 hour but only 80% of those cities can enjoy HSR service; (4) The service market of HSR and airports in 2015 will be spatial convergent, and the overlapped area will become larger and larger and expands from East China to Central China. In the end, the paper concludes that China's HSR and air transport will compete in major economic corridors in future such as Beijing-Shanghai, Beijing-Guangzhou, Beijing-Harbin, Beijing-Xi'an, Beijing-Chengdu corridors etc, and air transport has its own advantages in small cities of West China and conversely HSR in intra- Metropolitan Areas such as the Beijing-Tianjin-Tangshan area, the Yangtze River Delta area, the Pearl River Delta area. Besides, both the HSR and airports are highly correlated with socio-economic indicators of cities such as population and gross regional domestic product (GRDP). Considering the simulated overlapped service area of HSR and airports, the paper suggests Chinese government needs to reconsider or readjust their plans to not only satisfy the market needs but also decrease the competition and increase the cooperation between HSR and airports.

**DIFFERENTIATION AND COUPLING OF ECOLOGICAL AND SOCIAL SPACE OF METROPOLIS IN THE PROCESS OF URBANIZATION: A CASE STUDY OF XI'AN**

**Kai Wang, Xi'an International Studies University, CHINA**

Social justice issues caused by the configuration of the urban public service facilities and the open space has always been a hot issue and concerns of the Western urban social geography. The equity and accessibility towards the urban green spaces and other ecological spatial distribution also become the one main direction of study. Because of the differentiation of living space, the urban social space shows the characteristics of socio-spatial differentiation and polarization. In metropolis, the social strata stratification and the isolation of living space lead to different social strata that occupy the different types of ecological resources and ecological elements. Irrational allocation of ecological space has strengthened the differentiation of social space, and affected the construction of civil society and a just social order. Along with the urbanization process in CHINA, the concerns about the ecological environment and the demand of good living space quality by urban residents has increased, and has become China's current social problems which can't be ignored. Taking Xi'an High-tech District and Qujiang District as example and using GIS and RS, this article analyzed the spatial characteristics of regional eco-resources distribution and construction, discussed the features, reciprocity process and system of urban ecological and social space, and put forward spatial distribution and coupling path of ecological resources in urban community under the theory of social spatial justice based on analyzing the location of affordable housing, common real estate and dwellings with higher quality in the case-study districts. Therefore, it can play an consulting and reference role in reasonable planning and scientific distribution of urban ecological space.

**Xuefeng Wang, CURDS, Newcastle University UNITED KINGDOM**

**Andy Pike, CURDS, Newcastle University UNITED KINGDOM**

**John Tomaney, CURDS, Newcastle University UNITED KINGDOM**

This paper reports to the results of a study undertaken by the authors for the Henan Development and Reform Commission. Henan is the most populous province in China. Located in central China, the province has only recently begun to share in the growth experienced by the coastal provinces. Rapidly increasing industrialisation and urbanisation have thrown up a number challenges for local economic development policy. This paper identifies some of the challenges and explores some of the solutions.

**Mikko Weckroth, University of Helsinki, Department of Geosciences and Geography, FINLAND**

During the 21th century empirical study of happiness has developed rapidly regarding both methodology and method. As a result it has managed to attach the study of happiness and subjective wellbeing (SWB) as an essential component when defining wellbeing in a cultures and societies defined by “post scarcity economy”. Along with the rising interest for measuring happiness, there have been attempts to connect this study into geography through new welfare indicators such as “gross national happiness”. However these spatial analysis of SWB and happiness have been mostly operating with formal regions and comparisons between countries or in some cases between certain city regions. Hence the connections to 'space' and 'location' as a geographer understands them have remained unexplored. As an answer to this gap, this research is trying to establish an approach linking together empirical happiness study, theories of wellbeing and social attributes of urban life. Obtaining this goal is sought by developing an interdisciplinary approach for examining the spatial appearance of happiness inside a city region. In this study, as an addition to perceptions of personal happiness, the aim was to acquire knowledge about personal values and the components personal happiness is based on. Furthermore, moving into certain community and the perceived characteristics of a neighbourhood contributing happiness, were defined to represent these values as well. Thus the approach suggested in this study is trying to help us understand why certain population segments behave – and locate – as they do. This research would try to reach this understanding by recognising the shared values among different population segments in different living environments. And essentially, whether living in certain environment representing these values, could be defined as an attribute generating subjective wellbeing for them. The method of this study was to obtain knowledge about subjective wellbeing of individuals from two different residential areas inside Helsinki metropolitan area through comparative case study .Consequently, the chosen cases in this study were selected due to their emphasized 'village' images and identities and thus the juxtapositioning was constructed between a secluded post-suburban “gated community” located among the orbital roads of the metropolitan area, and more heterogeneous “urban village” better attached to existing urban structure. The research sought to answer the following questions: Are there any differences between the areas regarding the components personal happiness is based on? Are there any differences between the areas regarding the level of residents’ subjective wellbeing? Based on the assessments of the residents, what are the most important characteristics of neighbourhood contributing to personal happiness? The data used in order to gain answers to these questions was obtained from internet-based survey questionnaire. In the questionnaire the concept of 'subjective wellbeing' and 'happiness' were defined as synonyms and the instrumentalization was constructed as a synthesis composed of Erik Allardts 'loving', 'having' and 'being', Ed Diener's SWB and Aristotelian virtue ethics. Based on the obtained data, residents of post-suburban village Sundsberg seem to share a highly family oriented set of values and actualizing these values is ensured with high income, wealth and secure work situation. In the gentrified “urban village” Kumpula, however, the components of happiness seem to lean more towards learning and personal development, interesting leisure time activities and hobbies and specially having an influence regarding communal decisions. Some differences can also be seen with regard to subjective wellbeing; on average, people in Sundsberg rate their personal lives happier. People are more satisfied with their personal health and work life in Sundsberg, whereas in Kumpula feelings of loneliness, inadequacy, and frustration are slightly more common. When it comes to the characteristics of a neighbourhood that increases happiness, the data suggests that the key characteristics are peacefulness and safety, central location, good connections, and the proximity of



parks and recreat. In addition to these components, the residents in Kumpula were overall more satisfied with most characteristics that contribute to happiness in their residential area. Beside the above-mentioned attributes, the residents of Kumpula also emphasize some softer elements connected to the social, functional and communal side of the area. From Sundsberg residents' point of view, a residential area that contributes best to their happiness is a child friendly and safe community made of like-minded people, who share the same socioeconomic situation. The results of this study can be linked back to the society and metropolitan area from which they were chosen as cases to be studied. The results can thereby be seen as an example of differentiation of conditions for personal happiness between certain population segments. It is possible to detect a spatial dimension to this process as well; therefore, the results suggest that regional segmentation affected by broader life-orientation and set of values exists between high-ranking residential areas, too. Thus, the results of this research contribute to the debate on innovative, diverse and dynamic urban areas, as well as the cohesion of metropolitan area. The approach described in this study could be further developed and focused in order to reveal aspects of happiness and subjective wellbeing with are undetectable from analysis operating with larger scales.

