NYU STERN

B30.3332
Chris Edmond

Advanced Topics in Macroeconomics: Market Frictions

Revised: March 18, 2008

Classroom: KMC 7-191
Class time: Monday 4-6pm
Office hours: by appointment

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Course description

The topic of this half of the course is asset market frictions. It is an introduction to costly asset trade with applications to monetary economics and finance. We will cover equilibrium asset pricing with heterogeneous agents, segmented markets and endogenous time-varying risk premia.

This syllabus covers the second half of the course only. Laura Veldkamp has a separate syllabus for the first half.

Prerequisites

You are expected to have already taken the first year PhD sequences in micro and macroeconomics.

Course material

There is no required text, but two books that you might find useful are:

1. Cochrane (2005): *Asset pricing*. Princeton University Press. Revised edition.
   A standard graduate text on theoretical and empirical asset pricing.
2. Altug and Labadie (1994): *Dynamic choice and asset markets*. Academic Press.
   More of a macro perspective, now a bit dated. But contains a hard-to-find overview of material on nominal asset pricing omitted in most texts.

This syllabus contains links to required and supplementary readings. In order to get the most out of the class, you should at least skim the papers listed as "*key readings*" before class. The other papers listed give background or extensions or further empirical evidence. Many of these would be good candidates for referee reports or presentation (as discussed below).

Lecture notes and slides will be on my personal webpage as we go along.

Deliverables and grades

The grade in this class will be based on:

1. Problem sets 30%
   There will be two problem sets handed out over the course that extend and/or review papers we have discussed in class.
2. Referee report 30%
   Choose in consultation with me an appropriate paper on which to write a professional 2-3 page referee report.
3. Conference presentation 30% and discussion 10%
   We will run a mock conference session with papers and discussants. In consultation with me, you choose an appropriate paper on which to make a 20 minute presentation suitable for a conference. Acting as if you were the paper's author, your presentation should state the paper's question clearly, outline the methodology and the paper's results. There will also be a discussant for each presentation who will provide a more critical perspective.

Outline and Calender

Session 1 (March 24)

Introduction and overview. Effects of monetary policy (open market operations) at short and long horizons. Liquidity effect and Fisher effect. Review of basic one- and two-country cash-in-advance models. Evidence.

Read before class:

1. Friedman (1968): The role of monetary policy. AER.

Cash-in-advance models:

2. Altug and Labadie (1994): *Dynamic choice and asset markets.* Chapters 5-6.
3. Lucas (1982): Interest rates and currency prices in a two-country world. JME.
4. Lucas (1984): Money in a theory of finance. Carnegie-Rochester conference series.

Evidence:

5. Barr and Campbell (1997): Inflation, real interest rates, and the bond market. JME.
6. Cochrane (1989): The return of the liquidity effect. JBES.

Session 2 (March 31)

Endogenous asset market segmentation: closed economies. Fixed costs and asset market participation. Why segmentation gives a liquidity effect. Implications for the term structure of interest rates. High vs. low inflation.

Key reading:

1. Alvarez, Atkeson and Kehoe (2002): Money, interest rates, and exchange rates with endogenously segmented markets. JPE.

Supplementary reading and more background:

2. Edmond and Weill (2005): Models of liquidity effects. New Palgrave 2nd edition.
3. Lucas (1990): Liquidity and interest rates. JET.

Session 3 (April 7)

Endogenous asset market segmentation: open economies. Extension to two-country models. Exchange rates and implications for the forward premium anomaly. Random-walk exchange rates and implications for monetary policy.

Key readings:

1. Alvarez, Atkeson and Kehoe (2006): Time-varying risk, interest rates, and exchange rates in general equilibrium. FRB Minneapolis staff report.
2. Alvarez, Atkeson and Kehoe (2007): If exchange rates are random walks, then almost everything we say about monetary policy is wrong. AER.
3. Atkeson and Kehoe (2008): On the need for a new approach to analyzing monetary policy. NBER macroeconomics annual.

Background on forward premium anomaly:

4. Backus, Foresi and Telmer (2001): Affine term structure models and the forward premium anomaly. JF.
5. Fama (1984): Forward and spot exchange rates. JME.

