Course Syllabus

Monetary Economics (440.630)
Masters in Applied Economics Program
Johns Hopkins University

Fall Semester, 2011
Dr. Sang-Sub Lee
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Thursday 6:00 – 8:45

1. General Course Objective:

This course is designed as a survey of the basic theories in monetary economics for master level students. The main objective of the course is to help students understand the core aspects of monetary economy: how monetary phenomena and policies are determined, and how they interact with the rest of the macro economy. For that purpose, several key theoretical frameworks will be constructed, and various monetary economic phenomena including monetary policy actions will be analyzed within such frameworks. Major schools of thought in monetary economics, and their differences, which give rise to different policy implications, will also be discussed within those theoretical frameworks along with the empirical evidence.

Among the topics to be covered include: money demand and money supply, inflation and optimal quantity of money, monetary policy transmission mechanism, the term structure of interest rates, strategy of monetary policy and optimal monetary policy, time inconsistency problem in monetary policy, monetary policy targets and rules. We will also examine the recent financial crisis, the FED’s policy reaction to the crisis, and the challenges facing monetary authority ahead. For each topic covered, a core body of theories, issues, and evidence will be presented and discussed.

2. Readings:

2-A) Textbook Sources:

Walsh, Carl, Monetary Theory and Policy, 3rd edition, MIT Press, 2010*

Lectures will follow Walsh’s book in terms of the topics covered and their orderings for the most part. The book does an excellent job in presenting many of the highly relevant and exciting results from the recent research with an appropriate balance of theory and evidence, and plenty of insights.

However, the book is written essentially for Ph.D. level students and courses in mind, and it could be considered a little too rigorous for this class. Nonetheless, the book is still fairly accessible in most parts, particularly to the students with a good undergraduate
level macroeconomics and calculus background as well as some basic econometrics and
statistics knowledge. You should not be afraid of the lengthy mathematical derivations
you may run into here and there in the book. You will be neither asked nor expected to
follow all the technical details in the book. Focus will be on a few key steps in the
derivation of results and, more importantly, intuition behind them, not the detailed
mathematical derivations themselves. Mathematical derivations and expressions will,
in general, be discussed only to the extent they help you organize thoughts, analyze
problem, and solidify understandings.


Cochrane, John, *Time Series for Macroeconomics and Finance*, 2005, can be
downloaded at

Basic knowledge of econometrics and, in particular, time series analysis is very helpful
for reading and understanding monetary economics literature in general. Since most of
you may not be familiar with time series analysis, we will go through some fundamental
concepts and models in time series using John Cochrane’s lecture notes. We will spend
about 15 minutes on this at the end of each regular class.

2-B) Other Supplementary References:

Edition

Country*, Simon Schuster


Policy*, Princeton University Press

2-C) Articles:

Numerous articles from the FRB publications, academic journals, and financial
newspapers and magazines such as *WSJ* and *Economist* will also be assigned.
3. Exams and Other Assignments:

There will be one mid-term (30%) and the final (40%). Term project will account for the rest. Some questions will be posted for practice.

4. Tentative Course Outline (The detailed reading list could change somewhat.)

(**: Optional Reading)

I. Introduction and Overview

Readings:

Walsh: Introduction and Chapter 1


*What Went Wrong with Economics*, The Economist, July 18th 2009


II. Money in the Long Run and General Equilibrium Models of Monetary Economy

A. Review of Solow Growth Model and Tobin’s Monetary Growth Model

B. Sidrauski’s Monetary Growth Model (Money-in-the-Utility Function Model) and Other Extensions

Readings:

Walsh: Chapter 2: Skip pp44-46 on existence and skim through 2.5 and Appendix) Chapter 3: Skim through 3.1-3.3, and skip the rest)


C. Money and Public Finance

Readings:

Walsh: Chapter 4: Read 4.1-4.5 (pp146-152; Cagan's model, pp156-159; and 4.5 can be skimmed through), 4.6.1-4.6.2, 4.6-4.7

Other Readings


Bernanke, Ben, 2009, The Federal Reserve’s Balance Sheet, Speech delivered at the Federal Reserve Bank of Richmond 2009 Credit Market Symposium, April, 2009 (Update in October)

http://www.federalreserve.gov/monetarypolicy/bst_fedsbalancesheet.htm


Roberto M. Billi and George A. Kahn, What is the Optimal Inflation Rate?, Economic Review, FRB of Kansas City

Schmidt-Grohe, Stephanie and Martin Uribe, 2010, The Optimal Rate of Inflation, NBER WP 16054**


Mid-Term I: Tentatively Scheduled on 10/13/2011 (or 10/20/2011)

III. Money in the Short Run: Short Run Models and Monetary Policy Transmission Mechanism

A. Static AD-AS Model and the Phillips Curve

B. Rational Expectations and Stochastic Static AD-AS model with Rational Expectations
C. Extension of the Basic Rational Expectations AD-AS Model: Persistent Effects of Monetary Policy on Output and Price

D. New Keynesian Synthesis

Combined Readings for A, B, C, and D:

Walsh, Chapter 5-6, Chapter 1, Chapter 10.1-10.2.

