WWTF Project MA07-002

Agglomeration processes in ageing societies

Abstract

With the deepening of the European integration in the last decade, agglomeration processes have gained increased attention in policy and scientific research as well; the seminal contribution by Krugman (1991) initiated the development of the New Economic Geography (NEG). Our aim is to study agglomeration processes with an ageing population and to develop recommendations for an optimizing policy intervention. Therefore, we will extend the NEG models to incorporate intertemporal household decisions over the life cycle of an ageing population and to incorporate elements of endogenous growth and we will study the resulting growth paths in the decentralised economy and in the corresponding central planning problem. The latter requires new analytical and numerical mathematical techniques in distributed parameter control models to be developed. An interdisciplinary team of mathematicians, economists and demographers - all located in Vienna - will collaborate. The developed mathematical theory promises to have potential applications in other economic and demographic research areas.

Keywords:
age structured systems, optimal control, economic geography, lifecycle decisions, ageing populations, endogenous growth

Principal Investigator: Alexia Fürnkranz-Prskawetz

Institution: Austrian Academy of Sciences

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Further links about the involved persons and regarding the project you can find at
https://archiv.wwtf.at/programmes/mathematics/MA07-002