#### *Gateway E*

### **STRUCTURE THE DRAGON: THE LOGICS OF THE ADMINISTRATIVE DIVISION ADJUSTMENTS AND THEIR ECONOMIC AND SOCIAL IMPLICATIONS IN CHINA**

**Xing Wei, School of Public Policy & Management, Tsinghua University, CHINA**

**Zhusong Yang, School of Public Policy & Management, Tsinghua University, CHINA**

The paper aims to analyze the logics of the adjustments of the administrative divisions in China during the post-reform era, in particular after 1992, the year Chinese government further deepened its alleged socialist market economic system, and demonstrate the economic and social implications of these changings. Since China, the largest country in the world in terms of the population size and sooner of the economic size, is organized under the world's most complex administrative system which includes five plus half tiers government levels (central, provincial, prefecture, county, township plus vice provincial municipality), the divisions of the administrative units not only matter a great deal spatially, but also play the key roles economically and socially. The administrative division is the elementary factor for the formulation of the public policy, and a reasonable and well-organized administrative division system would determine the success of the economic and social policies in large extent. The paper will organize as following parts: (1) The paper gives a comprehensive summary on the evolution of the management system of the administrative divisions, and reviews the relevant studies. (2) The paper illustrates the pattern of the administrative division adjustments by conducting descriptive statistics. (3) The paper attempts to set up the dataset tracking all the adjustments of the administrative divisions above county level and including relevant economic and social statistical data during 1992 to 2010. During this period there were almost 800 adjustments on the administrative divisions at different jurisdictional levels, such as changings of the territory property (e.g. county upgrading to city, county-level-city changing to urban district), dividing, merging or rename of the territories. By categorizing these adjustments of the administrative divisions, the paper evaluates the performances of the administrative divisions with and without the adjustments from the economic and societal perspectives. (4) The paper then formulates a model to diagnosis and interprets the driving factors of the adjustments of the administrative divisions, and also the relations between these factors and the administrative divisions; economic and social performances. (5) Based on the findings of above analysis the paper also proposes the policy recommendations for the next step strategy on how to adjust the administrative divisions, which can achieve the long term prosperous and harmonious regional development in China.

#### *Gateway G*

### **THE CHANGING LANDSCAPE OF CHINA'S ECONOMIC DEVELOPMENT: A SPATIAL-TEMPORAL ANALYSIS**

**Jieqiong Wei, Northwest A&F University, CHINA**

**Jianhong Xue, Northwest A&F University, CHINA**

In the early stage of economic development after the 1978 reform, China adapted an export-orientated development strategy by which southern and coastal regions have comparative advantage and were given

preferential policies for industrial development compare to inner provinces and regions (e.g., Yang, 1990; DE MURGER et al, 2002). This regional development strategy can be best represented by the establishment of special economic zones in Shenzhen, Zhuhai and Xiamen and so on in Coast China. Such an economic development strategy was in the hope that these advantageous regions can be developed first, and then, the economic results of which can be extended to inner provinces or inland regions. As a result, China's economic development and growth has largely concentrated in the southern and coastal areas in the past three decades. Though such a development approach is widely criticized for causing regional inequality in China, recent statistics shows that, as the southern and coastal regions continue to grow in a fast pace, some of the inland and western provinces or regions have even been experiencing a higher growth rate than their counterparts in Coast China (Chinese Statistical Yearbook, 2010). This may suggest an important shift in China's regional development strategy and a major change in China's economic landscape. It provides us a reason for investigating the spatial distribution and temporal dynamics of regional economic development and underlying forces that drive such changes. Base on economic production function, we use a spatial-temporal econometric model to analyze the underlying drivers (including conventional factors of productivity and spatial externalities) for regional economic development and growth in China. Data from Chinese Statistical Yearbook (both cross-sectional and panel data) will be used for model estimation. The result of our study can be further used to analyze the internal trade flows and predict regional economic development trends and patterns in China. The implication of this study includes: (1) providing a picture of recent spatial and temporal distribution of the Chinese economy; (2) understanding disparity among Chinese regions and underlying forces behind it; (3) supporting the formation of new strategies or programs to promote internal trade and reduce regional inequality in China; and (4) comprehending how the changing dynamics can help China increase domestic demand in the time of global economic crisis.

*Gateway J*

# **INTERNATIONALISATION OF HOME-GROWN MULTINATIONAL CORPORATIONS IN DEVELOPING COUNTRIES AND ITS IMPACT ON LOCAL CLUSTER UPGRADING: THE CASE OF A CHINESE ENGINEERING MACHINERY CLUSTER**

**Ping Wei, Business School of Central South University, CHINA**

**Shaowei He, Business School of Northampton University, UNITED KINGDOM**

There has been an increasing recognition that examination of cluster development has to be put in the global context as presented in notions such as 'local buzz, global pipelines' (Bathelt et al., 2002; Owen-Smith and Powell, 2002), nodes within global networks (Amin and Thrift, 1992) and local-global nexus (Nachum and Keeble, 2003). In particular, some recent studies have examined the role of Western MNCs in shaping the upgrading and learning dynamics of clusters in developing countries (for example, Manning, 2008; Vang and Asheim, 2006). Less known, however, is about some other types of clusters where their development has little to do with Western MNCs and where home-grown multinational corporations from developing and transition economies are ascending quickly to global leadership positions and have played an important role in bridging the local clusters and global markets and production systems. In the context of China, those Chinese multinational corporations have speeded up their internationalization in recent years through cross-border acquisition and merger, joint venture, strategic alliance with western companies, establishment of overseas production or R&D centres, strengthening of overseas agent system, and overseas IPO. It is claimed that such outward investment offer an avenue to link up to the global production, distribution and innovation networks. What particularly draws western attention is recent significant efforts by some large Chinese corporations such as Huawei and ZTE (telecommunication producers), SANY and CSR (engineering machinery producers), and Petro China (the oil & gas producer) to expand internationally. It is claimed that Chinese companies now placed more emphasis on acquisition of strategic assets and proprietary knowledge in developed economies (Hong and Sun, 2006), aiming at transferring not only technology, but also the innovation process. It is also in academic debates that how Chinese experience differs from historical paths undertaken by Korean and Japan companies decades ago and whether they will promote mutual development gains between two sides. This paper is to examine the role of home-grown MNCs in developing countries in the transition of local clusters towards more knowledge-intensive forms of production. In particular, via a case study of the Engineering Machinery cluster in a central province in China, the focus will be on the recent internationalisation efforts taken by the those corporations and the impact on the upgrading of local clusters. The study will therefore be the first of its kind to make an original and much needed contribution to understanding how home-grown MNCs shape cluster dynamics in developing and transition economies. It will also have significant implications for policy makers as it helps to address how to best align MNCs' internationalisation strategy with regional economic development

strategy. This is particularly pertinent in the current context as Chinese governments at all levels are experimenting new models of industrialisation and encouraging their local champions to 'go global'. The analytic framework for this study has drawn heavily on literature in international business and on recent contributions on industrial clusters. The former has had long track of theoretical and empirical studies on Western MNCs since 1970s (for example, Buckley and Casson, 1976; Dunning, 1981) and on Third World Multinational since 1980s (Lall, 1983; Wells, 1983). The latter has witnessed rising research interests in external linkages of local agglomeration (Bair and Gereffi, 2001; Gereffi, Humphrey and Sturgeon, 2005; Giuliani, Rabellotti and Van Dijk, 2005; Yeung, Liu and Dicken, 2006), as well as cluster upgrading (Humphrey and Schmitz, 2002; Giuliani, Pietrobelli and Rabellotti, 2005). We establish the analytic framework to:

- Seek evidence of new knowledge acquired through external linkages established by the home-grown MNCs;
- Investigate how the new knowledge is trickled down the local clusters via interactive learning;
- Evaluate whether or not the process helps the local clusters in achieving product, process, functional and intersectoral upgrading.

