ECON 269A MONETARY POLICY I

Winter 2006

Professor: Fabio Milani, fmilani@uci.edu

Office Hours: SSPA 3145, Tue 3.30-5.00 PM

Time and Location: Tu-Th 2.00-3.20 PM

Course Webpage: http://www.socsci.uci.edu/~fmilani/econ269a.html

Grading:

Assignments	10%
Referee Report	10%
In-Class Presentation	10%
Paper	70%

Course description:

The course focuses on the derivation and estimation of state-of-the-art DSGE models, with particular emphasis on models useful for monetary policy.

You will learn:

- to build macroeconomic models with microeconomic foundations.
- to solve rational expectations models.
- to estimate macroeconomic models using Bayesian methods.

Textbook: There is no single textbook required.

We won't follow a particular book, but some of these can serve as reference if you are interested in macro

· Woodford, Interest and Prices

- Walsh, Monetary Theory and Policy
- · Obstfeld and Rogoff, Foundations of International Macroeconomics

• **Heer and Maussner**, *Dynamic General Equilibrium Modelling: Computational Methods and Applications*

• **Pissarides**, Equilibrium Unemployment

For the econometrics used in the course, these books might be useful:

· Gary Koop, Bayesian Econometrics

• **Fabio Canova**, *Methods for Applied Macroeconomic Research*, book available at <u>http://www.igier.uni-bocconi.it/whos.php?vedi=1873&tbn=albero&id_doc=177</u>

· John Geweke, Contemporary Bayesian Econometrics and Statistics.

Referee Report

You will need to write a referee report on one of the papers listed on the course webpage. I have chosen job market papers by students in macroeconomics in different departments. Instructions on how to write a referee report are also available there. Deadline: **February 3.**

In-Class Presentation

There will be an in-class presentation on one of the following (we can decide):

- your idea for the paper (present literature, what is missing, your idea, etc.)
- paper at an early stage
- one topic from the syllabus

Paper

In the course, you will write a paper, which will count for 70% of your final grade. Ideally, the paper should consist of an estimation of a macroeconomic model of your choice using Bayesian methods to study a particular research question. The paper can focus on each of the topics studied in the course (or mentioned in the syllabus), or another macroeconomic topic of your choice. In both cases, we need to discuss the topic before you start working on it. I will provide some possible ideas at the beginning of the course.

Topics

1. Dynamic Stochastic General Equilibrium (DSGE) Models: Overview

1.1 Monetary DSGE Models

/ Woodford, Interest and Prices, 2003. Chapters:

✤ Walsh, Monetary Theory and Policy. Chapters:

Clarida, Gali, and Gertler, (1999). <u>The Science of Monetary Policy: a New</u> <u>Keynesian Perspective</u>, Journal of Economic Literature.

Goodfriend and King, (1997). <u>The New Neoclassical Synthesis and the Role of Monetary Policy</u>, NBER Macroeconomics Annual.

McCallum and Nelson, (1999). <u>An Optimizing IS-LM Specification for</u> <u>Monetary Policy and Business Cycles Analysis</u>, *JMCB*.

Smets and Wouters, (2003). <u>An Estimated Dynamic Stochastic General</u> <u>Equilibrium Model of the Euro Area</u>, JEEA

Blanchard and Gali, (2005). <u>Real Wage Rigidities and the New Keynesian</u> <u>Model</u>

Faust, (2005). <u>Is Applied Monetary Policy Analysis Hard?</u>

Collard and Dellas, (2005) <u>The New Keynesian Model with Imperfect</u> <u>Information and Learning</u>

1.2 Real Business Cycles (RBC) Models

King and Rebelo, (2000). <u>Resuscitating Real Business Cycles</u>, Handbook of Macroeconomics.

Rebelo, (2005). <u>Real Business Cycle Models: Past, Present and Future</u>, Scandinavian Journal of Economics.

1.3 Open Economy Models (New Open Economy Macroeconomics - NOEM)

Obstfeld and Rogoff, Foundations of International Macroeconomics. Chapters:

 Lane, (1999). <u>The New Open Economy Macroeconomics: A Survey.</u>, JIE.
Gali and Monacelli, (2005). <u>Monetary Policy and Exchange Rate Volatility in</u> <u>a Small Open Economy</u>, RES.

2. Solving and Estimating DSGE Models

Solution of Linear Rational Expectations Models: Sims, (2000). <u>Solving Linear</u> <u>Rational Expectations Models</u>, *Computational Economics*.

Bayesian Estimation:	An and Schorfheide, (2005). <u>Bayesian Analysis of DSGE Models</u> .
	Gary Koop, Bayesian Econometrics
	John Geweke, Contemporary Bayesian Econometrics and Statistics
	Fabio Canova, Methods for Applied Macroeconomic Research
	Schorfheide, Bayesian Methods for Macroeconometrics
	Heer and Maussner, Dynamic General Equilibrium Modelling:
	Computational Methods and Applications
	Companyational memous and applications

2.1 Monetary DSGE Models

 Smets and Wouters, (2003). <u>An Estimated Dynamic Stochastic General</u> <u>Equilibrium Model of the Euro Area</u>, *JEEA* Schorfheide, (2000). <u>Loss Function-based Evaluation of DSGE Models</u>, *JAE* Christiano, Eichenbaum, and Evans (2005). <u>Nominal Rigidities and the</u> <u>Dynamic Effects of a Shock to Monetary Policy</u>, *JPE*

2.2 RBC Models

 Gali and Rabanal, (2004). <u>Technology Shocks and Aggregate Fluctuations:</u> <u>How Well Does the RBC Model Fit Postwar U.S. Data?</u>
Chari, Kehoe, and McGrattan (2005) <u>Business Cycle Accounting</u>, *Econometrica*.

