Consumer Economics II: Theory and Application for Valuing Non-Market Goods

Instructor: Prof. Xiaohua YU Ph.D., University of Göttingen
Email: xyu@gwdg.de ; **Tel:** 0551-3919574
Office: MZG 2027
Lecture Room: VG 3.101 (Goettingen)
Lab Session: the Computer Lab of the Department of Agricultural Economics
    and Rural Development, University of Göttingen (Blue tower 11th floor)
     (Platz der Göttinger Sieben 5, 37073 Göttingen)
Lecture Time: *9:00 am, 4 Aug. 2014 – 8 Aug. 2014*

Prerequisite courses: Introductory econometrics and Stata Sofeware

Course Description
        The techniques of valuating non-market goods are widely used for agribusiness and environmental economics. This course is designed for graduate-level students at the University of Goettingen and some other related universities, and helps understand the fundamental economic theory of non-market goods and master basic econometric techniques for applications.
        This course includes three parts: Part I introduces the basic theory; Part II introduces the econometric techniques; and Part III is practice with the real data.

Course Outline
1 Introduction
Part I: Basic Theory
2 Measurements of Welfare Changes
        2.1 Individual Preferences and Demand
        2.2 Welfare Measures for Changes in Prices
        2.3 Welfare Measures for Changes in Factor Prices
        2.4 Welfare Measures for Quantity Changes
        2.5 Aggregation and Social Welfare
3 Revealed Preference Models of Valuation
        3.1 Environmental Quality as a Factor Input
        3.2 Individual Demand for Environmental Quality
        3.3 The Structure of Preference: Complements or Substitutes
        3.4 Discrete Choice Models and Measures of Values
4 Stated Preference Models of Valuation
        4.1 Welfare Economics of Stated Preference Questions
        4.2 Validity of Stated Preference Welfare Measure
        4.3 Psychological Fundament of Stated Preferences
5 Values under uncertainty
        5.1 Individual Preferences and Expected Utility
        5.2 Aggregation and the Welfare Criterion

5.3 Revealed Preference Methods under Uncertainty
Part II: Methods and Econometric Techniques
6.   Econometrics of Limited Dependent Variables
        6.1 MLE.
        6.2 Maximum Simulated Likelihood
        6.3 Probit and Logit
        6.4 Tobit, Cragg Model, and Heckman Model
7   Contingent Valuation Methods (CVM)
        7.1 Continuous Methods: Open-Ended and Payment Cards
        7.2 Discrete methods: Single-Bounded and Double Bounded
8   Choice Experiments (CE)
        8.1 Experiment Design
        8.2 Econometric Estimation
9   Experimental Auction
        9.1 Auction Design
        9.2 WTP Estimation
10 Hedonic Techniques
        10.1 Basic Theory
        10.2 Model Specification and Estimation
        10.3 Measurement of Welfare Changes
Part III: Practice
11 Lab Sessions

Textbook:
Freedman A. M.2003 *The Measurement of Environment and Resource Values: Theory and Methods (2nd Edition)*, Resource for the Future, 2003.

Readings and References
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Dannenberg A. 2009"The Dispersion and Development of Consumer Preferences for Genetically Modified Food — A meta-analysis", *Ecological Economics*, Vol.68:2182-2192.
Deaton A. and J. Muellbauer. 1980. *Economics and Consumer Behavior*. Cambridge: Cambridge University Press.
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Gao Z., T. C. Schroeder and X. Yu, 2010 "Consumer Willingness to Pay for Cue Attributes: the Value beyond Its Owen", *Journal of International Food and Agribusiness Marketing*, Vol.22(1):108-124.
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Ready R.C. and D. Hu1995 "Statistical Approaches to the Fat Tail Problem for Dichotomous Choice Contingent Valuation." *Land Economics*, Vol. 71(4): 491-499.

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Vossler C. A., M. Doyou, and D. Rondeau (2012) "Truth in Consequentionality: Theory and Field Evidence on Discrete Choice Experiments." *American Economic Journal: Microeconomics:* 2012:4(4):145-171.

Yu X. and David Abler (2010): "Incorporating Zero and Missing Responses into CVM with Open-Ended Bidding: Willingness to Pay for Blue Skies in Beijing." *Environment and Development Economics,* Vol.15:535-556

Yu X., Z. Gao and Y. Zeng (2014). Willingness to Pay for the 'Green Food' in China. *Food Policy* Vol. (45):80-87.

Yu X., B. Yan and Z. Gao (2014). Can Willingness-To-Pay Values be Manipulated? Evidences from an Experiment on Organic Food in China, Forthcoming in *Agricultural Economics*. DOI: 10.1111/agec.12134

Teaching Method: Lectures + Lab Sessions

Language: English

Credits: 3

Grades: Participation and Exam