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Socio-dynamic discrete choice: Theory and application

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COLOPHON

This thesis is typeset in LyX running on Christian Schenk's MiKTeX distribution of TeX/LaTeX using the template bundle `classicthesis` developed by André Miede (www.miede.de). The LyX port of `classicthesis` was initially carried out by Nicholas Mariette and was continued by Ivo Pletikosić (ivpletik.inet.hr/classicthesis).

Hermann Zapf's Palatino and Euler type faces are used respectively for the main text and mathematics fonts. The typewriter text is set in Bera Mono, originally developed by Bitstream Inc. These fonts are freely available via the installation manager of the MiKTeX distribution, as well as via the Comprehensive TeX Archive Network (CTAN). The Euler fonts are additionally available from the American Mathematical Society which commissioned their development.

BibTeX was used to generate the bibliography, compiled and edited with Aleksander Simonic's WinEdt. Design Science's MathType was used to bulk convert equations to TeX originally in Microsoft Word.

The econometric estimations have been carried out with the optimization toolkit Biogeme developed by Michel Bierlaire at Ecole Polytechnique Fédérale de Lausanne (biogeme.epfl.ch), running the CFSQP algorithm developed by Craig Lawrence, Jian Zhou and André Tits at University of Maryland, as well as the DONLP2 algorithm developed by Peter Spellucci at the Technische Universität Darmstadt.

The multi-agent based simulations have been carried out in collaboration with László Gulyás at AITIA International (mass.aitia.ai) in Java with the Eclipse Integrated Development Environment using the open source agent based modeling and simulation platform Repast developed at University of Chicago Argonne National Laboratory by Michael North and team (repast.sourceforge.net).

Batch estimations and simulations were done at the Netherlands National Compute Cluster Lisa, with support of Willem Vermin and the High Performance Computing team at SURFSara, Science Park Amsterdam (www.surfsara.nl). Desktop communication with Lisa was done using PuTTY and WinSCP. Desktop test runs were done using Ubuntu Linux running in Oracle's VirtualBox.

Other analyses and graphics in the thesis have been generated using MathWorks' MATLAB, Microsoft Excel, IBM SPSS, Caliper Corporation's TransCAD, Pitney Bowes' MapInfo Professional, and Vlado Batagelj and Andrej Mrvar's Pajek. GrindEq's Image-to-PostScript was used to convert various graphical objects for use in TeX/LaTeX.

Additional computations and data manipulations were carried out in R using the igraph library developed by Gábor Csárdi and Tamás Nepusz. Last but not least, Christian Ghisler's TotalCommander has been an unmissable file manager for Microsoft Windows.