## **PhD Seminar in Financial Frictions**

Professors David Lando, Lasse H. Pedersen and Annette Vissing-Jørgensen August 21-23, 2013

The PhD seminar in Financial Frictions is a 3-day seminar that takes place Wednesday through Friday, August 21-23, 2013. The PhD seminar discusses topics related to financial frictions and how they affect asset markets. We will discuss both recent theories and empirical evidence. The program will consist of lectures (with active student participation) as well as a problem solving session for students wishing to obtain ECTS credits. Students are expected to participate actively in the seminar.

Please note that the following week, FRIC will host its first international conference: <u>FRIC'13</u>: <u>Conference on Financial Frictions</u> and PhDs may apply for a conference fee waiver (see the conference website for more information).

## **Program**

The program will consist of lectures all day Wednesday August 21 and in the morning Thursday August 22. Friday August 23 will consist of a student workshop/assignment, which is mandatory for students wishing to obtain ECTS credits. Please note that students are expected to attend all lectures and participate actively in the seminar.

### Wednesday August 21, 2013

Location: (Kilen) K143

9.00-10.15 Lecture 1, Lasse Heje Pedersen

10.15-10.45 Coffee break

10.45-12.00 Lecture 2, Lasse Heje Pedersen

12.00-13.30 Lunch break (lunch will be served at Solbjerg Plads, FUHU, 3<sup>rd</sup> floor)

13.30-14.45 Lecture 3, Annette Vissing-Jørgensen

14.45-15.00 Coffee break

15.00-16.15 Lecture 4, Annette Vissing-Jørgensen

#### Thursday August 22, 2013

Location: (Kilen) K143

8.30-10.00 Lecture 5, David Lando

10.00-10.30 Coffee break

10.30-12.00 Lecture 6, David Lando

#### Friday August 23, 2013

Location: (Kilen) K143

9.00-12.00 Student workshop (mandatory in order to obtain ECTS credits)







## **Prerequisites**

We invite applications from students who are currently working on a PhD project that relates to the theme of the seminar. Applications from postdoctoral researchers and junior faculty may also be considered.

To qualify for participation in the PhD Seminar in Financial Frictions, students must have knowledge of standard PhD-level asset pricing theory in discrete and continuous time as well as an ability to work independently with modeling and data.

The total number of participants is limited to 30.

## **Application**

The application should contain the following:

- 1. A short CV (including your e-mail and affiliation and the names of 2-3 references)
- 2. A short text (100 words) describing your research agenda and why this course is relevant

Applications should be sent by email to the FRIC Center Coordinator, Julie de Molade, at <a href="mailto:fric@cbs.dk">fric@cbs.dk</a>.

### **Deadline**

The deadline for submitting applications is August 1, 2013.

Applicants will be notified of admittance shortly after the application deadline.

#### Venue

The PhD Seminar in Financial Frictions will take place Wednesday through Friday August 21-23, 2013 at Copenhagen Business School, Center for Financial Frictions, Solbjerg Plads 3, 2000 Frederiksberg.

### **Outline of Lectures**

- 1. Capital constraints (margin requirements and leverage limits) (Lecturer: LHP)
  - Theory:
    - Margin-based asset pricing, the flat security market line
    - Macro and monetary economics with capital constraints
  - Empirical implications:
    - Deviations from Law of One Price
    - Betting against beta and embedded leverage
    - Effects of unconventional monetary policy
    - Buffett's alpha
- 2. Dynamic portfolio choice with transaction costs (Lecturer: LHP)
  - How to trade now and in the future when returns are predictable and trading is costly
- 3. The special features of Treasury bonds and the implications for asset pricing, monetary policy, and financial crisis Part 1 (Lecturer: AVN)







- 4. The special features of Treasury bonds and the implications for asset pricing, monetary policy, and financial crisis Part 2 (Lecturer: AVN)
- 5. Liquidity and credit risk in credit markets (Lecturer: DL)
  - Corporate bond liquidity
  - CDS markets
- 6. Money-market rates, discount rates, and funding frictions (Lecturer: DL)

