Econ. 504 Spring 2009 Chris Sims

# Preliminary Course Outline and Reading List*

Items marked "W" are available on the web. If viewed on screen with an up to date viewer, this file will show links to the bibliography at the end and to URL's where the paper can be downloaded (in cases where they exist). This version of the reading list marks with a "$\star$" items that either go over material that we covered in nearly the same form in lectures or that add material related to the lectures that you are expected to have read about. The unstarred readings are related to the lectures, but go substantially beyond them to cover material that you will not be responsible for on the exam. In many cases reading the unstarred papers could nonetheless be useful to you. Note that the section on solution methods, which we did cover in one lecture, was not on the original reading list.

**Topic 1:** *Transversality and Stochastic Lagrange Multipliers*

Pitfalls of conventional TVC's. Sufficiency for concave problems. The linear-quadratic permanent income model revisited. Setting up a DSGE for solution.

References:

Notes: $\star$"Random Lagrange Multipliers and Transversality" (Sims, 2000) W

Notes: $\star$"Stochastic Lagrange Multipliers for Problems with Lagged Expectations" W

**Topic 2:** *Linearizing and SolvingRE DSGE Models*

Getting the computer to do the hard work for bigger models. Continuous and discrete time. Avoiding the need to discover artificial predetermined variables in DSGE's. Perils of root counting. Pitfalls of linearization.

References:

$\star$"Solving Linear Rational Expectations Models" (Sims, 2001b) W

$\star$"Spurious Welfare Reversals in International Business Cycle Models" (Kim and Kim, 2003)W

Notes on pitfalls of linearization.

**Topic 3:** *Micro-foundations for price stickiness*

Dixit-Stiglitz-Blanchard-Kiyotaki-Calvo; "non-allocative" inertial contract prices; time-dependent vs. state-dependent adjustment; inattention; micro evidence

References:

⋆“Some Evidence on the Importance of Sticky Prices”, (Bils and Klenow, 2004)

⋆“Stickiness" (Sims, 1998) W (Only the models of “neutral stickiness", in the first part of the paper, are relevant here.)

“Reference Prices and Nominal Rigidities” (Eichenbaum, Jaimovich, and Rebelo, 2008)

Woodford (2003, Sections 6.1-2)

“An Estimated Dynamic Stochastic General Equilibrium Model of the Euro Area”, Smets and Wouters (2003)

**Topic 4:** *The Fiscal Theory of the Price Level*

Existence and uniqueness with active and passive monetary and fiscal policies; liquidity traps; central bank balance sheets.

References:

⋆“Equilibria Under ‘Active’ and ‘Passive’ Monetary And Fiscal Policies” (Leeper, 1991)

“Price Level Determinacy Without Control of a Monetary Aggregate” (Woodford, 1995)

⋆“A Simple Model for Study of the Determination of the Price Level and the Interaction of Monetary and Fiscal Policy” (Sims, 1994)

“Money as Stock: Price Level Determination with No Money Demand“ (Cochrane, 1999)

“Limits to Inflation Targeting” (Sims, 2005)

**Topic 5:** *Intertemporal Aspects of Fiscal Policy*

Identification problems in estimating effects; tax smoothing; optimal capital taxation; optimal inflation taxes; the burden of public debt; natural resource exhaustion.

References:

“Optimal Fiscal Policy in a Business Cycle Model" (Chari, Christiano, and Kehoe, 1994)

“Optimal Fiscal and Monetary Policy in an Economy without Capital" (Lucas and Stokey, 1983)

⋆“Federal Deficit Policy and the Effects of Public Debt Shocks" (Barro, 1980)

⋆“Fiscal Consequences for Mexico of Adopting the Dollar" (Sims, 2001a)

⋆“Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives" (Chamley, 1986)

“Optimal Taxation Without State-Contingent Debt” (Marcet, Sargent, and Seppälä, 2000)

⋆“National Debt in a Neoclassical Growth Model” (Diamond, 1965)

“Debt, Deficits, and Finite Horizons” (Blanchard, 1985)

**Topic 6:** *International Risk Sharing and Transmission of Business Cycles*

References:

⋆"Domestic Savings and International Capital Flows" (Feldstein and Horioka, 1991)

"Commodity Trade and International Risk Sharing: How Much Do Financial Markets Matter?" (Cole and Obstfeld, 1991)

"Tastes and Technology in a Two-Country Model of the Business Cycle: Explaining International Comovements" (Stockman and Tesar, 1995)

**Topic 7:** *A Brief Survey of Solution Methods for Nonlinear Equilibrium Models*

Higher order expansions; Projection methods; parameterized expectations; fixed-point methods; checking accuracy.

References:

*Numerical Methods in Economics* (Judd, 1998)

⋆"Solving the Stochastic Growth Model by Parameterizing Expectations", (den Haan and Marcet, 1990)

⋆"Accuracy in Simulations", (den Haan and Marcet, 1994)

**Topic 8:** *Exchange Rates and Exchange Rate Crises*

First generation; second generation; fiscal.

References:

⋆Rogoff and Obstfeld (1996, Sections 8.1-8.4)

"Fiscal Foundations of Price Stability in Open Economies", (Sims, 1997)

⋆"On the Fundamentals of Self-Fulfilling Speculative Attacks", (Burnside, Eichenbaum, and Rebelo, 2000)

**Topic 9:** *Macro Models with Credit Frictions*

Financial accelerator; efficiency effects from bankruptcy laws

References:

"Bankruptcy Law, Capital Allocation, and Aggregate Effects: A Dynamic Heterogeneous Agent Model with Incomplete Markets" (Zha, 2001)

"The Financial Accelerator in a Quantitative Business Cycle Framework", (Bernanke, Gertler, and Gilchrist, 1999)

**Topic 10:** *Policy Games and Learning*

References:

"Rules rather than discretion: The inconsistency of optimal plans" (Kydland and Prescott, 1977)

⋆"A Positive Theory of Monetary Policy in a Natural Rate Model" (Barro and Gordon, 1983)

*The Conquest of American Inflation* (Sargent, 1999)

⋆"Projecting Policy Effects with Statistical Models" (Sims, 1988)

⋆"Laboratory Experiments with an Expectational Phillips Curve" (Arifovic and Sargent, 2003)

**Topic 11:** *Using Models to Formulate Policy*

Comparing quantitative policy models to academic models; the role of quantitative models in the policy process — rules, commitment, targets; does the Lucas critique imply there is no such thing as real time policy analysis?

References:

"Policy Rules for Inflation Targeting" (Rudebusch and Svensson, 1999)

⋆"Modest Policy Interventions" (Leeper and Zha, 2001)

⋆"Autoregressions, Expectations and Advice" (Sargent, 1984)

⋆"A Rational Expectations Framework for Short Run Policy Analysis" (Sims, 1987)

**Topic 12:** *Rational Inattention*

References:

"Implications of Rational Inattention" (Sims and Zha, 2006)

Book on information theory (and inference, and computer learning) (MacKay, 2003)

**Topic 13:** *Structural VAR's and Monetary Policy*

References:

"Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory" (Clarida, Galí, and Gertler, 2000)

"Interpreting the Macroeconomic Time Series Facts" (Sims, 1992)

"Do monetary policy shocks matter in the G-7 countries?" (Kim, 1999)

"Does Monetary Policy Generate Recessions?" (Sims and Zha, 2006)

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