The first and second points listed above aims to understand the diffusion effect of internationalized activities as regards flows of the human resources, innovation and information, with the first evaluating intra-firm global networks and the second looking at inter-firm linkages. The results then will be used to link with levels of cluster upgrading over time which is what the third point means to do. The second part of the paper is to apply the analytic framework to the case study. Most of the previous studies on Chinese clusters either focused on traditional manufacturing clusters such as clothing (e.g. Zhang et al., 2011) or high-tech clusters such as ICT and telecommunications (e.g. Yeung et al., 2006; Zhou et al., 2003) in more developed areas in China. Very little has been said about other types of clusters in less developed areas in China. This study will then document the rise and transition of this type of clusters and contemplate its implications in both theoretical and empirical terms.

*Gateway N*

## **ANALYSING AND GOVERNING URBAN-RURAL RELATIONS**

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Since the 19th century processes of industrialisation and globalisation have caused intensive changes in land use and in interrelations between different types of space. Divisions of labour, increasing mobility and migration, new technologies and changing societal preferences modified complex flows of information, goods and people. In consequence the dichotomy between "rural" and "urban" started dissolving and transitions amongst the two categories increased, including the creation of new spatial types like metropolitan regions or peri-urban areas. Unlike this in many analytical as well as political concepts the defined dichotomy between urban and rural persists up to now. One reason is caused by indifferent and simplified use of indicators like land cover or GNP for defining characteristics and challenges in "urban" and "rural" areas. One other reason is the missing reflection and integration of interrelations between these types. New definitions of space base on the reflections of interrelations (Massey 2005), especially the consideration of flows and the interconnections between flows and land use. Expectedly the relationships and flows in between "urban" and "rural" have been analysed and discussed rarely. A review of scientific literature indicated lack of comparative data on flows until today (SPESP 2000). Best known are some physical flows like water and migration of people, analysis about flows of information and knowledge are mainly missing. Additionally knowledge about causes and effects of complex land use changes are limited. Analytical concepts interconnecting land use and flows are at an early stage. Politics of interrelations like between programmes for rural areas and programmes for the urban areas are still exceptional. The full paper and the presentation will focus on two aspects, the analytical gap and connected to this on governance deficits. First an overview will be given on concepts and models reflecting urban-rural relationships. This includes thematically focussed issues like commuting as well as multi-dimensional concepts like urban metabolism, value chains or ecological footprint. Second current modes of governing urban-rural relations will be analysed. Different forms of regional governance influencing flows will be mentioned, including formal ways like regional planning, informal ways like regional management or managing of value chains and regional economic policy. Using the analytical results the following questions will be discussed: In which way reflect the existing analytical and governance concepts interrelations adequately? What will be

consequences for reflecting spatial interrelations in a better way in future? What are consequences for regional governance, especially for better integration and coordination? The presented discussions and results are part of a project funded by the German Federal Ministry of Education and Research (BMBF) within the funding measure “Sustainable Land Management”. The funding measure has been designed to generate the basic knowledge which is needed for sustainable land management decisions and to provide relevant strategies for action as well as suitable technologies and system solutions by means of inter- and transdisciplinary research approaches (BMBF 2008).

*Gateway ESS1*

## **METROPOLITAN GOVERNANCE SYSTEMS IN THE GLOBAL SOUTH: FORMS AND EFFECTIVENESS**

**Robert Wilson, LBJ School of Public Affairs, USA**

Large metropolitan areas have increasingly become the key sites for wealth generation in many countries of the world. A feature of the urban landscape worldwide and accentuated by globalization, these conurbations span or encroach upon multiple jurisdictions of local government and embrace ever-larger populations. But with high levels of social inequities and the new challenges of sustainability and disaster reduction, metropolitan planning and governance issues will inevitably be high on the policy agenda of many countries in coming years. The question facing the metropolis is at the same time simple and complicated: how best to develop an institutional architecture of government and governance that can offer macro-level policy development and implementation across what is often a complex raft of individual governments, institutions, and agencies. The mismatch between municipal resources and the demand for public services are significant impediments to coordination across municipalities. New approaches to collective decision-making, public resource mobilization and allocation in metropolitan areas are needed. As increasingly important generators of wealth in a global economy, metropolitan economies must be economically competitive. Without effective metropolitan wide planning and governance systems, potential agglomeration economies in infrastructure and logistics, labour markets and clustered development will likely go unrealized. And if growth occurs, governance systems are critical in insuring the prosperity is shared. Despite the strong performance of metropolitan economies in many countries, these places tend to have a sizeable informal economy, a large number of low-skilled immigrants, and a high rate of unemployment. These conditions contribute to increased socioeconomic inequalities, residential segregation and social exclusion. The spatial organizations of metropolitan areas can exacerbate income inequalities and only metropolitan wide planning and governance efforts can ameliorate these issues. In fact, the spatial or geographic mismatch of resources and services necessarily requires a multi-level approach to effective governance. This paper will report on a research program to investigate the impact of metropolitan governance on economic growth and the well-being of residents. The project adopts a cross-country, empirically based, interdisciplinary framework to study the challenges of the metropolis. A completed element of this program, which examined the four federal countries in Latin America (Argentina, Brazil, Mexico, and Venezuela) identified forms, functions, political legitimacy and performance of the emerging metropolitan governmental structures and sought explanations of these innovations. The relatively few models of successful metropolitan governance organized by the local governments themselves was explained by resistance from existing institutional structures and political systems as well as geographical disparities in terms of socio-economic status, labour markets, governmental services and resources within metropolitan areas. This paper extends this project to metropolitan challenges in Asia and Africa and to countries with unitary governmental structures. The contrast of differing developmental and governance context in these regions with the findings from Latin America provides a framework for identifying and assessing key factors affecting the emergence of effective metropolitan governance arrangements. Robert H. Wilson is the Mike Hogg Professor of Urban Policy and Associate Dean for Research at the LBJ School of Public Affairs. His current work focuses on urban policy and the performance of metropolitan governance systems. Recent publications on this topic include *Metropolitan Governance in the Federalist Americas: Case Studies and Strategies for Equitable and Integrated Development* (University of Notre Dame Press), *Urban Segregation and Governance in the Americas* (Palgrave), and *Governance in the Americas: Decentralization, Democracy and Subnational Government in Brazil, Mexico and the United States* (University of Notre Dame Press).

