

Fall 2006 (first half)

Mike Golosov

14.461 – Advanced Macro I

The course will discuss some of the most frequently used monetary theories. The course is designed both to give an overview of the current work in the field and to teach some of tools frequently used in modern monetary theories. During the course we will discuss a relatively small number of papers in detail.

The course will roughly consist of four parts. Section 1 sets up basic cash in advance / money in the utility function models, derives optimal monetary policy and discusses determinacy of equilibria and liquidity traps. Section 2 goes on to incorporate price stickiness in the analysis. Section 3 considers alternative theory of monetary transmission mechanism based on limited participation. Section 4 reviews current research on credibility of monetary policy and expectation traps.

Reading list (more papers will be added as the course progresses)

Useful reference

Woodford, Michael, *Interest & Prices: Foundations of a Theory of Monetary Policy*, Princeton University Press 2003, Princeton, NJ

0. Preliminaries

Christiano, L.J., M. Eichenbaum, and C. Evans, “Monetary Policy Shocks: What Have We Learned and to What End?” in *Handbook of Macroeconomics*, ed. Taylor, J., and Woodford, M., (New York, NY: Elsevier, 1999).

Chari, V.V., Patrick J. Kehoe, and Ellen R. McGrattan, “A Critique of Structural VARs Using Real Business Cycle Theory”, *Minneapolis Federal Bank Working paper 631*, 2004.

Fernandez-Villaverde, J. J., Rubio-Ramirez and T. J. Sargent, “A, B, C, (and D’s) for Understanding VAR”, *mimeo*, 2004.

1. Foundations of monetary models and Friedman rule and indeterminacy

Chari, V.V. and P. Kehoe, "Optimal Fiscal and Monetary Policy," in *Handbook of Macroeconomics*, ed. Taylor, J., and Woodford, M., (New York, NY: Elsevier, 1999).

Cole, H. and N. Kocherlakota, “Zero Nominal Interest Rates: Why They are Good and How to Get Them”, *Federal Bank of Minneapolis Quarterly Review*, 1998, 22(2), 2-10.

Feenstra, Robert C., "Functional Equivalence between Liquidity Costs and the Utility of Money", *Journal of Monetary Economics*, 1986, 17 (2), 271-91.

Lucas, R. and N. Stokey, "Money and Interest in a Cash-in-Advance Economy", *Econometrica*, 1987, 55(3), 491-513.

Benhabib, J., S. Schmitt-Grohe and M. Uribe, "The Perils of Taylor Rule", *Journal of Economic Theory*, 2001, 96, 40-69.

Carlstrom, Charles T. and Timothy S. Fuerst, "Timing and Real Indeterminacy in Monetary Models", *Journal of Monetary Economics*, 2001, 47 (2), 285-298.

Matsuyama, Kiminori, "Sunspot Equilibria (Rational Bubbles) in a Model of Money-in-the-Utility-Function", *Journal of Monetary Economics*, 1990, 25, 137-144.

Matsuyama, Kiminori, "Endogenous Price Fluctuations in an Optimizing Model of a Monetary Economy", *Econometrica*, 1991, 59 (6), 1617-1631.

Eggertsson, G. and M. Woodford, "The Zero Bound on Interest Rates and Optimal Monetary Policy". *Brookings Papers on Economic Activity*, 2003 Issue 1, 139.

Woodford, M. "Monetary Policy and Price Level Determinacy in a Cash-in-Advance Economy", *Economic Theory*, 1994, 4, 345-380

Woodford, M., "Price-level Determinacy without Control of a Monetary Aggregate", *Carnegie-Rochester Conference Series on Public Policy*, 1995, 43, 1-46

Bassetto, M., "A Game Theoretic View of the Fiscal Theory of the Price Level", *Econometrica*, 2002, 70(6), 2167-2195

Kocherlakota, N. and C. Phelan "Explaining Fiscal Theory of Price Level", 1999, 23(4), 14-23

Cooley, T. and G. Hansen "Money and the Business Cycle" in *Frontiers of Business Cycle Research* Princeton University Press, 1995

2. Sticky price models

Yun, T. "Nominal Price Rigidity, Money Supply Endogeneity and Business Cycles", *Journal of Monetary Economics*, 1996, 37, 345-370.

Woodford, Michael, *Interest & Prices: Foundations of a Theory of Monetary Policy*, Princeton University Press 2003, Princeton, NJ, especially chapter 3.

