ECONOMICS 272:
Intertemporal Asset Pricing Theory

Fall 2015

Basic information

Lectures	Friday 14:00-16:50, Rm 200
Instructor	Prof. Alexis Akira Toda
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Course description

The goal of Econ 272 is to familiarize students to theoretical topics in the intersection of mathematical economics (general equilibrium theory) and finance and to help students develop research skills in applied theory. I will put particular emphasis on how to apply general equilibrium theory to diverse topics such as finance, international economics, macroeconomics, and public economics.

Preliminary course outline

1. Risk aversion: Pratt (1964).
2. Optimal consumption-portfolio problem: Samuelson (1969), Merton (1971).
3. Recursive utility: Epstein and Zin (1989), Ozaki and Streufert (1996), Toda (2014b).
4. Intertemporal capital asset pricing model (ICAPM): Merton (1973), Breeden (1979), Campbell (1993).
5. General equilibrium with incomplete markets (GEI): Geanakoplos (1990).
6. Dynamic general equilibrium models with heterogeneous agents: Constantinides and Duffie (1996), Saito (1998), Calvet (2001), Angeletos and Calvet (2005, 2006), Krebs (2003a,b, 2006, 2007), Angeletos (2007), Angeletos and Panousi (2011), Toda (2014b,a).
7. Power law: Gabaix (1999, 2009), Reed (2001, 2003), Benhabib et al. (2011, 2014), Toda (2012, 2014b), Toda and Walsh (2015).
8. Default and punishment: Dubey et al. (2005), Zame (1993), Walsh (2014).

9. Collateral: Geanakoplos and Zame (2014), Geanakoplos (1997, 2003, 2010), Fostel and Geanakoplos (2008, 2012a,b), Simsek (2013), Toda (2013), Geerolf (2014).

10. Non-representative agent asset pricing: Gollier (2001), Gârleanu and Panageas (2015), Toda and Walsh (2014).

11. Financial crisis: Brunnermeier and Sannikov (2014) and others.

Evaluation

You will be evaluated by a term paper submitted by the specified deadline. There are two options.

Option 1. Write a (preliminary) research paper that is related on topics, models, and/or techniques introduced in the course. The paper should have an introduction, a brief discussion of the related literature, detailed description of the model, and the main results you would expect to get. (Better yet if you can get actual results.)

Option 2. Write a literature review on two topics introduced in or related to the course. The review must be sufficiently detailed so that I can grasp the models of the major papers.

In either case, I will evaluate the paper by its substance and style. Finding a good content requires ingenuity and cannot necessarily be taught. On the other hand, you can learn how to write in a good style. While writing the paper, read at least Strunk and White's "Elements of Style" and Cochrane's "Writing Tips for PhD Students" (Google them and you will find). The paper must be written using LaTeX, because you will write your dissertation with LaTeX anyway. If you are not already familiar with it, go to my web page and you will find useful links.

Textbooks

There are no required textbooks for this course. However, textbooks that might be useful are Black (1995) (ideal for bedtime reading), Duffie (2001) (standard graduate text in theoretical finance), Villanacci et al. (2002) (for those of you interested in proving theorems in GEI models), and Chang (2004) (handy reference for stochastic control).

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