**ARE THE FUNDS FOR PERIPHERAL AND LESS DEVELOPED REGIONS IMPLEMENTED IN A WAY TO ENSURE THEIR GREATEST EFFECTIVENESS? EVALUATION OF IMPLEMENTATION OF COMPLEMENTARITY CONCEPT IN POLAND'S VOIVODSHIPS**

**Dominika Wojtowicz, Kozminski University, POLAND**

Poland has one of the greatest territorial disparities in terms of gross domestic product per capita among EU countries. There are three types of disparity that are visible: a gap between Warsaw and the rest of the country; and rising disparities between large urban areas and rural ones and finally persistent gap between eastern and western Poland [see: Regional Development in Poland, Policy Brief, OECD 2008]. The five eastern regions with the lowest growth rates and the smallest contributors to national GDP face multidimensional problems that derive from different factors. Slow development of these regions is mainly due to historical legacies, the predominance of agricultural activities with low productivity, and their peripheral situation, bordering less developed countries. As Poland is the largest recipient of EU structural funds, being allocated EUR 67 billion under EU cohesion policy, support for peripheral and less developed regions has become more significant within development policies in 2007-2013 period. There is a special Operational Programme entitled "Development of Eastern Poland" that provides financial aid (2,3 billion euro) for five Polish regions (Warmińsko-Mazurskie, Podlaskie, Lubelskie, Podkarpackie and Ewiotokrzyskie). The purpose of this Programme is to stimulate economic growth and overcome stagnation, which is marginalising Eastern Poland's regions. The strategic objective of the Programme is to accelerate the pace of socio-economic development in Eastern Poland, at the same time respecting the sustainable development policy. Financial aid to those regions is provided also within Regional Operational Programmes, Human Capital Operational Programmes and programmes supporting cross-border cooperation. There are also investments co-financed within cohesion policy managed on national level (mainly transport infrastructure projects) located in all five less developed regions. In this context – it is worth asking question on effectiveness of all implemented measures. According to a macroeconomic modelling projection, only Development of Eastern Poland Operational Programme is expected to deliver additional Gross Domestic Product (GDP) of 1.38% and up to 13610 new jobs annually but evaluation of the real impact of EU aid will be extremely difficult and should be undertaken in a long-term perspective. At this stage the most important task is to ensure that the funds finance projects with the greatest potential and to provide the highest degree of complementarity between them. On the basis of different research conducted up to the date, the author argues that the effectiveness of the funds targeted to the poorest regions could be larger, if there was greater care for complementarity between the undertaken actions. In the peripheral regions the degree of linkages between implemented projects, which could increase their impact on socio-economic development and thereby contribute decreasing the distance to the regions of higher growth is far more insufficient. The paper concentrates on analyzing the real implementation of complementarity concept in one of the peripheral region – Lubelskie. The author tries to respond few fundamental questions, like: - what is the degree of complementarity between different programmes and projects supporting less developed regions? - is the complementary volunteered or rather casual? - do beneficiaries of EU funds really care about complementarity of their project? - what do regional government leaders do to provide complementarity between realized projects? - what mechanisms and tools are provided by implementation institutions to strength the level of complementarity between different programmes and projects? Research tools include the analysis of statistical data, evaluation reports, literature and qualitative surveys (interviews with the representatives of selected local governments and regional institutions gathered within research project financed by World Bank.G

**INDUSTRY AGGLOMERATION AND LOCAL HEADQUARTERS EFFECTS ON THE ESTABLISHMENT SURVIVAL IN U.S. REGIONS**

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This paper evaluates regional characteristics, focusing on agglomeration and local headquarters concentration on the survivability of new establishments in the United States. Based on a unique time series database, we use the Cox semi-parametric proportional hazards model to analyze all establishments in traded industries from 1990 to 2009. We find there is a positive relationship between agglomeration and headquarters strength and survival rates of establishments. It appears that there is a non-monotonic relation between agglomeration and

establishment survival, suggesting a positive impact on survival until agglomeration diseconomies negatively affect survivability. Other results from the model show establishments that are considered to be headquarters have much higher survival rates than establishments that are branches. Survival is also increased for establishments involved in external trade or those that were part of a firm merger.

#### *Gateway I*

### **BORDERING ON PROSPERITY: WHY IS VLADIVOSTOK SHRINKING AND ARE THERE POTENTIALS FOR CHANGE?**

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Shrinking cities face many obstacles, in particular, a falling population and loss of economic vitality. The fear is that unless some dramatic action is taken these negative factors will in turn feed into each other dragging the city into a downward spiral. Many policy makers look towards major events as a catalyst to catapult the city out of the vicious circle. Shrinking cities located in border regions face additional challenges. Often these factors include disparities of economic growth across the border, undocumented migration, an underground economy based on the border region, national policies and a host of others that are specific to that particular border region. Vladivostok, with a population of about 578,000 is the largest city in Russia's Far East region. As the capital of the Primorskiy Krai it has the distinction of being a major Russian port city located near the borders with China and North Korea—all within easy driving distance. Across the sea, it faces the main island of Japan. Continuing the trend of several decades, over the last ten years, Vladivostok lost 10% of its population due to a combination of factors including falling birth rate, shortage of labour, lack of economic growth and the Eurocentric policies and cultural orientation of the government and its population. Vladivostok is taking the opportunity to host the September 2012 APEC Summit as a catalyst to focus its revival strategies based on innovation, education and tourism. So far, the entire process has been driven by federal authorities from Moscow and through the regional government. Massive investments have been implemented, including the construction of the newest university campus in Russia along with the creation of the Far Eastern Federal University out of the 19th century Far Eastern University. In addition to world class R&D facilities the campus will include a large convention centre that is expected to rival international competitors. In the meantime, recent changes have rekindled the pride of Vladivostok elites, who are looking forward to converting the new national inputs into local development assets. Using Vladivostok as a case study, this paper examines the border related challenges faced by a shrinking city in their locational, psychological and cultural dimensions. In what ways do borders impact on shrinking cities? Do border locations hinder or help? Being proximate to the world's most robust economy does not seem to have halted Vladivostok's economic slide or the loss of its population. Are there significant potential benefits derived from its location near China, similar to that enjoyed by Hong Kong and Macao? If there are, then what are the factors that are preventing Vladivostok to take advantage of its proximity to China, not to mention Japan and the two Koreas? Is its border location more of an obstacle than a gateway to prosperity? What are the objective and subjective factors that have prevented Vladivostok to enjoy the positives of being proximate to China? Utilizing published and unpublished data collected on site, this paper explores the implications of international borders on the shrinking city of Vladivostok. This paper posits that at this juncture, being a border city, on balance, is a hindrance rather than a help to Vladivostok. In fact, the multitude of cultural and geo-political attitudes and the economic structures that have arisen in response to its border location are obstacles that need to be overcome if its revival strategy is to have any chance to succeed.

