

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

Lecturer:

Prof. Dr. Andreas Ziegler
Chair of Empirical Economic Research
Nora-Platiel-Str. 5, 34109 Kassel
Office hours: Wednesday, 11.30-12.30 h (Room 1119)

Expected schedule:

First part (April 09 – April 12, 2018)

April 09

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| Introduction to Stata (Engler) | 11.00-13.00 h (Nora-Platiel 4, Room 1215) |
| Lecture (Ziegler): | 14.00-16.00 h (Arnold Bode 2, Room 0409) |
| Lecture (Ziegler): | 16.30-18.30 h (Arnold Bode 2, Room 0409) |

April 10

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| Lecture and applications with Stata (Ziegler): | 12.00-14.00 h (Nora-Platiel 4, Room 1215) |
| Tutorial with Stata (Engler): | 14.30-16.30 h (Nora-Platiel 4, Room 1215) |
| Lecture (Ziegler): | 17.00-18.30 h (to be announced) |

April 11

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| Lecture (Ziegler): | 11.00-13.00 h (Nora-Platiel 6, Room 0213) |
| Lecture and applications with Stata (Ziegler): | 14.00-16.00 h (Nora-Platiel 4, Room 1215) |
| Tutorial with Stata (Engler): | 16.30-18.30 h (Nora-Platiel 4, Room 1215) |

April 12

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| Lecture (Ziegler): | 11.00-13.00 h (Arnold Bode 2, Room 0409) |
| Lecture and applications with Stata (Ziegler): | 14.00-16.00 h (Nora-Platiel 4, Room 1215) |
| Tutorial with Stata (Engler): | 16.30-18.30 h (Nora-Platiel 4, Room 1215) |

Second part (July 12 – July 13, 2018)

July 12

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| Presentations: | 10.00-18.00 h (to be announced) |
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July 13

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| Presentations: | 10.00-18.00 h (to be announced) |
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Lecture slides:

On the website and in the moodle course “Applied econometric analysis of stated choice data”

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 (2016), *Are private investors willing to pay for sustainable investments? A stated choice experiment*, MAGKS Discussion Paper No. 40-2016.
- 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
- Pacifico, D. and H. Yoo, H. (2013), lcllogit: 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