2.3 Open Economy Models

Bergin, (2003). <u>Putting the 'New Open Economy Macroeconomics' to a test</u>, JIE

& Ghironi, (1999) Towards New Open Economy Macroeconometrics.

Lubik and Schorfheide (2005). <u>A Bayesian Look at New Open Economy</u>

Macroeconomics, NBER Macro Annual

🏕 Justiniano and Preston (2005).

Fuesta and Rabanal (2004). <u>Euro-Dollar Real Exchange Rate Dynamics in an</u> <u>Estimated Two-Country Model: What is Important and What is Not</u>

3. Estimating DSGE Models with Learning

3.1 Models with Adaptive Learning

Webpage: <u>Adaptive Learning in Macroeconomics</u> Evans and Honkapohja (2001). *Learning and Expectations in Macroeconomics.*

3.2 Estimating Models with Learning

 Milani, Fabio (2004). <u>Expectations, Learning and Macroeconomic Persistence</u>
Sargent, Williams, and Zha (2005). <u>Shock and Government Beliefs: the Rise</u> and Fall of American Inflation, AER

4. A-Theoretical Models: VARs and Bayesian VARs

4.1 Estimating VARs, SVARs, and BVARs. Identifying the Effects of Monetary Policy

 Christiano, Eichenbaum, and Evans (1999). <u>Monetary Policy Shocks: What</u> <u>Have We Learned, and To What End</u>
Sims and Zha (1999). <u>What Does Monetary Policy Do?</u>, BPEA

4.2 Factor-Augmented VARs

Bernanke, Boivin, and Eliasz (2005) <u>Measuring Monetary Policy: A Factor</u> <u>Augmented Vector Autoregressive (FAVAR) Approach</u>, QJE & Belviso and Milani (2003). <u>Structural Factor-Augmented VAR (SFAVAR) and the Effects of</u> <u>Monetary Policy</u>"

Giannone, Reichlin, Sala (2003). <u>Tracking Greenspan: Systematic and</u> <u>Unsystematic Monetary Policy Revisited</u>

5. Post-War U.S. Monetary Policy: Has it Changed?

Clarida, Gali, and Gertler (2000) <u>Monetary Policy Rules and Macroeconomic</u> <u>Stability: Evidence and Some Theory</u>, QJE

Prophanides, (2004). <u>Monetary Policy Rules, Macroeconomic Stability and</u> <u>Inflation: A View from the Trenches</u>, *JMCB*

Lubik and Schorfheide (2004) <u>Testing for Indeterminacy: An Application to</u> U.S. Monetary Policy, AER

Sims and Zha (2005) Were There Regime Switches in US Monetary Policy?, AER

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Milani (2005) Learning, Monetary Policy Rules, and Macroeconomic Stability
Canova and Gambetti (2005). <u>Structural Changes in the US Economy: Bad</u>
Luck or Bad Policy

6. Incorporating Labor Market Frictions in DSGE Models

Shimer (2005). <u>Reassessing the Ins and Outs of Unemployment</u>
Walsh (2005) <u>Labor Market Search, Sticky Prices, and Interest Rate</u>
<u>Policies</u>, *RED*

 Trigari (2003) Equilibrium Unemployment, Job Flows and Inflation Dynamics
Lubik and Krause (2005). The (Ir)relevance of Real Wage Rigidity in the New Keynesian Model with Search Frictions

Christoffel, Kuestee, and Linzert (2005). <u>The Impact of Labor Markets on</u> the Transmission Process of Monetary Policy for the German Economy

Nason and Slotsve (2004). <u>Along the New Keynesian Phillips Curve with</u> <u>Nominal and Real Rigidities</u>

Praun (2005). (Un)Employment Dynamics: The Case of Monetary Policy Shocks

REFEREE REPORT

Guidelines, <u>RIE hints for referees</u>, <u>CJE's advice</u>

Write a referee report on one of the following papers (they are job market papers by students in macroeconomics):

Praun (JMP 2005) (Un)Employment Dynamics: The Case of Monetary Policy Shocks

Beechey (JMP 2004) Excess Sensitivity and Volatility of Long Interest Rates: The Role of Limited Information in Bond Markets

Scotti (JMP 2004) <u>A Multivariate Bayesian Analysis of Policy Rates: Fed</u> and ECB Timing and Level Decision

Primiceri (JMP 2003) Why Inflation Rose and Fell: Policymakers' Beliefs and US Postwar Stabilization Policy

Molnar (JMP 2005) Optimal Monetary Policy when Agents are Learning

/* Zhao (JMP 2005) Monetary Policy under Mis-specified Expectations

An (JMP 2005) <u>Bayesian Estimation of DSGE Models: Lessons from Second-</u> <u>Order Approximations</u>

🏕 Justiniano (JMP 2003)