Chapter 5 (Skim 5.3; While reading 6, don’t pay too much attention to the detailed model specifications and derivations
Chapter 1 (1.2.2, 1.3)


Bernanke, Benjamin (2003), Remarks at the Federal Reserve Bank of Dallas Conference on the Legacy of Milton and Rose Friedman's Free to Choose, Dallas, Texas

____________ (2004), The Great Moderation

Ball, Laurence, and Gregory Mankiw (2002), The NAIRU in Theory and Practice, NBER WP #8940

Mankiw, N.G. (2000), The Inexorable and Mysterious Tradeoff Between Inflation and Unemployment, NBER WP #7884


Mankiw, N.G. (2006), The Macroeconomist as Scientist and Engineer, NBER WP #12349

Fuhrer, Jeffrey, 2009, Inflation Persistence, FRB of Boston, forthcoming in Handbook of Monetary Economics**.


Gali, Jordi, and Mark Gertler, 2007, MACROECONOMIC MODELING FOR MONETARY POLICY EVALUATION, NBER WP 13542 (JEP)
**D. Monetary Policy Transmission Mechanism and Credit Channel of Monetary Policy**

Walsh, Chapter 10.5 (Skip 10.5.5 and Skim over 10.5.3, 10.5.4)

Bernanke, Ben, (2007), *The Financial Accelerator and the Credit Channel*, Speech made at the Credit Channel of Monetary Policy in the Twenty-first Century Conference, Federal Reserve Board

______, and Mark Gertler (1995), *Inside the Black Box: The Credit Channel of Monetary Policy Transmission*, NBER WP #5146


**IV. Topics in Monetary Policy**

**a) Monetary Policy Operating Procedures, Policy Instrument Choice, Policy Tools at ZLB**

*Readings:*

Walsh: Chapter 11


Bernanke, Ben, 2002, *Deflation: Making Sure It Doesn’t Happen Here*, Remarks Before the National Economists’ Club


Keister, Todd, Antoine Martin, and James McAndrews (2008), *Divorcing Money from Monetary Policy*, Federal Reserve Bank of New York


Bernanke, Ben, and Vincent Reinhradt, 2004, *Conducting Monetary Policy at a Very Low Short-term Interest Rates*, AEA Meeting

Hamilton, James, and Cynthia Wu, 2011, *The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment, JMCB***

Bernanke, Ben, Vincent Reinhart, and Brian Sack, Monetary Policy Alternatives at the Zero Bound: An Empirical Assessment, Brooking Papers on Economic Activities

Eggertsson, Gauti and Michael Woodford, The Zero Bound on Interest Rates and Optimal Monetary Policy, Brooking Papers on Economic Activities**

**b) Interest Rates and Monetary Policy: The Term Structure of Interest Rates**

*Readings:*

Walsh: 10.3

Bernanke, Ben, (2005), *The Global Saving Glut and the U.S. Current Account Deficit.*, Federal Reserve Bank of St. Louis. April 14; Federal Reserve Bank of St. Louis Review


_______ and Mary Trubin (2006), *The Yield Curve as a Leading Indicator*, FRB of New York

Fisher, Mark (2001) *Forces that Shape Yield Curve Parts 1 and 2*, FRB of Atlanta**


of Operation Twist and Its Implications for QE2

Ilmanen, Antti, *Understanding the Yield Curve*, Citibank


c) Rules versus Discretion: Time Inconsistency Problem

*Readings:*

Walsh: Chapter 7*

Bernanke, Ben (2004), Panel Discussion: *What have we learned since October 1979*


Alesina, Alberto, and Andrea Stella, 2010, The Politics of Monetary Policy, Forthcoming in Handbook of Monetary Policy

d) Optimal Monetary Policy Rules

*Readings*

Walsh: Chapter 8


Bernanke, Ben (2003), *Constrained Discretion and Monetary Policy*, FRB, Remarks before the Money Marketeers of New York University, Feb 2003


Taylor, John, and John Williams, 2010, Simple and Robust Rules for Monetary Policy, NBER WP 15908**

e) Financial Crisis and Monetary Policy

Adrian, Tobias and Hyun Song Shin (2008), Financial Intermediaries, Financial Stability and Monetary Policy

Bernanke, Ben (2009), Reflections on a Year of Crisis, Remarks made at the FRB of Kansas City’s Annual Economic Symposium, Jackson Hole, Wyoming

Brunnermeier, Marcus (2009), Deciphering the 2007-2008 Liquidity and Credit Crunch, Journal of Economic Perspectives

Gorton, Gary, Panic of 2007, NBER WP.

Pozsar, Zoltan, Tobias Adrian, Adam Ashcraft, and Hayley Boesky, 2010, Shadow Banking, Federal Reserve Bank of New York Staff Reports #458


f) Monetary policy, Asset prices, and Financial Market


____________ and Mark Gertler (2001), Should Central Banks Respond to Movements in Asset Prices, American Economic Review


*Asset Price Bubbles and Monetary Policy*, ECB 2005

Frederic S. Mishkin (2008), *How Should We Respond to Asset Price Bubbles*, Federal Reserve Board


**VI. Epilogue**
**Term Projects (30%)**

Write a term paper on a monetary topic of choice, and presents to the class at the end of the semester.

Paper should include some literature review, theoretical basis, and empirical evidence from own data analysis.

09/15/2010: (preliminary) Selection of Topic
09/29/2011: Abstract submission
10/20/2011: Mid-point check
12/2011: Presentation

**Sample Topics:**

Financial Crisis and the Monetary Policy Responses

Taylor Rule

Inflation dynamics and forecasting

Monetary Policy and Asset Prices

(Structural) VAR and Monetary Policy Transmission Mechanism

Term Structure of Interest Rates

Effects of Large Asset Purchase