

Consumer Behavior and Demand Analysis: Theory and Applications

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Office: MZG 2027 Office Hour: TBA

Lecture Room: **OEC 0.167** and the Computer Lab (Blue tower 11th floor)
(Platz der Göttinger Sieben 5, 37073 Göttingen)

Lecture Time: 8 Aug. 2011 - 12 Aug. 2011

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Course Description

This course is designed for graduate-level students at the University of Goettingen and Promotionskollege Program in Agricultural Economics, and helps understand the fundamental economic theory of consumer behaviors and practice demand analysis. This course includes two parts: Part I introduces the basic theory and Part II applies the theory to demand analysis using data from developing countries.

After a brief review of the basic theory, this course will focus on

- Econometric models for demand analysis
- Extension of basic theories
- Estimation of Demand for Nutrition

The detailed course may be adjusted by the demand of the students.

Course Outline

- 1 Introduction
- 2 Review of the Demand Theory
 - 2.1 Utility and Demand
 - 2.2 Cost minimization
 - 2.3 Properties of Demands
 - 2.4 Consumer surplus
- 3 The Theory at Work
 - 3.1 Stone's analysis
 - 3.2 Basic Translog Model (BTL)
 - 3.3 Linear Expenditure System (LES)
 - 3.4 Almost Ideal Demand System (AIDS)
 - 3.5 Quadratic Almost Ideal Demand System (QUAIDS)
 - 3.6 An implicitly, directly additive demand System (AIDADS)
- 4 Separability and Two-stage Budgeting
 - 4.1 Weak Separability
 - 4.2 Implicit Separability
 - 4.3 Strong Separability
 - 4.4 Indirect Separability
- 5 Aggregation
 - 5.1 Homotheticity and quasi-homotheticity
 - 5.2 Linear and non-linear-aggregation
- 6 Lancaster Model
 - 6.1 Lancaster approach of consumer theory
 - 6.2 Limitations of the Lancaster Model
- 7 Beyond the theory
 - 7.1 Non-market goods
 - 7.2 Habit persistence
 - 7.3 Quality
- 9 Demand for Nutrition

- 9.1 Nutrient Elasticities in a Complete Food Demand System
- 9.2 Modeling physical quantities of food and nutrients
- 9.3 Consumer Demand for Healthy Diet
- 10 Lab session: Introduction to Stata

Readings and References

- Balestra P. and M. Nerlove (1966) "Pooling Cross Section and Time Series Data in the Estimation of a Dynamic Model: The Demand for Natural Gas." *Econometrica*, Vol. 34(3):585-612.
- Deaton A. and J. Muellbauer. (1980). *Economics and Consumer Behavior*. Cambridge: Cambridge University Press.
- Deaton, A. (1988). "Quality, Quantity and Spatial Variation of Price." *American Economic Review* 78(3):418-430.
- Deaton A. (1986) "Demand Analysis" Handbook of Econometrics, Chapter 30, Vol.III. 1767-1839.
- Deaton, A (1997) *The Analysis of Household Surveys : A microeconomic Approach to Development Policy*. World Bank and Johns Hopkins University Press.
- Fan, S., E. J. Wailes, and G. L. Cramer. (1995). "Household Demand in Rural China: A Two-Stage LES-AIDS Model." *American Journal of Agricultural Economics* 77(1):54-62.
- Gao Z., J. Lee and X. Yu: "Consumer Demand for Healthy Diet: New Evidence from Healthy Eating Index." Selected Presentation in Agricultural and Applied Economics Association (AAEA) 2010 Annual Meeting, July 25-27, 2010, Denver, Colorado.
<http://ageconsearch.umn.edu/handle/61724>
- Green R. and J. M. Alston (1990) "Elasticities in AIDS Models." *American Journal of Agricultural Economics*, Vol. 72(2):442-445.
- Hausman, Jerry A, (1978). "Specification Tests in Econometrics," *Econometrica*, vol. 46(6):1251-71.
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- Hendler R. (1975) "Lancaster's New Approach to Consumer Demand and Its Limitations." *The American Economic Review*, Vol. 65(1): 194-199.
- Huang K. S. (1996) "Nutrient Elasticities in a Complete Food Demand System", *American Journal of Agricultural Economics* 78(1):21-29.
- Irz X. (2010) Modeling physical quantities of food and nutrients consumed from aggregate data—with an application to Finland, *Agricultural Economics* 41 (2010) 293–304
- Lancaster K. J. (1966) "A New Approach to Consumer Theory." *The Journal of Political Economy*, Vol. 74(2): 132-157.
- Meyer S. and X. Yu. "Comparison of Several Demand Systems by Monte Carlo Simulations." Selected Presentation in AAEA 2011 annual conference.
- Moschini, G. (2001). "A Flexible Multistage Demand System Based on Indirect Separability." *Southern Economic Journal* 68(1):22-41.
- Wooldridge J. M (2002). *Econometric Analysis of Cross Section and Panel Data*. MIT Press , 2002.
- Yu, X., and D. Abler (2009). "The Demand for Food Quality in Rural China." *American Journal of Agricultural Economics*, Vol.91(1):57-69.
- Yu X. and D. Abler: (2010) "Interactions between Cigarette and Alcohol Consumption in Rural China", *European Journal of Health Economics*. Vol. (11):151–160.

Teaching Method:

Lectures + Lab Sessions

Credits: 3

Grades:

Participation (20%) + Assignments (20%) + Exam (30%) + Project Work (30%)