316-466 MONETARY ECONOMICS Semester 2, 2003

Instructor

Chris Edmond

Office Hours: Wed 1:00pm - 3:00pm, Economics and Commerce Rm 419

Email: <cpedmond@unimelb.edu.au>

Prerequisites

316-312 Macroeconomics and 316-313 Microeconomics

Classes

Mon 9:00am - 10:30am Babel Lower Theatre Wed 9:00am - 10:30am Old Arts-204 (CLS)

Textbook

• Carl E. Walsh. (1998) Monetary Theory and Policy. Cambridge, MA: MIT Press.

In addition to the text by Walsh (above), we will also make use of material from:

• Michael Woodford. (2003) Interest and Prices: Foundations of a Theory of Monetary Policy. Princeton, NJ: Princeton University Press, forthcoming.

Subject overview

An advanced introduction to modern monetary economics. Covers topics such as: neoclassical monetary theory; price rigidities; interest rates, inflation targeting and central banking; rules versus discretion in monetary policy; microeconomic foundations of monetary economics. Both theoretical and empirical issues will be emphasized. Open economy aspects of monetary economics will be covered where appropriate.

Assessment

EITHER (a): 180 minute final examination (70%) and homework assignments (30%); OR (b) 90 minute mid-semester examination (20%), 180 minute final examination (50%) and homework assignments (30%).

Schedule of topics

- Students with strong interests in *international* monetary economics are also encouraged to attend my PhD course, 316-632 International Monetary Economics, where many related topics will be covered.
- I plan to split the course into four parts of varying lengths. There will be one homework assignment for each part.

PART I: INTERTEMPORAL PRICES AND CHOICES

1. Introduction and course overview. One lecture.

- Some provocative reading:
 - J. Bradford De Long. (2000). "The Triumph of Monetarism?" *Journal of Economic Perspectives.* **14**(1): 83-94.
 - Milton Friedman. (1968). "The Role of Monetary Policy," American Economic Review. **58**(1): 1-17.
 - Robert E. Lucas, Jr. (1996). "Nobel Lecture: Monetary Neutrality," *Journal of Political Economy.* **104**(4): 661-682.
- 2. Monetary economics concepts. One lecture. Barter and exchange economies. Double coincidences. Money as a medium of exchange, store of value, and unit of account. Money as memory. Fiat money versus commodity money. The "Hahn problem." Inflation. Liquidity. Quantity theories and Fisher equations. Etc.
- 3. **Asset pricing basics**. <u>Four lectures</u>. Choice under uncertainty. Intertemporal prices. Intertemporal budget constraints. Consumption-based asset pricing.
 - Concise textbook treatment:
 - Lars Ljungqvist and Thomas J. Sargent. (2000). Recursive Macroeconomic Theory. Cambridge, MA: MIT Press. Chapters 7 and 10.
 - A classic article:
 - Robert E. Lucas, Jr. (1978). "Asset Prices in an Exchange Economy," *Econometrica*. **46**(6): 1429-1445.
 - An excellent text for future reference:
 - John H. Cochrane. (2001). Asset Pricing. Princeton, NJ: Princeton University Press.
 - First homework due at end of week three.

1. Money demand and money-in-the-utility-function models (Chapter 2 of Walsh). Three lectures. Money demand. Monetary neutrality and superneutrality. Speculative hyperinflations. Welfare costs of inflation.

• References:

- Robert E. Lucas, Jr. (1980). "Two Illustrations of the Quantity Theory of Money," *American Economic Review.* **70**(5): 1005-1014.
- Robert E. Lucas, Jr. (1988). "Money Demand in the United States: A
 Quantitative Review," Carnegie-Rochester Conference Series on Public Policy. 29(1): 137-167
- Robert E. Lucas, Jr. (2000). "Inflation and Welfare," *Econometrica*. **68**(2): 247-274.
- George T. McCandless Jr and Warren E. Weber. (1995). "Some Monetary Facts," Federal Reserve Bank of Minneapolis Quarterly Review. 19(3): 2–11.
- Maurice Obstfeld and Kenneth Rogoff. (1983). "Speculative Hyperinflations in Maximizing Models: Can We Rule Them Out?" Journal of Political Economy. 91(4): 675-687.
- 2. Cash-in-advance models (Chapter 3 of Walsh). <u>Four lectures</u>. Pricing nominal assets. Interest rates and inflation. Liquidity effects and asset market segmentation (if time permits).

• References:

- Fernando Alvarez, Andrew Atkeson, and Patrick J. Kehoe. (2002). "Money, Interest Rates, and Exchange Rates with Endogenously Segmented Markets," Journal of Political Economy. 110(1): 71-112.
- Fernando Alvarez, Robert E. Lucas, Jr and Warren E. Weber (2001). "Interest Rates and Inflation," *American Economic Review* **91**(2): 219-225.
- Alberto Giovannini and Pamela Labadie. (1991). "Asset Prices and Interest Rates in Cash-in-Advance Models," *Journal of Political Economy*. 99(6): 1215-1251.
- Robert J. Hodrick, Narayana Kocherlakota, and Deborah Lucas. (1991).
 "The Variability of Velocity in Cash-in-Advance Models," *Journal of Political Economy.* 99(2): 358-384.
- Robert E. Lucas, Jr. (1984). "Money in a Theory of Finance," Carnegie-Rochester Conference Series on Public Policy. **21**(2): 9–45.
- Robert E. Lucas, Jr and Nancy L. Stokey. (1987). "Money and Interest in a Cash-in-Advance Economy," *Econometrica*. 55(3): 491-513.
- Cyril Monnet and Warren E. Weber. (2001). "Money and Interest Rates," Federal Reserve Bank of Minneapolis Quarterly Review. **25**(4): 2–13.

