

**BW37 Seminar: ‘Estimating consumer choices: from theory to practice’**  
**Summer semester 2021**  
**Jun.-Prof. Dr. Biliana Yontcheva**



**Content:**

Understanding the determinants of consumer choices is crucial for policy: both at the firm-level (e.g. with regard to product portfolio choices) and at the state level (e.g. when it comes to optimal taxation levels and anti-trust law). In this course we will look at simple statistical models which allow us to measure the importance of specific product characteristics in shaping consumer purchase decisions. In particular, we will focus on the role of prices and product quality. We will discuss how to select the appropriate model of consumer behavior and the tradeoffs involved in the process. In the first block of the course, students will learn about models which rely on transaction-level information. In the second part of the course, we will see how these models can be generalized and applied to aggregated (market-level) data. We will discuss how the estimated parameters can be used to reach conclusions about firm market power and consumer welfare.

**Target group:**

This course is aimed at advanced Bachelor students specializing in Economics or Business Administration. Students taking this course should ideally have completed a course in Econometrics.

**Organization:**

An introductory lecture will be held at the beginning of the semester (Friday, 15.04.2022, 10:30-14:00). This part of the course will provide students with an overview of the literature. Possible topics for presentations and term papers will be outlined. After the introduction, students will select a topic. In the second part of the semester, individual work will take place, with multiple opportunities for consultations. Students will make short presentations on their topics (approx. 30 minutes) at the end of May (27-28.05.2022) or June (03.06.2022). Having researched the topic and presented in front of the group, students will write a short term paper. The deadline for submission of term papers is the 15th of August 2022.

**Prerequisites:**

Students attending the lecture should have completed at least one introductory econometrics course and one microeconomics course during their studies.

**Language:**

The course will be conducted in English (the literature and presentations will be in English; term papers will be accepted in both German and English).

**Examination process:**

Short term paper (70%), presentation (30%).

**Workload:**

3 SWS (6 ECTS)

## Seminar paper topics and literature:

Specific papers and topics will be discussed and assigned during the introductory part of the course. The topics fall into two general blocks.

### 1. Models of individual-level consumer behavior: estimation of consumer choices

The term papers in this block will look at how economists estimate consumer preferences using individual-level data (i.e. observed purchases). We will review how to determine the role of observed product characteristics in consumer choices. In addition, we will discuss how processes which are not directly observed by the econometrician can be incorporated into models of purchasing decisions. We will look at different statistical methods and evaluate their strengths and weaknesses when it comes to calculating demand with individual-level data.

*Example:* Train, K. E. (2009). Discrete choice methods with simulation. Chapter 3: Logit. Cambridge university press.

### 2. Models of aggregated decisions: estimation of market shares

The term papers in this block will look at how economists deal with scenarios in which information on individual transactions is not available. We will look at how price sensitivity and consumer preferences can be calculated using information on firm market-shares. We will also discuss issues such as the endogeneity of prices and the use of elasticity estimates to quantify firm marginal costs, as well as consumer welfare.

*Example:* Goeree, M. S. (2008). Limited information and advertising in the US personal computer industry. *Econometrica*, 76(5), 1017-1074.

## Contacts:

If you have further questions, please send an e-mail to [yontcheva@dice.hhu.de](mailto:yontcheva@dice.hhu.de). Additional information can be found on the ILIAS platform.