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The Kuznets inverted U curve which focuses on the relationship between economic growth and income inequality is an old and well-studied theme in development œconomics. According to Kuznets (1955), except for traditional societies that do not have or that merely initiate the process of modern economic growth and industrialisation, developing countries have a less egalitarian distribution of incomes than developed ones, because income inequalities increase during the first and middle stages of economic development while they decrease in more advanced stages.

Using cross-sectional evidence upon a panel of 24 countries, Williamson (1965) applied the inverted U curve hypothesis to regional economics, stipulating that regional inequalities also follow an inverted U curve according to the general level of a country's development. Williamson's initial assumption boosted important empirical literature (Amos, 1988, Fan and Casetti, 1994, Azzoni, 2001, Petrakos, 2003, Rey, 2004), while Henderson's (1974) pioneering work introduced urbanisation issues, by considering that the relationship between urban concentration and per capita income or utility, also follows an inverted U pattern (Henderson, 2003).

These studies initiate some major concerns in regional economics: firstly, does economic growth lead to spatial or urban inequality and, if this is the case, for how long ? Secondly, does inequality depend upon the pace or the specialisation patterns of economic growth? Finally, is there any adequate public policy response to spatial inequality due to growth processes, in order to preserve social cohesion? Several studies have attempted to provide explanatory evidence on the relation between economic growth and regional inequality or urbanisation.

In the most common interpretation of the Kuznets curve, the inverted U pattern arises from a rather mechanistic process of reallocation of labour from a stagnant poor rural and agricultural sector (where the mean and standard deviations of incomes are low) to an expanding urban industrial sector (where the mean and standard deviations of incomes are much higher). It assumes perfect labour mobility and a time-constant ratio of the mean incomes between urban and rural areas, while income distribution is supposed to be more uneven in urban than rural areas (Ros, 2000). During the first stages of development, inequality increases as the reallocation of labour leads to a higher standard

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deviation in the country's per capita income distribution, while the spatial patterns of inequality are explored under the traditional rural/urban distinction. In subsequent stages of development however, the inequality gap starts declining, with the appearance of a middle income urban class which demographically represents the most important social group. Wheaton and Shishido (1981), Mac Kellar and Vining (1995), Moomaw and Alwosabi (2004) use cross-sectional evidence over different samples of developed and developing countries, in order to study urban primacy. Their conclusion assumes that urban concentration rises until a certain level of per capita income, and then falls.

A second interpretation of the inverted U curve assumes imperfect labour mobility and the presence of diminishing returns in agriculture and increasing returns to scale in the urban sector. In a Myrdallian cumulative process, labour's reallocation towards the urban sector, during the early stages of development, leads to an increase of the productivity differential in favour of urban industrial areas (Ros, 2000). Backwash effects dominate, leading to a widening of inequalities. In later stages of development, the appearance of spread effects may reverse the tendencies and lead to a decline in interregional and intraregional disparities. Inequality traps may however occur and produce deviations from the inverted U pattern. This is often the case with the formation of megapoles and persisting urban primacy. Krugman and Venables (1995), Fujita and Hu (2001), Fujita and al. (1999) follow economic geography models and consider that agglomeration economies and trade costs are the key explanatory factors in the relation between economic growth and urban concentration.

One should note that while Kuznets's assumptions led to a huge amount of papers on development economics, a more recent endogenous growth literature also developed on the subject. It specifically focuses on how income distribution or spatial inequality may affect growth (Bertola, 1993, Alesina and Rodrik, 1994, Tamura, 1996, Partridge, 1997, Barro, 2000, Lucas, 2000, Azzoni, 2001).

Finally, by relaxing some assumptions of the previous theories (mainly the increasing returns to scale for the urban sector), Ades and Glaeser (1995), Henderson and Becker (2000), Davis and Henderson (2003) use human capital models to consider the relationship between economic growth and spatial or urban inequality due to skill and knowledge acquisition. In these models, government policies, institutional frameworks and democratization play an important role in modifying factor (mainly human capital) endowment. They do not necessarily deliver an inverted U relationship, although Penalosa (1994) or Perotti (1996) point out the cases in which the reverse may hold.

The present issue of *Région et Développement* gathers together eight papers and a note which focus on different aspects of the relationship between regional inequality, urbanisation and agglomeration effects.

A first set of papers studies, through different methodological options, the relationship between economic growth and regional inequality.

Mark Janikas and Sergio Rey consider a spatial framework allowing for a simultaneous interaction between regional growth and inequality. They provide evidence for inequality being a partial function of economic growth but not the opposite, in the United States from 1969 to 2000. The Kuznets curve results then from a Myrdallian process of cumulative causation. A second interesting feature of their paper concerns spatial clustering and its effects on economic growth. The authors find that intra-state spatial clustering seems to have no effect on growth, while it is negatively correlated with intra-state inequality. This indicates that states with high initial levels of spatial clustering will have lower growth rates of inequality. These results lead them to incorporate a spatial dependence analysis within the study of regional economic change.

