Macroeconomics with Household Heterogeneity: Syllabus

Dirk Krueger and Kurt Mitman
Konstanz, May 2017

1 Organization

<table>
<thead>
<tr>
<th>Time of Class:</th>
<th>9:00-12:00 and 13:00-16:00</th>
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<tbody>
<tr>
<td>Room</td>
<td>V 1001</td>
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<tr>
<td>Instructor:</td>
<td>Dirk Krueger (mornings) and Kurt Mitman (afternoon)</td>
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<tr>
<td>Email:</td>
<td><a href="mailto:dkrueger@econ.upenn.edu">dkrueger@econ.upenn.edu</a>, <a href="mailto:kurtmitman@gmail.com">kurtmitman@gmail.com</a></td>
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2 Suggested Background Readings

1. Angus Deaton “Understanding Consumption” Oxford University Press, 1992

3 Course Outline and Overview

This is a course in quantitative macroeconomics with heterogeneous households. We will first review the basic literature, but then quickly turn to applications of the baseline models as well as their computation. We will cover three broad topics. During the first day we will discuss stationary models with rich household heterogeneity, explain how they are computed efficiently and apply them to topics in public finance (social security and tax reforms, more specifically).

During the second day we will exposet models with household heterogeneity and aggregate fluctuations, again explain how these are best computed and apply them to the study of the aggregate and distributional consequences of large recessions. The third day is devoted to models with (the threat of) consumer default and personal bankruptcy. We explore the role of default for the insurance of idiosyncratic shocks and extend them to models of the housing market and foreclosure decisions. For details see the attached table of contents for the course.

4 Goal of the Course

We want to prepare you to write your first research paper and, eventually, a dissertation in this area, which is overlaps the fields of macroeconomics, labor economics and applied microeconomics. After having taken this course you will know how to write down dynamic consumption models, solve them (numerically, if required) in general equilibrium, map these models to the data and use them for applied policy question. We also hope
expose you to open research questions in this area so that you, if you wish, can apply the techniques acquired and the substance studied in this course to start your own research agenda. **Most importantly, we want to have fun with this course!!!**

5 Tentative Outline of the Course

<table>
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<tr>
<th>Date</th>
<th>Time</th>
<th>Topic</th>
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| Monday, May 22, 17 | 09:00-12:00 | Standard Incomplete Markets Model in Partial and General Equilibrium, Applications  
Blundell and Preston (1996), Aiyagari (1994),  
| Monday, May 22, 17 | 13:00-16:00 | Computation of Heterogeneous Household Models  
Hagedorn, Manovskii & Mitman (2017), Hedlund et al. (2017) |
| Tuesday, May 23, 17 | 09:00-12:00 | Incomplete Market Models with Aggregate Risk  
Krusell and Smith (1998), Krueger, Mitman and Perri (2016a,b) |
| Tuesday, May 23, 17 | 13:00-16:00 | Computation and Applications of Incomplete Market Models with Aggregate Risk  
Maliar, Maliar and Valli (2010), Kaplan, Mitman and Violante (2017) |
| Wednesday, May 24, 17 | 09:00-12:00 | Models with Default 1: Limited Commitment Models  
Alvarez and Jermann (2000), Kehoe and Levine (2001),  
| Wednesday, May 24, 17 | 13:00-16:00 | Models with Default 2: Standard Incomplete Markets Models with Equilibrium Default  
Athreya (2002), Chatterjee et al. (2007)  
Jeske, Krueger and Mitman (2013), Mitman (2016) |
References