- 3. Money and exchange rates. <u>Two lectures</u>. Open economy extensions of the flexible price approach. Two-country cash-in-advance models. Monetary approach to exchange rates. Evidence for nominal rigidities.
 - A classic reference for the flexible price approach:
 - Robert E. Lucas, Jr. (1982). "Interest Rates and Currency Prices in a Two-Country World," *Journal of Monetary Economics.* **10**: 335-360.
 - Concise textbook treatment:
 - Maurice Obstfeld and Kenneth Rogoff. (1996). Foundations of International Macroeconomics. Cambridge, MA: MIT Press. Chapter 8.
 - Second homework due at end of week seven.

PART III: MONETARY ECONOMICS WITH NOMINAL RIGIDITIES

1. Money and output in the short run — sticky price models (Chapter 5 of Walsh, Chapters 1 though 6 of Woodford). <u>Five lectures</u>. Goods market imperfections. Sticky prices. Phillips curves, natural rates, etc. Overview of "new Keynesian" macroeconomics. Interest rate rules. Reduced form and structural models.

• References:

- Olivier Blanchard and Nobuhiro Kiyotaki. (1987). "Monopolistic Competition and the Effects of Aggregate Demand," American Economic Review. 77(4): 647-666.
- Guillermo, A. Calvo. (1983). "Staggered Prices in a Utility-Maximizing Framework," *Journal of Monetary Economics.* **12**(3): 383-398.
- V.V. Chari, Patrick J. Kehoe, and Ellen R. McGrattan. (2000). "Sticky-Price Models of the Business Cycle: Can the Contract Multiplier Solve the Persistence Problem?" *Econometrica*. 68(5): 1151-1179.
- Richard Clarida, Jordi Galí, and Mark Gertler. (1999). "The Science of Monetary Policy: A New Keynesian Perspective," *Journal of Economic Literature*.
 37(4): 1661–1707.
- Richard Clarida, Jordi Galí, and Mark Gertler. (2000). "Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory," *Quarterly Journal of Economics*. 115(1): 147-180.
- John B. Taylor (1980). "Aggregate Dynamics and Staggered Contracts," Journal of Political Economy. 88(1): 1-23.
- John B. Taylor (1993). "Discretion Versus Policy Rules in Practice," Carnegie-Rochester Conference Series on Public Policy. 39: 195-214.

- 2. **Inflation dynamics** (Chapter 5 of Walsh, Chapter 3 of Woodford). <u>One lecture</u>. Empirical models of inflation dynamics.
 - References:
 - Jeff Fuhrer and George Moore. (1995). "Inflation Persistence," Quarterly Journal of Economics. **110**(1): 127-159.
 - Jordi Galí and Mark Gertler. (1999). "Inflation Dynamics: A Structural Econometric Analysis," Journal of Monetary Economics. 44(2): 195-222
- 3. Evidence on sticky prices (Chapter 3 of Woodford). One lecture. Empirical tests of price stickiness. Implications for structural models.
 - References:
 - Mark Bils and Peter J. Klenow. (2002). "Some Evidence on the Importance of Sticky Prices," NBER Working Paper No. 9069.
 - Mark Bils, Peter J. Klenow, and Oleksiy Kryvtsov. (2003). "Sticky Prices and Monetary Policy Shocks," Federal Reserve Bank of Minneapolis Quarterly Review. 27(1): 2-9
 - Argia M. Sbordone. (2002). "Prices and Unit Labor Costs: A New Test of Price Stickiness," *Journal of Monetary Economics.* **49**(2): 265-292.
 - Third homework due at end of week eleven.

PART IV: CENTRAL BANKING (if time permits)

- 1. **Central banks and incentives** (Chapter 8 of Walsh). <u>Two lectures</u>. Rules vs discretion. Time inconsistency. Reputation. Credibility. Commitment.
 - References:
 - Andrew Atkeson and Patrick J. Kehoe. (2001). "The Advantage of Transparent Instruments of Monetary Policy," NBER Working Paper No. 8681.
 - Robert J. Barro and David B. Gordon. (1983). "A Positive Theory of Monetary Policy in a Natural Rate Model," *Journal of Political Economy.* 91(4): 589-610.
 - David Backus and John Driffill. (1985). "Inflation and Reputation," American Economic Review. **75**(3): 530-538.
 - Finn E. Kydland and Edward C. Prescott. (1979). "Rules Rather than Discretion: The Inconsistency of Optimal Plans," *Journal of Political Economy*. 85(3): 473-492.
 - Nancy L. Stokey. (2002). "Rules versus Discretion' after Twenty-Five Years," in Mark Gertler and Kenneth Rogoff (eds). NBER Macroeconomics Annual. Cambridge, MA: MIT Press.
 - Fourth homework due at end of week twelve.