Altig, Christiano, "Firm-Specific Capital, Nominal Rigidities, and the Business Cycle". Working paper, Northwestern

Christiano, Lawrence J., Martin Eichenbaum, and Charles Evans , "Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy," *Journal of Political Economy* forthcoming

Chari, V.V., P. Kehoe and E. McGrattan, "Sticky Price Models of the Business Cycle: Can the Contract Multiplier Solve the Persistence Problem?", *Econometrica*, 2000, 68(5) 1151-1179.

Golosov, M and R. Lucas, "Menu Costs and Phillips Curves", Working Paper, MIT.

Correai, I, P. Nicolini and P. Teles, "Optimal Fiscal and Monetary Policy: Equivalence Results", Working paper, Chicago Federal Bank.

Christopher J. Erceg, Dale W. Henderson and Andrew T. Levin "Optimal Monetary Policy with Staggered Wage and Price Contracts", *Journal of Monetary Economics*, 2000, 46(2), 281-313.

Khan, A., R. King and A. Wolman, "Optimal Monetary Policy", *Review of Economic Studies*, 2003, 70, 825-860.

Bils, M and P. Klenow "Some Evidence on the Importance of Sticky Prices", *Journal of Political Economy*, 2004

Adao, B., I. Correia and P. Teles, "Gaps and Triangles", *Review of Economic Studies*, 2003, 70, 699-713

Schmitt-Grohe, S. and M. Uribe "Optimal Fiscal and Monetary Policy Under Sticky Prices", *Journal of Economic Theory*, 2004, 114, 198-230.

3. Segmented markets

Alvarez, Fernando, Andrew Atkeson, Patrick J. Kehoe, "Money, Interest Rates, and Exchange Rates with Endogenously Segmented Markets," *Journal of Political Economy*, 2002, 110 (1), 73.

Alvarez, F., Atkeson, A. , and C. Edmond. "On the Sluggish Response of Prices to Money in an Inventory Theoretic Model of Money Demand", NBER WP #10016

Alvarez, F., Lucas, R., and Warren Weber, "Interest Rates and Inflation", *American Economic Review*, 2001, 91(2), 19-225.

4. Expectation traps

Albanesi, S., L. Christiano and V.V. Chari, "Expectation Traps and Monetary Policy", *Review of Economic Studies*, 2003, 70(4), 715-741.

Albanesi, S., L. Christiano and V.V. Chari, "How Severe is the Time Inconsistency Problem in Monetary Policy?", *Quarterly Review*, 2003, 27(3).

5. Sticky Information

Mankiw, G. and R. Reis, "Sticky Information versus Sticky Prices: A Proposal to Replace the New Keynesian Phillips Curve", *Quarterly Journal of Economics*, 2002, 117(4)

Reis, R. "Inattentive Producers" 2005 WP Princeton

Reis, R. "Inattentive Consumers" 2004 NBER WP 10883

Ball, L., G. Mankiw and R. Reis, "Monetary Policy for Inattentive Economies" *Journal of Monetary Economics*, 2004

6. Heterogeneous Information

Hellwig, C. "Heterogeneous Information and the Benefits of Transparency", 2005 UCLA WP

Woodford, M. "Imperfect Common Knowledge and the Effects of Monetary Policy," in P. Aghion, R. Frydman, J. Stiglitz, and M. Woodford, eds. *Knowledge, Information and Expectations in Modern Macroeconomics*, Princeton: Princeton University Press. 2002

7. Time consistency and expectation traps

Abreu, D., D. Pearce and E. Stacchetti, "Toward a Theory of Discounted Repeated Games with Imperfect Monitoring", *Econometrica*, 1990, 58(5), 1041-1063.

Atkeson, A, "International Lending with Moral Hazard and Risk of Repudiation", *Econometrica*, 1991, 59(4), 1069-1089.

Athey, S., Atkeson, A. and P. Kehoe, "The Optimal Degree of Discretion in Monetary Policy", *Minneapolis Federal Bank Staff Report 326*, 2004.

Barro, R. and D. Gordon, "Rules, Discretion and Reputation in a Model of Monetary Policy", *Journal of Monetary Economics*, 1983, 12(1), 101-121.

Kydland, F. and E. Prescott, "Rules Rather Than Discretion: The Inconsistency of Optimal Plans", *Journal of Political Economy*, 1977, 85(3), 473-491.