## **Preliminary Readings**

- 1. Capital constraints (Lecturer: LHP)
  - Main reading:
    - Two Monetary Tools: Interest Rates and Haircuts, Adam
       Ashcraft, Nicolae Garleanu, and Lasse H. Pedersen (2010), <u>NBER Macroeconomics</u>
       Annual, 25, 143-180.
       (http://pages.stern.nyu.edu/~lpederse/papers/TwoMonetaryTools.pdf)
    - Betting Against Beta, Andrea Frazzini and Lasse Heje Pedersen (2010).
       (http://pages.stern.nyu.edu/~lpederse/papers/BettingAgainstBeta.pdf)
  - Background reading:
    - Margin-Based Asset Pricing and Deviations from the Law of One
       Price, Nicolae Garleanu and Lasse Heje Pedersen (2011), <u>The Review of Financial Studies</u>, 24(6), 1980-2022.
      - (http://pages.stern.nyu.edu/~lpederse/papers/MarginPricingLoOP.pdf)
    - Embedded Leverage, Andrea Frazzini and Lasse Heje Pedersen (2011).
       (<a href="http://pages.stern.nyu.edu/~lpederse/papers/EmbeddedLeverage.pdf">http://pages.stern.nyu.edu/~lpederse/papers/EmbeddedLeverage.pdf</a>)
    - Buffett's Alpha, Andrea Frazzini, David Kabiller, and Lasse Heje Pedersen (2012).
       (http://pages.stern.nyu.edu/~lpederse/papers/BuffettsAlpha.pdf)
- 2. Dynamic portfolio choice with transaction costs (Lecturer: LHP)
  - Main reading:
    - Dynamic Trading with Predictable Returns and Transaction
       Costs, Nicolae Garleanu and Lasse Heje Pedersen (2012), The Journal of Finance, forthcoming. (http://pages.stern.nyu.edu/~lpederse/papers/DynamicTrading.pdf)
  - Background reading:
    - Dynamic Portfolio Choice with Frictions, Nicolae Garleanu and Lasse Heje Pedersen (2013)
- 3. The special features of Treasury bonds and the implications for asset pricing, monetary policy, and financial crisis (lecture 3 and 4) (Lecturer: AVN)
  - Main reading:
    - The Aggregate Demand for Treasury Debt, Arvind Krishnamurthy and Annette Vissing-Jørgensen, Journal of Political Economy, April 2012.
       (<a href="http://www.kellogg.northwestern.edu/faculty/vissing/htm/demandtreas\_jan6.pdf">http://www.kellogg.northwestern.edu/faculty/vissing/htm/demandtreas\_jan6.pdf</a>
       )
    - Short-term Debt and Financial Crisis: What we can learn from U.S. Treasury Supply, Arvind Krishnamurthy and Annette Vissing-Jørgensen.
       (<a href="http://www.kellogg.northwestern.edu/faculty/vissing/htm/shortdebt\_071012.pdf">http://www.kellogg.northwestern.edu/faculty/vissing/htm/shortdebt\_071012.pdf</a>
       )







- The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy, Arvind Krishnamurthy and Annette Vissing-Jørgensen, Brookings Papers on Economic Activity, Fall 2011.
   (http://www.kellogg.northwestern.edu/faculty/vissing/htm/brookings2012.pdf)
- Why an MBS-Treasury swap is better policy than the Treasury twist, Arvind
  Krishnamurthy and Annette Vissing-Jørgensen.
   (http://www.kellogg.northwestern.edu/faculty/vissing/htm/MBS%20swan%20ve
  - (http://www.kellogg.northwestern.edu/faculty/vissing/htm/MBS%20swap%20versus%20Treasury%20twist3x.pdf)
- 4. Liquidity in credit markets (Lecturer: DL)
  - Main reading:
    - Corporate yield spreads: Default risk or liquidity? New evidence from the Credit Default Swap market, F. Longstaff, S. Mithal and E. Neis. Journal of Finance, 2005, pp. 2213 2253. (<a href="http://www.kier.kyoto-u.ac.jp/fe-nomura/symposium/joint2004/sympo">http://www.kier.kyoto-u.ac.jp/fe-nomura/symposium/joint2004/sympo</a> joint longstaff1.pdf)
    - Corporate bond liquidity before and after the onset of the subprime crisis, Jens Dick-Nielsen, Peter Feldhütter, and David Lando. Journal of Financial Economics, 2012, vol.103, 471-492.
      - (http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1364635)
  - Background reading:
    - Market Liquidity: Asset Pricing, Risk, and Crises, Yakov Amihud, Haim Mendelson, and Lasse Heje Pedersen, Cambridge University Press, 2013.
       (http://www.amazon.com/Market-Liquidity-Asset-Pricing-Crises/dp/0521139651/)
- 5. Money-market rates, discount rates, and funding frictions (Lecturer: DL)
  - Main reading:
    - The term structure of interbank risk, Damir Filipovic and Anders B. Trolle (2012)
       Journal of Financial Economics, forthcoming.
       (http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1923696)
  - Background reading:
    - Credit Risk Modeling Theory and Applications, David Lando. Chapters 5 and 7
       Princeton University Press. (2004). (<a href="http://www.amazon.com/Credit-Risk-Modeling-Applications-Princeton/dp/0691089299">http://www.amazon.com/Credit-Risk-Modeling-Applications-Princeton/dp/0691089299</a>)

### **Credit units**

3 ECTS credits

#### More information

If you have any questions about this course, please contact Julie de Molade at <a href="mailto:idm.fi@cbs.dk">idm.fi@cbs.dk</a> or at <a href="mailto:fric@cbs.dk">fric@cbs.dk</a>.

You can also keep yourself updated on FRIC activities here: www.fric.dk.



