

## **MULTISCALE AND DYNAMIC RESIDENTIAL SEGREGATION BETWEEN MIGRANTS AND ORIGIN POPULATION IN THE CHINESE CITY OF SHIJIAZHUANG**

Gwilym Owen, University of Sheffield, UK  
Gwilym Pryce, University of Sheffield, UK  
Yu Chen, University of Sheffield, UK  
Bifeng Wang, Hebei GEO University, China  
Hui Song, Hebei GEO University, China

Market reforms in China have led to greater socioeconomic segregation in Chinese cities through rising socioeconomic inequality coupled with increased residential mobility. In particular past studies have shown substantial residential segregation between migrants from rural areas, who are often poorer and face economic and institutional barriers to services, and residents who originate from the city. These studies have, however, tended to only consider one scale of segregation, have treated migrants as one homogeneous group, have not quantified the spatial distribution of migrants with regard to the centre of the city and have not addressed how segregation is changing over time. In this study we use a multilevel modelling approach to measuring segregation to address these issues. Using census data from 2000 and 2010 in the city of Shijiazhuang, our results show that migrants are substantially segregated from residents who originate from the city. This segregation is much larger at the micro scale than the macro scale, although segregation at the macro scale is increasing over time while segregation at the micro scale is remaining constant. Additionally, while migrants tend to be found in areas with other migrants generally, they are particularly likely to be located in the same areas as other migrants from their own province of origin. Furthermore migrants from certain provinces of China are substantially more segregated than migrants from other provinces. Finally we find no relationship between location of migrants and the city centre. The results show that the distribution of migrants in the city is complex and evolving and that this has implications for urban policy aimed at reducing disparities between rural migrants and the rest of the urban population.

## **PROJECTED EMPLOYMENT AND POPULATION CHANGE IN REGIONAL LABOUR MARKETS IN THE UK**

David Owen, University of Warwick, UK  
Anne Green, University of Birmingham, UK

The “North/South” divide in rates of employment change and the occupational composition of employment are long established in the UK, with the southern regions of England emerging as most advantaged. Will these differentials continue into the future? Will regional variations become more pronounced or will there be a convergence in regional fortunes? How will employment develop over the medium-term, in terms of industry, occupation and the gender composition of employment? There are different approaches to looking at likely future trends - from quantitative projections to scenario development. Working Futures is a set of medium-term projections of the labour market which has been produced by the Warwick Institute for Employment Research in collaboration with Cambridge Econometrics every few years, disaggregated to the nations, regions and larger cities of the UK. This paper presents the main results from the latest projections for 2017 to 2027 and reflects on implications for regional economic development and associated policy domains.

## **TACKLING INVESTMENT-ORIENTATION IN CROSS-BORDER COOPERATION: THROUGH EXAMPLES OF TWO PROGRAMMES IN CENTRAL EUROPE**

Zoltan Pamer, Hungarian Academy of Sciences, Centre for Economic and Regional Studies, Hungary

Promotion of cross-border cooperation appears to be high in the agenda of Cohesion Policy since the 1990s, when the INTERREG Community Initiative was launched. The initiative has been widened in the

subsequent programming periods and got deeper integrated into the mainstream of Cohesion Policy: from the period 2007-2013 the objective 'territorial cooperation' has become one of the three main objectives. Parallel with that, cooperation opportunities with pre-accession countries have become wider, by integration of former pre-accession tools, the Instrument for Pre-accession (IPA) was developed. These developments were particularly important in Central Europe, where member states were neighboured with several pre-accession countries.

The paper aims to provide an in-depth yet simple approach to tackle how investment projects are funded under cross-border cooperation schemes. For introduction a short overview will be given on the changing scope and significance of cross-border cooperation within the notion of 'territorial cohesion' and the Cohesion Policy itself. Then the role of cross-border cooperation will be presented within Cohesion Policy of the investigated countries (Austria, Croatia, Hungary, Slovenia), just like the typically funded actions by the two investigated programmes. To tackle investment-orientation through implementation of hard projects, the relationship of cooperation activity and absorption of EU co-financing will be used, in order to identify which levels of the settlement structure consider cross-border cooperation as a tool for investment, through what types of beneficiary organisations and what their possible motivations might be.

## **PROJECTIONS OF ENERGY DEMAND IN EUROPEAN CITIES USING DOWNSCALED POPULATION SCENARIOS**

Stefano Pareglio, FEEM, Italy

Francesca Diluiso, FEEM, Italy

Gianni Guastella, FEEM, Università Cattolica, Italy

This work is an attempt to estimate future energy demand in cities based on current population projections. In Europe, the urban population is growing rapidly, and it is expected to reach 80% of the total population by 2050. This increase in urbanisation will surely shift significantly the demand for energy in cities but the real extent of this change depends on several factors determining the energy demand from the residential and transport sectors. Many of these factors, such as the urban form and the urban mobility systems, are the object of planning policies and the projected energy demand conditioned to future economic and demographic scenarios is a piece of highly relevant information for urban planners and policymakers. Starting from national-level energy density data we derived statistically downscaled energy consumption data and applied spatially explicit econometric models to reproduce population projections at the grid level for all EU member states. We then upscaled the grid-level data at the urban level using the boundaries of the Functional Urban Areas in Europe. Results suggest that the amount of energy required by cities strongly depend on their land-use patterns. This evidence poses significant challenges to the planning of future cities as it points out how the current patterns of land use will soon become unsustainable in terms of energy demand as the urban population continues to grow.

## **CROSS-BORDER REGIONS BETWEEN GALICIA AND ITS NEIGHBOURING TERRITORIES? EXPLORING AN EMERGING REGIONAL GEOGRAPHY**

Valerià Paül, Universidade de Santiago de Compostela, Spain

Juan M. Trillo-Santamaría, University of Santiago de Compostela, Spain

Alejandro Otero Varela, University of Santiago de Compostela, Spain

In the last decades, much attention has been paid to the building and institutionalisation of cross-border regions. These have usually been set up by bordering territorial authorities at a regional administrative level. On the Iberian Peninsula, Spanish autonomous regions have led multiple cross-