

Applied econometric analysis of stated choice data (MA and MAGKS course)

Lecturer:

Prof. Dr. Andreas Ziegler
Unit Empirical Economic Research
Nora-Platiel-Str. 4, 34109 Kassel

Planned schedule:

First part (March 26 - March 28, April 02 - April 03, 2024)

Seminar room 6 (room 1124), Campus Center (Moritzstraße 18, 34109 Kassel)

March 26 (in presence)

Introduction to Stata (Haverkamp)	10:00-12:00 h
Lecture and applications with Stata (Ziegler)	13:00-18:00 h

March 27 (in presence)

Lecture and applications with Stata (Ziegler), Tutorial with Stata (Haverkamp)	10:00-18:00 h
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March 28 (in presence)

Lecture and applications with Stata (Ziegler), Tutorial with Stata (Haverkamp)	10:00-17:00 h
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April 02 (online)

Lecture and applications with Stata (Ziegler), Tutorial with Stata (Haverkamp)	10:00-18:00 h
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April 03 (online)

Lecture and applications with Stata (Ziegler), Tutorial with Stata (Haverkamp)	10:00-12:00 h
Tutorial with Stata (Haverkamp)	13:00-18:00 h

Second part (July 17 - July 19, 2024)

Room 2215, Nora-Platiel-Straße 4, 34109 Kassel

Lecture slides:

In the open-moodle course “Applied econometric analysis of stated choice data 2024” (for the registration key please write an E-Mail to thilo.haverkamp@uni-kassel.de)

Prerequisite for attending the course:

Deep knowledge of microeconomic models and methods

Requirements for earning 6 ECTS credits:

- For master students in Kassel: Successful attendance of an econometric master course
- Attendance and active participation throughout both parts of the course
- Writing of a seminar paper (about ten pages plus tables) and oral presentation in the second part of the course

Outline:

1. Introduction to multinomial discrete choice models
 - 1.1 Background
 - 1.2 General model structure
 - 1.3 Maximum Likelihood estimation
 - 1.4 Statistical testing
 - 1.5 Multinomial logit models
 - 1.6 Applications
2. Flexible multinomial discrete choice models
 - 2.1 Background
 - 2.2 Multinomial probit models
 - 2.3 Mixed logit models
 - 2.4 Latent class logit models
 - 2.5 Applications
3. Stated choice analyses
 - 3.1 Stated and revealed preferences
 - 3.2 Design of stated choice experiments
 - 3.3 Examples
 - 3.4 Econometric analysis
 - 3.5 Applications

Literature:

- Greene, W.H. (2012), *Econometric analysis*, 7th Edition, Pearson Education.
- Greene, W.H. and D.A. Hensher (2003), A latent class model for discrete choice analysis: Contrasts with mixed logit, *Transportation Research Part B* 37, 681-698.
- Gutsche, G. and A. Ziegler (2019), Which private investors are willing to pay for sustainable investments? Empirical evidence from stated choice experiments, *Journal of Banking and Finance* 102, 193-214.
- Hensher, D.A. and W.H. Greene (2003), The mixed logit model: The state of praxis, *Transportation* 30 (2), 133-176.
- Hensher, D.A., J.M. Rose, and W.H. Greene (2005), *Applied choice analysis: A primer*, Cambridge.
- Hole, A.R. (2007), Estimating mixed logit models using maximum simulated likelihood, *The Stata Journal* 7, 388-401.
- Hoyos, D. (2010), The state of the art of environmental valuation with discrete choice experiments, *Ecological Economics* 69 (8), 1595-1603.
- Johnston, R.J. et al. (2017), Contemporary guidance for stated preference studies, *Journal of the Association of Environmental and Resource Economists* 4 (2), 319-405.
- Louviere, J.J., D.A. Hensher, and J.D. Swait (2010), *Stated choice methods – Analysis and application*, 7th printing, Cambridge
- Mariel, P., D. Hoyos, J. Meyerhoff, M. Czajkowski, T. Dekker, K. Glenk, J.J. Jacobsen, U. Liebe, S.B. Olsen, J. Sagebiel, and M. Thiene (2021), *Environmental valuation with discrete choice experiments: Guidance on design, implementation and data analysis*, Springer Nature.
- Pacifico, D. and H. Yoo, H. (2013), Icllogit: A Stata command for fitting latent-class conditional logit models via the expectation-maximization algorithm, *The Stata Journal* 13 (3), 625-639.
- Train, K.E. (2009), *Discrete choice methods with simulation*, 2nd edition, Cambridge University Press, Cambridge, New York.
- Winkelmann, R. and S. Boes (2009), *Analysis of microdata*, 2nd Edition, Springer, Berlin, Heidelberg.
- Ziegler, A. (2012), Individual characteristics and stated preferences for alternative energy sources and propulsion technologies in vehicles: A discrete choice analysis for Germany, *Transportation Research Part A* 46 (8), 1372-1385