The Division of Labor Needs Not Imply Regional Specialization
Samuli Leppälä (samuli.leppala@tse.fi), Research Associate1; Pierre Desrochers (pierre.desrochers@utoronto.ca), Associate Professor2
1Department of Economics, Turku School of Economics, Turku, Finland; 2Department of Geography, University of Toronto, Toronto, Canada

Abstract.
The regional specialization of economic activities is generally deemed desirable for at least three reasons: 1) the law of comparative advantage; 2) localized economies of scale; and 3) knowledge spillovers.

These arguments are nonetheless insufficient to justify specialization more desirable than a more diversified economic base. Building on a methodological individualist perspective, we argue that: 1) spatial units (regions, nations or locally-based networks of individuals) are not entities which specialize, produce or innovate; and 2) deriving a logically consistent argument from such flawed foundations results in ultimately untenable conclusions.

More specifically: 1) the law of comparative advantage, while valid for individuals and firms, does not necessarily imply regional specialization; 2) localized economies of scale are seldom specific to one industry and external in all but the regional level; and 3) the relative importance of intraindustrial (or industry specific) and interindustrial knowledge spillovers remains an empirical question whose study would benefit from more disaggregated (individualistic) perspective.

Our conclusion is that the use of realistic microfoundations for regional economies actually militates for spontaneously evolved diversity.

1 On Methodological Individualism
• The existence of all social phenomena depends on individuals – their properties, goals, and beliefs;
• Therefore, all social phenomena are explicable only in terms of interacting individuals (their properties, goals, and beliefs);
• Among social sciences MI strong in economics, but typically eschewed by economic geographers (Plummer and Sheppard 2006);
• Main shortcomings of urban growth models is: 1) the use of spatial entities as units of analysis that are not agents of change (Frenken & Boschma 2007); 2) attributing intent to collectives (Hodgson 1986).

4 Knowledge Spillovers
• Two strands of knowledge spillover theories have emerged, which either stress regional specialization (Porter and MAR-spillovers) or regional diversity (Jacobs spillovers) (Glaeser et al. 1992).

• Empirical findings inconclusive. Both views have found support.
• Main criticism: studies do not document or prove the existence of localized knowledge spillovers, i.e. how knowledge in fact passes among individuals (e.g. Breschi & Lissoni 2001, Hansen 2002).
• A more disaggregated (individualistic) approach could be useful.

Conclusions
• Comparative advantage: Whilst individual specialization is productive, regional specialization necessarily isn’t.
• Localized economies of scale: 1) Should explain why are external to firms; 2) while inputs can be specialized, not necessarily specific; 3) overlooks economies of scope and complementarities.
• Knowledge spillovers: Inconclusive results. More disaggregated perspective more promising.

→The division of labor makes sense for individuals, as well as for group of individuals, yet it needs not imply regional specialization

References

Acknowledgements
• Social Sciences and Humanities Research Council of Canada