#### *Gateway KSS1*

### **FROM EXPORTS TO DOMESTIC MARKET: DYNAMIC GLOBAL PRODUCTION NETWORKS, INSTITUTIONAL EVOLUTION AND REGIONAL RESILIENCE IN CHINA**

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Domestic markets in host countries have been generally neglected in the conceptual and empirical analysis of the export-oriented regional development prevailed in East Asia including China over the past decades. This paper sheds light on the rising domestic market in China as emerging dynamics of regional resilience in the post-crisis world order. Drawing upon the strategic coupling in the global production networks (GPNs) perspective, the study advances an evolutionary framework to conceptualize the interaction among dynamic

GPNs, market reorientation of Transnational Corporations (TNCs) and regional resilience in China, particularly the Pearl River Delta (PRD) in the dynamic global-local interaction. It argues that the institutional and network embeddedness of TNCs in the processing trade regime have hampered their ‘recoupling’ with domestic market and ‘decoupling’ from external markets. As a pilot attempt at articulating domestic market in the analytical framework, this study urges more research to reflect significant implications of dynamic GPNs, market reorientation of TNCs for reshaping regional trajectories in the era of contemporary globalization.

*Gateway J*

# **LOCAL ECONOMIC COMPETITION AND COOPERATION: A CASE IN JIANGSU PROVINCE, CHINA**

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**Zhi Li, Nanjing University, CHINA**

In recent years, many Chinese provinces and cities are facing the deficiency of land resources and other production factors in economy development. A so called enclave economy, which is a kind of regional economic cooperation pattern, has been tried to put into practice in many places to alleviate the bottlenecks of land resource deficiency. But there is lacking of corresponding theoretical guidance for selecting proper ways in land use patterns and distributing revenue and GDP between stakeholders of enclave economy. This paper tries to find out a general calculation methods for GDP and revenue allocation to achieve win-win situation of objective function of both sides of the potential cooperation, which are defined as the source party and the destination party. The cooperation is normally acted between two local governments by establishing a common industrial development park. Variables in the objective function of each party in the cooperation are including constraints factors in economic aspects, social aspects and ecological aspects. Regional economic cooperation and competition patterns and conditions of two governments are analyzed by the comparison of objective incremental matrix from the two governments in different development patterns. And rational range of revenue and GDP allocation coefficient of regional economy cooperation is calculated theoretically to achieve the win-win result among the both sides of the economic cooperation. Based on the theoretical analysis, two industrial parks at county level of Jiangsu Province are selected as potential area to discuss the development possibility of regional economic cooperation. The rational range of allocation coefficient of revenue and GDP is calculated to support decision making of the two governments theoretically with positive effects on both parties. The main achievement and findings of this paper will be the calculation methods for revenue and GDP allocation coefficient between the two parties of the regional economic cooperation and competition as well as the selection of the factors in the objective function.

*Gateway F*

# **QUALITY-ORIENTED URBAN DEVELOPMENT PATTERN?: CASE STUDIES IN SHANGHAI AGAINST ECONOMIC TRANSITION**

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After more than 30 years’ growth, Chinese cities, especially in the eastern region, are confronting the great challenge of economic transition. The further economic development is depending more and more on the capacity of whole social and environmental foundation. The former pattern with one-sided emphasis on growth cannot continue. Although the national government and responsible commission have set up a series of goals in economic policy, such goals have not yet successfully been converted as operational targets into urban planning practice, in which economic, social and environmental issues are just twisting together. This paper will concentrate on the transition efforts in urban development pattern with case studies on different spatial levels. A hypothesis, quality-oriented urban development pattern will be discussed. Improvement of life quality in the existing urban space will play the central role to make balance among the economic, social and environmental aspects in the future. Since Shanghai is seen as one of the most important cities in China for economic transition, its city government has also announced its new development concepts. Economic growth is not seen as the only important goal any more. Social and environmental issues have gained more and more attentions, which are seen as the basic foundation for sustainable development. The transformations path from the former to the new pattern will also be analyzed. One on hand, the value system in the urban development will be adjusted

in solving the constantly emerging problems. The governance structure and planning law will be also greatly changed to cultivate the new pattern. On the other hand, the practical works, e.g. in fields of urban form and density, urban infrastructure and mobility, landscape, as well as energetic renewal projects, will also reflect this new trend and bring the new pattern into reality through a series of projects. After the host of EXPO in 2010, Shanghai has gained great influences in the media world and improved its infrastructure standard. Based on these achievements, Shanghai's efforts to pursue global city's status try to cultivate better life quality in the city instead of one-sided emphasis on the immediate economic growth. Knowledge economy has been taken as one important development model in the economic transition's process. Accessibility and life quality for the investor and corporations as well as high-qualified work forces have gained attention to the decision maker. At the same time, a more balanced development in the regional structure is also showing its importance at the same time. The networks in the whole city region with multiple-centred spatial structure will be strengthened in the urbanization's process. The two case studies will introduce the transformation in goals setting and implementation process with the focuses on the accessibility and life quality. One case is about the core area development around Hong-Qiao transport hub centre. The city government has developed a comprehensive transportation system including airport, railway station as well as regional coach system on the national and regional level. The ideas like carbon natural development or mixed land use to develop an attractive business community are implemented. The other case locates in the nearby of this transport centre and has good connection with each other. A new development strategy for one new district with about 200 km<sup>2</sup> area in the outskirts of Shanghai's city centre is been advanced. This new district is seen as the centre with great science park and hi-tech industry for Shanghai's global city efforts. The accessibility from the Hong-Qiao transport hub and the cultivation of local life quality are seen the interconnected sides between each other. On the regional level, the Huangpu River flows through the planning area and connect different parts in the whole region. E.g. the city centre as financial centre will take more cooperation with this area for the regional development in fields like R & D, Hi-tech production as well as residential functions. From such cases studies, several experiences can be concluded. Chinese city and its urban space have to assume the economic transition tasks with the emphasis on the quality improvements. In the near future, the experiences, which were developed by western countries in the last 40 years, will have the chances for systematic implementation in the China's urban transformation process. The new development pattern will not only have flagship projects in separate plots, but also require the systematic coordination on the quarter, district or city level. And this provides new chances not only for the western architects but also for the urban planners.