John Carruthers, Michael Hollar and Gordon Mulligan's paper concerns the relationship between growth and convergence in the space economy, using United States' data for the 1982-1997 period. This paper seeks to expand the traditional two equations land use based regional adjustment model (containing population and employment density), by adding a third equation for wages, in order to provide more robust evidence on geographic relationships investigation. Two main conclusions can be drawn from this study: firstly, taking into account the spatial interdependencies substantially enhances the robustness of land use based adjustment models; secondly, even if productive decentralisation trends seem to characterise the United States' post-industrial economy, the longstanding urban and regional hierarchy patterns remain unchanged.

By focusing on the forty main European metropolitan areas, Christian Longhi's paper builds empirics on the evolution of their productivity patterns, during the process of economic integration that took place on this Continent during the 1975-2000 period. By combining geographical, industrial and temporal dimensions at the level of cities, the author provides several arguments supporting the existence of structural convergence across the main European metropolitan areas. The paper specifically highlights related movements of convergence between metropolitan areas in terms of industrial composition, an issue which seems rather neglected by relative literature.

A second set of papers stresses more specifically the urbanisation process and city size distribution, with regards to regional disparities. Different urban systems are considered and the validity of statistical laws, such as Zipf's or Gibrat's law, on urbanisation are also examined. Two main questions arise from these studies: firstly, is urbanisation linked to economic growth; secondly, is it positively or negatively correlated with regional inequality? Metropolitan policies are also considered here.

Maurice Catin, Said Hanchane and Abdelhak Kamal deliver an empirical model in order to examine the determinants of urbanisation and primacy in a panel of 56 developing countries, over the 1950-2000 period. This model considers different stages of economic development and specifies the rural-urban migration effects from the factor accumulation and productivity ones. The aim of their paper is to examine whether the inverted U curve hypothesis

holds when it comes to urbanisation issues. The authors provide evidence that urbanisation rates, compared to economic growth, follow the inverted U patterns, at its upward curve, while the degree of primacy responds in a more erratic way. International integration, productive specializations, transport costs and trade policies seem to play an important role on the primacy rate's changes.

Michel Dimou, Alexandra Schaffar, Zhihong Chen and Shihe Fu focus on Zipf's and Gibrat's law, using Chinese cities data for the 1984-2005 period. The main issue of the paper is to examine whether urban growth depends upon city-size or not. The authors use ADF and co-integration tests, as well as Markov matrices, in order to study the nature of urban growth in China. One of the main conclusions of the paper is the existence of a threshold, above which cities seem to grow in a parallel way, while smaller towns' populations tend to rapidly converge towards this threshold. This leads to a dichotomous urban system, characterised by great instability when it comes to small towns, but providing longstanding stable patterns when it comes to metropolitan areas.

Paschalis Arvanitidis and George Petrakos explore the role and importance of four close located metropolitan areas (Skopjie, Sofia, Thessaloniki and Tirana) in South-East Europe. The authors show that the economies of the four metropolitan areas have undergone significant structural changes over the last twenty years, in an attempt to adapt to internal and external forces related to globalisation, European integration and urban competition. A second issue in their paper concerns cooperation strategies among these cities, both on hard infrastructure and on soft policy, in order to create an integrated regional urban network. Such a cooperation goes against the fragmentation of economic policies and competition that prevailed until recent years.

A third set of papers allows one to consider a larger spectrum. These papers do not clearly deal with the relationship between regional inequalities, agglomeration effects and economic growth. They deliver results however that should be taken into account within a more general concern on the subject.

Simonetta Longhi, Peter Nijkamp and Jacques Poot present an original contribution aiming to examine the impacts of immigration on the labour market, by carrying out a meta-analysis on 45 primary studies published between 1982 and 1997 on this subject. They consider three possible outcomes (positive, negative and null effect) of immigration over a broad range of labour market indicators such as wages, employment and labour force participation. Their results deliver evidence that the impact of immigration on the labour market of the native born population is quantitatively very small, while it is much higher on the market of earlier immigration waves. Although the authors essentially focus on the meta-analysis methodology, their results can be used in enlarging the regional growth and inequality approaches.

Within a theoretical framework involving hypothetical examples, Daisuke Nakamura' paper introduces a four case typology of spatial structure, in order to reveal the mechanisms that lead to the appearance of several irregular spatial

formations of market areas and the corresponding structures of supply areas. His analysis also provides information on the methodological connectivity between central-place system and agglomeration economies. The author thus explores the importance of the additional location factors, with respect to the spatial constraints and spatial enhancement forces of economies.

Finally, a short note by Maurice Catin, Christine Cuenca and Abdelhak Kamal presents a case study of Morocco's urban structure, dominated by the importance of Casablanca. The authors show, however, that the decrease in the primacy rate goes along with the 1970-2000 demography, leading to a new gap between the most important urban centres and smaller towns, where each city's productive forces tend to specialize in specific industrial segments. This provides some explanatory arguments about the inverted U curve, when it comes to urbanisation trends.

During these last years, much consideration has been given, by regional science scholars, to the relationship between regional inequalities, urbanisation and agglomeration effects. The papers gathered in this issue of *Région et Développement* do not pretend to provide an exhaustive state-of-the-art overview ; they outline, however, the new theoretical and methodological issues on the question.

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