Albert-Ludwigs-Universität Freiburg
Institut zur Erforschung der Wirtschaftlichen Entwicklung

Asset Pricing and Liquidity Risk

In the WS 2011/2012 we provide a 6 week block lecture on dynamic capital market theory with a special focus on liquidity risk starting on October 31st and a block seminar on liquidity and credit risk that will be based on this lecture taking place end of January 2012. The aim of this course is to guide through the basic building blocks of classical finance. Both lecture and seminar are intended for advanced students, especially master students and other students in their final year and can be regarded as preparation for a possible master or diploma thesis.

Outline:

The 6 week block lecture consists of two parts. The first set of lectures covers the fundamentals of dynamic capital market theory. Within the concept of asset pricing theory the price of an asset can be expressed as the expectation of the payoff multiplied by the *pricing kernel* (or discounted by the *stochastic discount factor*). We exploit this general methodology by particularly looking at derivative asset prices. The main topics that we will cover are changes of measure and martingale-based pricing techniques. The second part of the lecture studies how defaultable assets can be valued. In this part, we will discuss some advanced topics of asset pricing with a special focus on liquidity risk.

Equipped with the knowledge from the lecture, we will study different research papers in a block seminar. Here we will focus particularly on the effects of credit and liquidity risk on asset pricing. Every participant is required to provide a presentation and a short essay that summarizes and discusses the main ideas and results of the respective research paper. Participants of the seminar should either first attend the block lecture or should already have knowledge about the above topics to ensure a successful participation in the seminar.

Instructor: JProf. Dr. Eva Lütkebohmert-Holtz and Dr. Yajun Xiao, Research Group Financial Mathematics, Institute for Research in Economic Evolution

Prerequisites: *Principles of Finance.* We also encourage students to simultaneously take the course *Futures and Options.* The block lecture or knowledge about the above topics is assumed for those students who want to take part in the liquidity seminar.

Participants: Applications for the seminar including a short CV and a credit points transcript can be send to Thomas Lais (room 2313) until October 31st 2011.

Course (4SWS):

- Block Lecture: October 31st – December 6th, 2011

Mo. 2-4pm, KG II, room 2006

Tue. 8-10am, KG I, room 1010

- Seminar: January 23rd-25th, 2012

ECTS (credit points):

4 ECTS points for the lecture based on a 60min written exam in December 2011

4 ECTS points for the seminar based on the presentation and the essay

Main References: The block lecture is mainly based on the two following standard textbooks:

Cochrane, J.: *Asset Pricing*. 2005.

Duffie, D.: *Dynamic Asset Pricing Theory*. 1996.

For the seminar the following reading list is exemplary:

Fama, French: *Common Risk Factors in the Returns on Stocks and Bonds*.

Goldstein, Ju and Leland: *An EBIT-based model of dynamic capital structure.*

Hackbarth, Miao and Morellec: *Capital structure, credit risk, and macroeconomic conditions*.

Huang, Huang: *How much of the corporate-treasury yield spread is due to credit risk?*

Chen, Collin-Dufresne and Goldstein: *On the Relation Between the Credit Spread Puzzle and the Equity Premium Puzzle.*

Chen: *Macroeconomic Conditions and the Puzzles of Credit Spreads and Capital Structure.*

Bhamra, Kuehn and Strebulaev: *The levered equity risk premium and credit spreads: A unified framework.*

Bansal and Yaron: *Risks for the long run: A potential resolution of asset pricing puzzles.*

Acharya and Pedersen: *Asset Pricing with Liquidity Risk.*

Ashcraft, Garleanu and Pedersen: *Two Monetary Tools: Interest Rates and Haircuts.*

Brunnermeier and Pedersen: *Market Liquidity and Funding Liquidity.*

Additional Information: http://www.prim.uni-freiburg.de/lehre