*Gateway OSS1*

## **FINANCIALIZED BUSINESS MODELS AND ECONOMIC SPACE**

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**Colin Haslam, University of Hertfordshire, UNITED KINGDOM**

The traditional spatial economics and economic geography literature are grounded in a "productionist" framework which emphasises the transformation of (largely) physical inputs into "productive" outputs where opposing spatial agglomerating and dispersing forces are at work to generate distinctive geographical patterns of economic activities. Similarly a parallel business and management literature focus on how "productive" activities are more or less amenable to spatial relocation and industrial organisation (e.g., through FDI, industrial clustering, out-sourcing and off-shoring) as well as what factors and mechanisms generate "sticky" spatial agglomerations. In the New Economic Geography (NEG) literature the agglomerating forces relate to market size, the cost of living, and the existence of other locale-specific factors (e.g. housing) whilst the dispersing forces are derived from the increasingly intensified competition in the core locale that enhances the scope for economic expansion into the peripheral (either due to the lower product price or rising congestion cost in the core). The Proper Economic Geography (PEG) and the Evolutionary Economic Geography (EEG) literature fundamentally challenge the validity of the treatment of economic geography and time (or history) in the NEG literature at the ontological, epistemological, and methodological levels (see Garretsen and Martin, 2010, for a critical review). The PEG and EEG literature have characterised economic space as absolute (or Euclidean, as in the NEG models), relative (or non-Euclidean), and relational, either appearing as one or all simultaneously depending on circumstances. In particular these strands of literature emphasise the heterogeneous structure of economic space or the economic relations that constitute economic space (as in the relative definition) or the processes that endogenously embed and define both space and time (as in the relational definition). In keeping with the PEG and EEG tradition, this study further explores the nature of relative and relational space that is characterised by fuzziness, multiplicity, heterogeneity, malleability, and porosity, as well as relative stability and structural durability. Our exposition is further informed by recent developments in the "business model"



literature and financial accounting that informs business strategy. Specifically, we treat the economic system or the “econosphere” as an information pool within which businesses emerge and evolve in accordance with the generalised Darwinian principles of variation, selection and inheritance (Beinhocker, 2007; Hodgson and Knudson, 2006, 2010). In essence we regard any particular spatial characteristic of the economic system (e.g., the density and structure of economic activities at specific locales) as the phenotypical manifestation of the underlying business genotypes that govern the emergence and evolution of business models. We consider the term “economic activities” in its broadest term to also include the traditionally non-productive activities such as financial trading and asset acquisition. We examine the nature, function, and structure of the information content of the econosphere and ascertain the deep forces and mechanisms of spatial agglomeration and dispersion. In our conceptualisation, much of the information base, especially accounting and financial information, that underlies business models is generated out of the interactions amongst a network of broadly similar stakeholders and congeals both space and time simultaneously. Thus, economic space is defined in terms of not only geographical proximity, but also technological adaptability, cultural affinity, and institutional complementarity. The complex interactions of various information contents and the purposes and functions of business models exhibit some distinctive mechanisms and patterns of spatial agglomeration/ dispersion. Moreover, different forces and mechanisms, contractual or non-contractual, transactive or non-transactive, are at work to generate divergent spatial patterns of productive and non-productive economic activities. For the purpose of practical analysis and from an accounting perspective the focal firm within a business model (and thus also business models) is concerned with generating liquidity and solvency to sustain a going concern. This financial constraint takes on added cultural urgency and amplification in an era of shareholder value supremacy because management and investor interests are congruent around the need to generate financial leverage out of capital employed. In this context strategy is important because this involves: recalibration of global value chains, exploitation of resources and capabilities and the manipulation of corporate finance to deliver financial leverage and ongoing re-capitalisation (through debt and equity). We argue that over the past three decades as business models in the major developed economies became increasingly financialised, the decline in the spatial concentration and mix of productive activities is accompanied by spatial “stickiness” of non-productive activities. This process is now spreading to parts of the developing countries. The spatial economics agenda need to explore the tension now emerging between the progressive re-location of economic flows (GDP, expenditure and output) from the advanced to developing regions and the accumulation of capital (as debt and equity) which remains less fluid and much more sticky. The G7 share of GDP has in recent decades dropped from over 70 per cent to under 50 percent and this will continue to fall. In contrast, the G7 share of global debt and equity outstanding has risen to over 70 percent and is represented as wealth accumulated by households in real estate and pension funds which is not mobile. From a financialised business model perspective, the focus of analysis should be exploring the propensity for GDP to be mobile and the tension between financial de-leveraging and the need to maintain wealth accumulations in real estate and pensions which remain geographically sticky, as such processes present a significant challenge to sustaining regional futures.

*Gateway ESS1*

## **POLICY EXPERIMENTS IN CHINA'S LOCAL GOVERNMENTS: A MULTI-CORRESPONDENCE ANALYSIS**

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Policy experimentation has been conducted all over the world and it is touted as a promising means to facilitate institutional innovation and promote growth. Instead of a “one-size-fits-all” policy, a growing number of scholars in international development argue that designing appropriate policy requires a high degree of local specificity, and policy experiments are needed to discover what works locally. China has been frequently cited as a successful example of implementing unorthodox local policy experimentation projects during its reform period. Local policy experiments in China can be initiated by the central government, local governments or line ministries and bureaus. If an experimental project is initiated by the central government (e.g. the establishment of special economic zones), the central government usually bears the costs and risks of these projects together with local governments. On the other hand, if a project is initiated within a local government, or by some line ministry or bureau, local government has to allocate its resources into and sometimes fundraise for this project. Thus, facing a finite budget constraint and uncertainty of experimentation outcomes, local government officials have to think carefully whether to start a policy experiment and if so, when and in what area. Why do local government officials implement social policy experiments, when there is no electorate to monitor their activities and when the outcomes of such projects are not as immediate and as easily observable and measurable as those projects that directly target short-term economic growth? In order to explain this puzzle, this paper proposes that

there is a need to clearly specify different actors in China's central-local relations and to systematically analyze their preferences, motivations and subsequently, policy choices. Specifically, our research argues that agents independent from local governments play an important role in pushing for long-term and social efforts at the local level. These independent agents do so by exerting influences that might benefit local officials' career advancement. Thus, social benefits or long-term benefits that are generated by local policy experiments are actually unintended consequences from the perspective of local officials, but not from the perspective of independent agents. These agents intentionally push local officials to exert efforts in projects that have longer-term effects or that are socially beneficial.'

*Gateway J*

# **MECHANISM STUDY OF FIRM MIGRATION AND ITS IMPACT OF DEVELOPMENT-OPTIMIZED REGION: A CASE STUDY OF DONGGUAN CITY OF GUANGDONG PROVINCE IN CHINA**

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Major Function-Oriented Zone Planning (MFOZ Planning) has been raised to the national strategic level in the field of territorial development in China. In the planning, orientations of development are designed for four types of major functions, one of which is development-optimized region. For these areas, their main orientation in the future development is industrial adjustment and upgrade, such as improving the regional ability of innovation and developing new green industries with high technology and added value. Firm migration in these areas contends both immigration and emigration in the same time. This article takes Dongguan city in Guangdong Province as an example to analyze mechanism of firm migration in development-optimized region. Based on the semi-structured depth interviews and questionnaire method with local authorities, industrial associations and entrepreneurs, the article demonstrates the result as follow: Firstly, labour-intensive firm emigrations while the capital and technology-intensive firm immigration happens in the same time. Secondly, labour-intensive firm emigration can be attributed to the factors such as rising cost, environmental regulations, regional dependence and gaming between different local governments. Thirdly, capital and technology-intensive firm immigration can be attributed to the factors such as industrial base, regional innovation, industrial policy and the soft environment. Firm migration to some extent improves the industrial adjustment and upgrade, and it will also restructure the territory spatial. The Ecology-Production-Living space between the proportional relationships also will change with labour-intensive industries dispersion and capital and technology-intensive industry agglomeration, development-optimized region will improve the quality of land space.