Time permitting we may also discuss:

6. Lustig and Verdelhan (2006): Investing in foreign currency is like betting on your intertemporal marginal rate of substitution. JEEA.
7. Lustig and Verdelhan (2007): The cross section of foreign currency risk premia and consumption growth risk. AER.

Session 4 (April 14)

Dynamic money demand. Partial equilibrium inventory-theoretic model of money demand. A simple dynamic stochastic general equilibrium model with exogenous participation. Variable velocity. Why this looks like sticky prices. Propagation of liquidity effects. Bringing back endogenous participation.

Key readings:

1. Alvarez, Atkeson and Edmond (2008): Sluggish response of prices and inflation to monetary shocks in an inventory model of money demand. Working paper.
2. Khan and Thomas (2007): Inflation and interest rates with endogenous market segmentation. Working paper.

Background reading:

3. Grossman and Weiss (1983): A transactions-based model of the monetary transmission mechanism. AER.
4. Dotsey, King and Wolman (1999): State-dependent pricing and the general equilibrium dynamics of money and output. QJE.

Due at the start of the class: problem set #1.

Session 5 (April 21)

Habit formation. Consumption-based asset pricing puzzles and how to fix them. Term structure and exchange rates implications. Connections to segmented market models. Microfoundations. Habit lookalikes.

Key readings:

1. Campbell and Cochrane (1999): By force of habit: A consumption-based explanation of aggregate stock market behavior. JPE.

Textbook version:

2. Cochrane (2005): *Asset pricing*. Chapter 21.

Extensions and microfoundations. We probably won't have time to say much about these, but they too would be good choices for a referee report or presentation:

3. Chetty and Szeidl (2005): Consumption commitments: Neoclassical foundations for habit formation. Working paper.
4. Guvenen (2005): A parsimonious macroeconomic model for asset pricing: Habit formation or cross-sectional heterogeneity? Working paper.
5. Wachter (2006): A consumption-based model of the term structure of interest rates. JFE.
6. Verdelhan (2007): A habit-based explanation of the exchange rate risk premium. Working paper.

Session 6 (April 28)

Heterogeneous agents and idiosyncratic risk. Basic idea. Extension to general equilibrium. Role of persistent shocks. Evidence. Connection to limits-of-arbitrage literature.

Key reading:

1. Constantinides and Duffie (1996): Asset pricing with heterogeneous consumers. JPE.

Textbook version:

2. Cochrane (2005): *Asset pricing*. Chapter 21.

Antecedents:

3. Mankiw (1986): The equity premium and the concentration of aggregate shocks. JFE.
4. Weil (1992): Equilibrium asset prices with undiversifiable labor income risk. JEDC.

Evidence:

5. Cogley (2002): Idiosyncratic risk and the equity premium: Evidence from the consumer expenditure survey. JME.
6. Lettau (2002): Idiosyncratic risk and volatility bounds, or can models with idiosyncratic risk solve the equity premium puzzle. REStat.

Related ideas. Almost certainly we won't have enough time to discuss these, but they too would be good choices for a referee report or presentation:

7. Chien, Cole and Lustig (2007): A multiplier approach to understanding the macro implications of household finance. Working paper.

8. Heathcote, Storesletten and Violante (2007): Consumption and labor supply with partial insurance: An analytical framework. Working paper.

9. Krueger and Lustig (2007): When is market incompleteness irrelevant for the price of aggregate risk (and when is it not)? Working paper.

10. Storesletten, Telmer and Yaron (2004): Cyclical dynamics in idiosyncratic labor market risk. JPE.

Limits-of-arbitrage in general equilibrium (time permitting).

1. Edmond and Weill (2007): Aggregate implications of micro asset market segmentation. Work in progress.

Background reading:

2. Shleifer and Vishny (1997): The limits of arbitrage. JF.

Evidence:

3. Collin-Dufresne, Goldstein and Martin (2001): The determinants of credit spread changes. JF.

4. Gabaix, Krishnamurthy and Vigneron (2007): The limits of arbitrage: Theory and evidence from the mortgage-backed securities market. JF.

Session 7 (May 5)

Conference presentations: 20-minute conference presentation and 5-minute discussion.
Due Monday May 12: problem set #2 and referee report.