

THE BUCHAREST UNIVERSITY OF ECONOMIC STUDIES
DOMAIN: ECONOMICS AND BUSINESS ADMINISTRATION
DOCTORAL SCHOOL: ECONOMIC CYBERNETICS AND STATISTICS

**SUMMARY OF THE
HABILITATION THESIS**

APPLIED QUANTITATIVE METHODS

Candidate: Prof. dr. Claudiu Herțeliu

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Summary

The main field research of Claudiu Herteliu is **applied quantitative methods** in several socio-economic areas such as: (a) rural development; (b) demography; (c) scientometrics. Nowadays the use of quantitative methods within various academic domains is almost permanent. Of course, there are manuscripts in which the scientific arguments are produced in a qualitative or mixed (qualitative-quantitative) manner (Jick, 1979; Cavana *et al.*, 2001; Neuman, 2013; Kaplan & Duchon, 1988). However, plenty of researches are focused on the use of quantitative methods within academia in general (Nardi, 2018; Render *et al.*, 2017; Tonidandel *et al.*, 2018) or within rural development/ demography/ scientometrics in special (Meinzen-Dick *et al.*, 2004; Jeong *et al.*, 2018; Bloem *et al.*, 2018; Pope & Stanistreet, 2018; Caswell & Zarulli, 2018; van Raan, 1996; Glänzel & Schoepflin, 1994; van Raan, 1996; Bornmann, 2017; Martín-Martín *et al.*, 2018).

After his PhD graduation (late 2006 and confirmation from Ministry of Education and Research in early 2007) Claudiu Herteliu successfully managed to promote his research ideas mainly in papers published in relevant scientific journals (Archives of the Balkan Medical Union , Economic Computation and Economic Cybernetics Studies and Research, Entropy, Human Reproduction, Journal of Applied Quantitative Methods, Lancet, Physica A: Statistical Mechanics and its Applications, Publications, Quality & Quantity, Scientometrics) and also as book chapters. His research interests exceed the core topics already mentioned (rural development/ demography/ scientometrics) with focused on economics (Andrei *et al.*, 2017; Jianu *et al.*, 2014; Geambaşu *et al.*, 2014), econophysics (Ileanu *et al.*, 2018; Rotundo *et al.*, 2015) or epidemiology (Andrei *et al.*, 2013; Marian *et al.*, 2013; Griswold *et al.*, 2018; Fullman *et al.*, 2018; Wang *et al.*, 2017; Abajobir *et al.*, 2017).

For the current thesis, due to space limitation, a selection of his works is presented. Hence, relevant content for demography domain (Herţeliu *et al.*, 2018; Ausloos *et al.*, 2015) was not included. Further, the habilitation thesis is organized as follows: (i) chapter #2 focused on rural development includes two pieces of work: Herţeliu & Costea, 2011 and an extract from Herţeliu, 2013; (ii) chapter #3 focused on demographics includes three pieces of work: Herţeliu *et al.*, 2014; Herţeliu & Fărcăşanu, 2011; Herţeliu *et al.*, 2015; (iii) chapter #4 focused on scientometrics consists in two pieces of work: Herţeliu *et al.*, 2017 and an extract from Boja *et al.*, 2018.

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