Syllabus

Overview and Aim: The aim of the course is to introduce students to the main methodological tools in modern macroeconomics while at the same time providing a survey of the main questions and answers given in the modern literature. The emphasis is on "quantitative theory", i.e., theory designed to match basic features of the data. A large focus of the course will be to develop a theoretical toolbox that will you be able to apply in the future. The first day provides an overview of the course and gives an introduction to dynamic programming techniques. We continue by discussing the permanent income hypothesis as an introduction to macroeconomic models featuring incomplete-markets and income risk. A number of applications of the incomplete-markets framework will be discussed. On Thursday and Friday, we will discuss models with market incompleteness as well as introduce another type of heterogeneity: imperfect information and the resulting differences in expectations. The final lectures on Friday will give an overview of recent applications of the type of models discussed in class at the current research frontier.

Organization: The course will start on Monday, September 5, in the morning with a brief meeting at 08:45 followed by the first lecture. The daily schedule is listed below.

09:00 – 10:30: Lecture
10:30 – 11:00: Coffee break
11:00 – 12:30: Lecture
12:30 – 13:30: Lunch
13:30 – 15:00: Problem Session
15:00 – 16:30: Review of Material and problems

Please note that there will be a welcome dinner on Sunday, September 4, at 19:00. On Friday, September 9, instead of problem sets, there will be a final review session from 13:30 to 14:30 followed by the end of the course.

Evaluation: An integral part of each BGPE course is the final exam. You will receive the BGPE course certificate only if you successfully participate in the final. Not participating in the final means that your applications for the future BGPE events will not be considered. The exam will be open-book on September 30 with a duration of around 90mins. You will take the exam at your respective institute.

Course Materials: The course will make use of several sources. The main text for the course is Ljungqvist and Sargent: Lars Ljungqvist and Thomas J. Sargent, Recursive Macroeconomic Theory, MIT Press. Registered students will be provided with lecture notes and additional readings for topics not covered in Ljungqvist and Sargent ahead of the course. A detailed list of papers is included at the end of this document

Technology: It is recommended that students bring a laptop to the course with software that can be used to carry out numerical computations, ideally MATLAB or Python. Knowledge of computational methods will not be tested in the final exam, but computation is an essential part of modern macroeconomics, and there will be a discussion of computational methods with some examples.

References

[1] Aiyagari, R. (1994), "Uninsured Risk and Aggregate Saving," Quarterly Journal of Economics, 109, 659-684.

[2] Auclert, Adrien. "Monetary policy and the redistribution channel." American Economic Review 109.6 (2019): 2333-67

[3] Kaplan, G., K. Mitman and G. Violante (2017) "Consumption and House Prices in the Great Recession: Model Meets Evidence", Working Paper

[4] Kaplan, G., B. Moll and G. Violante (2017) "Monetary Policy According to HANK", American Economic Review

[5] Krueger D. and F. Perri (2006), "Does Income Inequality Lead to Consumption Inequality: Evidence and Theory," Review of Economic Studies, 73, 163-193.

[6] Krueger, D. K. Mitman and F. Perri (2016a), "Macroeconomics and Household Hetero-geneity," Handbook of Macroeconomics.

[7] Krusell, P. and Smith, A. (1998), "Income and Wealth Heterogeneity in the Macroecon-omy," Journal of Political Economy, 106, 867-896.

[8] Maliar, L., Maliar, S. and Valli, F., 2010. "Solving the incomplete markets model with aggregate uncertainty using the Krusell–Smith algorithm", Journal of Economic Dynamics and Control, 34(1), pp.42-49.

[9] Mitman, K. (2016), "Macroeconomic Effects of Bankruptcy and Foreclosure Policies ", American Economic Review, Vol 106(8).

[10] Sims, Christopher A. "Implications of rational inattention." Journal of monetary Economics 50.3 (2003): 665-690.

[11] Mackowiak, Bartosz, and Mirko Wiederholt. "Optimal sticky prices under rational inattention." American Economic Review 99.3 (2009): 769-803.

[12] Coibion, Olivier, and Yuriy Gorodnichenko. "Information rigidity and the expectations formation process: A simple framework and new facts." American Economic Review 105.8 (2015): 2644-78.

[13] Bordalo, Pedro, et al. "Overreaction in macroeconomic expectations." American Economic Review 110.9 (2020): 2748-82.

[14] Kohlhas, Alexandre N., and Ansgar Walther. "Asymmetric attention." American Economic Review 111.9 (2021): 2879-2925.