*Gateway CSS2*

# **MISSING LOVE: THE FATE OF THE DISPLACED FROM THE SHANGHAI WORLD EXPO 2010**

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Mega-events are major one-off events that have been enthusiastically competed for and staged in cities across the world as an entrepreneurial strategy to attract ever mobile capital investment, to boost the tourism industry, and to improve the image of urban places. A celebratory account of the impacts of mega-events as such is prevailing and only recently has it been charged for ignoring the inherent contradictions and the irrationalities in the mega-event business. This paper aims to address the social inequalities and socio-spatial injustices generated and exacerbated by the Expo from the perspectives of the displaced who sacrificed most yet were treated with minimal respect and dignity in the process of losing their homes. The paper starts with the notion of love ethics as strongly promoted by feminist writer bell hooks in her book *Outlaw Culture* (1994). Hooks argues that the domination and suppression suffered by the black, the poor, the women, and other minorities, result from the white supremacist capitalist patriarchy system. For hooks, a radical ethics of love is the antidote to the systems of dominations: imperialism, classism, racism and sexism. As an act of will, love implies a choice and is crucial

for the radical inspirations of change and transformation. To embrace such ethics of love, foremost, is to realize our capacity and genuine love for the others so as to acknowledge and to challenge the institutionalized and internalised systems of domination, oppression, exploitation and violence. Central to her argument for the ethics of love lies in the critique on the politics of representation in the capitalist societies. Inspired by bell hooks, I argue that the sufferings of the displacees from the Shanghai World Expo reside in our incapacity of loving and caring for the others, consenting and condoning collective indifference or oblivion to the structural and institutionalised social injustices. Through a critical examination of the discourses surrounding 'better city' and 'better life', a deliberate play of the main theme of the Shanghai World Expo; the paper dissects their entanglement with socialist residues of asceticism and nationalism, and examines their endowment with power and authority in legitimatizing the Expo project, the choice of Expo site and the displacement process, and in suppressing rightful claims from the displacees. I argue that the dominant discourses have promised an illusionary better life to the displacees that has been reduced to only materialistic housing condition improvement whilst emotional upheaval, re-organization of social ties, removed attachment to original homes and many other social consequences accompanied with the uprooting are rationalized and marginalized as unavoidable price to pay for the so-called 'better life'. Deliberately representing rightful claims and resistance as unreasonable, greedy and opportunistic, the event-state-media alliance is able to perpetuate social injustices under the guise of 'public interest' or 'common good'. Drawing from ethnographic evidence and engaging with the Enlightenment debates on justice, right and ethics, the paper critiques the dominant representations about the expo project, the displacement and the displacees, and reflects upon the consequences of such representations upon the displacees as well as Chinese society as a whole; thereby it interrogates the prevailing societal indifference to human sufferings and incapacity of loving for others in China's modernisation. Concurring with bell hooks' call for a radical politics of love, the paper suggests a radical change in representation, for a start, adopting the notion of 'domicide' (Porteous and Smith, 2001) to speak from/for the displacees and to raise critical consciousness about collective violence we have condoned against those whose homes are killed for the sake of a 'better city'. The paper concludes with a reminiscence of collectivism spirit in our communist past not long time ago and a revival of ideological debates in political circles and academic arenas.

*Gateway F*

# **CONNECTING THE PEARL RIVER DELTA: INTRA- AND EXTRA- SERVICE NETWORKS OF A POLYCENTRIC MEGA-CITY REGION**

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Most researches on the business service connections of polycentric mega-city regions have focused on developed countries. However, with ongoing globalization, many regions in developing areas are increasingly connected to the international service networks and being reshaped by both inner and external forces. Based on GaWC's interlocking network model and POLYNET's methodology, this research takes one of the most dynamic globalizing mega-city regions- the Pearl River Delta- as a case to investigate its service connections and functional polycentricity through analyzing the office networks of 219 firms from 5 advanced producer service sectors. The aim is to figure out: first, how advanced producer service activities are organized in the Pearl River Delta city region and connect it both internally and externally with national and global service networks; second, to what extent the Pearl River Delta can be seen as a functional polycentric city region from the perspective of business service connections in comparison to its morphological characteristic; third, how the Pearl River Delta's spatial pattern can be explained and how it is related to China's specific geographical, cultural-historical and institutional framework. The article is organized through five sections. Firstly, it briefly reviews the theoretical progress on city regions in a world of globalization and the significance of perspectives from developing areas. After that some basic geo-historical information of the Pearl River Delta is provided to build a basis for the empirical analysis that follows. The next section deals with methodology and data. The results of the analysis of the Pearl River Delta's service networks as well as some explanations are presented in the fourth part. Finally, based on these findings some conclusions and reflections make up the closing section. The outcome of this research sketches a detailed map of the business service geographies of the Pearl River Delta city region. It discovers that from the functional perspective the Pearl River Delta is a very complex and fragmented city region with a scale-dependent polycentric structure. A rough core-periphery pattern can be observed with Guangzhou and Shenzhen as two leading service centres which have high connectivities both

internally and externally. However, the relative positions of them within the network vary across regional, national and global scales. Different business service activities have quite diverse location requirements and arrangements within the Pearl River Delta thereby exert distinct sector specific effects on its spatial connections and structures. The organization of the Pearl River Delta's service network and spatial pattern is not completely determined by economic factors, but also heavily influenced by some specific geographical, cultural-historical and institutional environments of this region.

*Gateway F*

# **THE DETERMINANTS OF URBANIZATION IN CHINA: A PREFECTURAL-LEVEL ANALYSIS**

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China's unprecedented pace of urbanization, currently the fastest since Economic Reform began in 1978, is regularly the subject of research by both scholars and policy makers. While previous research has focused on whether Chinese cities are under or over-urbanized, this paper explores the determinants of Chinese urbanization using prefecture-level data from 288 cities from 2006 National Bureau of Statistic reports. It shows that spatial autocorrelation and huge regional gaps should be considered in addition to traditional economic factors. However, multiple regressions show that traditional economic factors, such as total population, per capita GDP and tertiary industry share, retain their importance. It also seeks to add consideration of geographic variables to the determinants of urbanization. Among geographic variables, agricultural industry share in province and being located in the Yangtze River Delta significantly and negatively influence the level of urbanization, while location in the Middle region has significant and positive influences. It is worth noting that secondary industry share becomes less significant as more geographic factors are added. Likewise, variables like Financial Expenditure within Budget, Road Area Per Capita, Foreign investment and Ratio of Students to Teachers in Primary Schools are not significant. These findings can improve urban policy decision making across regions and cities, and promote the road to healthy, smart and sustainable urbanization in China in the future.

*Gateway OSS1*

# **WHERE IS THE GLOBAL TRANSACTION CENTRE OF RMB: SHANGHAI, HONG KONG OR PERHAPS LONDON?**

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This paper presents preliminary results of a study on the world major foreign exchange markets and FOREX trading centres. This research focuses on the recent trends of transactions of the world major foreign currencies, their geographical locations and the driving forces behind them. It also touches upon the relation of "on-shore" and "off-shore" characteristics, which helps to distinguish the importance and prominence of FOREX trading centres. The findings could shed light on the potential location and emergence of a global RMB transaction centre-the so-called RMB off-shore centre that Shanghai and Hong Kong are currently competing for, which is a battle that London and Singapore would also like to join.

*Gateway C*

# **TECHNOLOGICAL INNOVATIONS FOR ENHANCED INFORMATION SHARING AND COMMUNITY INVOLVEMENT: A FRAMEWORK FOR SPATIAL PLANNING SUPPORT SYSTEM AND A CASE STUDY IN TOOL IMPLEMENTATION**

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In spatial planning discourse, European spatial governance at regional level is prioritised in facilitating coordination and integration in cross-borders, cross-sectors and cross-organizations management, while at local level it emphasises on a social construction towards better social justice. The discussions on both sides fall into a

request for enhanced information or knowledge sharing in policy integration and evidence-based practices. It is looking for better sharing of information between institutions, effective community involvement, wider stakeholder-engagement, and empowering the public in spatial decision-making in practical situations. The requirement for evidences in policy-integration and stakeholder-collaboration created a need for technical innovations in Information and Communication Technologies (ICTs) for information collection and communication. A new opportunities have been created from matching the innovations of Web 2.0 internet applications and geo-semantic web services with the standing demand on gathering and exchanging knowledge in spatial planning, which facilitates the shift of spatial-decision-making towards more social justice and stronger civil society role. This paper provides a framework for applying recent web-based and map-based technical innovations in spatial decision making. The results of a literature review and empirical findings from interviews and workshops with planners have inspired the development of a Public Participation GIS (PPGIS) tool for the local transport planning consultation in Greater Manchester area. The prototype tool (URL: <http://www.ppgis.manchester.ac.uk/tpss/>) was designed to work as an information sharing platform and public consultation platform in spatial decision making in favour of broader knowledge sharing between professionals as well as the general public. A prototype system was designed, developed and implemented with local authorities in Greater Manchester in a case study of sustainable transport planning. This paper also introduces some practical experiences learnt from the case study of trying to implement the prototype in planning institutions in Manchester, UK. The experiences learnt show organisational obstacles and dilemmas as well as opportunities in implementing technical innovations for more socially sustainable planning-decision-making. First, the contradiction between the limited expectations of the planners and the complex technological facilities that the developers offer affected the motivation to take up innovations in the first place. Second, the wider context of planning-decision-making, i.e. the changing ideology of public policy-making, affects the acceptance of a PPGIS tool, which changes the old way of working in practice. Third, the organisational structure and politics within planning institutions can also limit the diffusion of innovations. Besides, the actors (i.e. initiator, developers and targeted users) in technology implementation are often not clearly defined, which causes uncertainties and misunderstandings in the process. Furthermore, there is a dilemma in that using ICT innovations to facilitate policy innovations also means unexpected changes in daily routine or organisational culture, which most governmental departments are not fully ready and willing to accept.

*Gateway K*

## **CREATIVE NETWORKING IN DEVELOPING COUNTRIES: A CASE STUDY OF PLANNING AND DESIGN INDUSTRY IN SHANGHAI, CHINA**

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Creative products are considered as the outcome of a series of interactive processes, including creation, production, distribution and consumption. The role of intermediary organizations such as distribution channels in establishing the linkages between creators and consumers are valued highly. Typically, the cases of animation & comics and film making industry in different regions prove the above opinion. With a primary purpose of examining whether or not it is true for the developing countries like China, the author takes the planning and design industry in Beijing as an example, and focuses on the following issues: what kind of linkage is the most important for creative firms, if and how linkages exert an effect on the creativity of those firms. Beijing is selected as the survey region not only because Beijing has already made a clear definition and classified different kinds of creative activities, but also because planning and design industry has developed to a large scale and a lot of firms has agglomerated into some specific areas. Data are collected by 88 questionnaires and nearly a dozen in-depth interviews. Subsequent analysis is conducted with the use of UCINET and SPSS. The former software is used to map out the network structure and the latter is for the analysis of the correlation between firm creativity and the variables of its network structure.

**Kaj Zimmerbauer, University of Oulu, FINLAND**

Supranational regions are being constantly institutionalized by the region-builders around the world. In Europe, the first 'Euroregions' date back to the 1950s, but the boom of cross-border regions truly began in the 1990s, resulting in the current situation of about 100 supranational and 'unusual' regional entities. Unfortunately, typical for many of those non-standard regions is 1) the arbitrary of their borders which reflect their immaturity, 2) little relation to functional integrity in terms of culture and identity, 3) their 'imaginary' character which is envisaged by the politicians and the elites (in the forms of growth corridors etc.), 4) delimitation not in relation to functional geographies in subjective way involving 'the map and the pencil' and 5) the difficulties to see their proposed commonality. As rather top-down constructs and dominated by public sector actors, many of those regional entities seem thus to be merely 'regions on paper' and as such they lack identity, both as distinctive characteristics of a region (identity of the region) and as a sense of regional consciousness and collective belonging and distinction (identification with the region). As such regions become nevertheless continuously institutionalized. It should be asked how their identities become manifested and constructed. Accordingly, it needs to be asked how regional identity is understood and emphasized by the regional advocates who work in planning and development and are thus the key actors in institutionalization practices. After all, regional identity is of particular significance in the development of new supranational regions for at least two reasons. First, regional identity is not just a bunch of representations or a sense of attachment, but entails a broader concept of knowledge, emotions and actions. Its instrumental element can therefore trigger regional activism, increase participation and cause positive development across borders. Second, the lack of regional identity makes one suspicious regarding what would happen if external funding (e.g. Interreg) becomes less generous. By that time non-standard regions should and in fact must have gained legitimacy and become "standardized" by their own populations to survive. My approach to this situation is to discuss the current tendency of institutionalizing a region and building a regional identity through branding. Thus, I see identity and image as intertwining, both conceptually and in the everyday practices of regional development, where regional competitiveness is emphasized. Moreover, it can be argued that regional identity is to some extent a prerequisite for successful branding and image building, but the interplay is nevertheless distinctly bidirectional. This means that newly established (supranational) non-standard regions are increasingly being constructed by place promotion outside the region, but they may also become gradually familiar to the inhabitants of the region in such an institutionalization process, and the inhabitants will eventually identify with them accordingly. Research is done through an analytical distinction between thick and thin place-making, where inward looking thick identity is more based on a shared culture and community relations, whereas outward looking thin identity is more fluid, practical and utilitarian. By analyzing the case studies of the Barents Euro-Arctic region and the Ireland-Wales cross-border region through the 17 thematic interviews of the 'regional elites', it becomes emphasized that regional identity seems to have a strong instrumental element and it is expected to cause positive development across the borders. Thus, it can be argued that the purpose of the language-based production of regions has shifted from enhancing an esprit de corps to more marketing-oriented promotional representations, at least if the actions of local authorities and other officials are considered. In other words, the discourses that are intended to strengthen thick regional identity and institutionalize the region for its inhabitants are less important nowadays and have been replaced by hegemonic discourses of attractiveness and a positive image. Although the advocates did not emphasize the thick and/or cultural identity, it should also be part of planning and the regional identity politics.

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