Tufts University
Department of Economics
Masters Program in Economics

MACROECONOMIC THEORY I

Economics 205
Autumn 2009
Professor M. Bianconi
111 Braker Hall
Ph: 617- 627 2677

E-mail: marcelo.bianconi@tufts.edu
URL: www.tufts.edu/~mbiancon
Office Hours: Tuesdays 11:30-1:15pm, or by appointment

Web Page for this course: www.tufts.edu/~mbiancon/ec205-09.html

General Objectives:

• This course is designed to give you the foundations of modern macroeconomics based on the microeconomic principles of rationality and optimization. We shall examine four basic aspects of an economic system:
(i) the time structure, static versus dynamic and intratemporal versus intertemporal substitution;
(ii) the information structure, symmetric versus asymmetric information;
(iii) the risk structure, certainty equivalents and risk;
(iv) the asset market structure, complete versus incomplete markets.
For example, one of the focus is on general equilibrium under competitive markets, with special attention to dynamic macroeconomic theory, i.e. the so-called "microeconomics (or price theory) with a subscript *t* ."

• We shall study in detail private consumption, private investment and capital accumulation, asset pricing and the structure of asset markets, monetary policy, and fiscal policy, with attention to the relationship between individual behavior and aggregate outcomes. In each specific issue, we shall try to start with some basic framework, and move to a more general equilibrium framework.

• As a technical note, this course will cover only *discrete* time dynamic economic models.

Course Requirements:

Two Mid-Term One Hour (+) Exams (25% each) – Wednesday, October 21; Wednesday, Nov 18
One Two-Hour Final Exam (35%) – Thursday, Dec 17, 12:00-2:00PM
Short Problem Sets (10%)
Class Participation and Attendance (5%)

{*Exam and Problem Sets Policy: There are no make-up exams. Problem set is due at a prearranged date; after the deadline, the problem set looses 20% of its value for each late day; problem sets handed in six or more days after the deadline have no value. All grades in this class are curved.*}

• I encourage you to work with groups of your fellow colleagues to study and solve problem sets. Group problem sets will be negotiated.

Main Texts:

Barro, Robert J. (1997) Macroeconomics. Fifth Edition or any edition. The MIT Press, Cambridge, MA. This is an intermediate macroeconomics undergraduate textbook that gives the essence of the classical approach to macroeconomics based on the microeconomic principles of rationality and optimization. It will be partially used as general reading and background.

* Bianconi, Marcelo (2003) Financial Economics, Risk and Information: An Introduction to Methods and Models. World Scientific Publishing Co., River Edge, NJ. This is a monograph that presents several of the methods and models examined in the course.

Ljungqvist, Lars and Thomas J. Sargent (2004, second edition; 2000 first edition) Recursive Macroeconomic Theory. The MIT Press, Cambridge, MA. The sequence to Sargent's Dynamic Macroeconomic Theory with up-to-date examples and applications of recursive methods. (Both editions are useful).

Obstfeld, Maurice and Kenneth Rogoff (1996) Foundations of International Macroeconomics. The MIT Press, Cambridge, MA. The graduate textbook in macroeconomics with focus on the international trade and finance aspects of the field. The book is a treatise on the subject and we may be used as background.

Sargent, Thomas J. (1987) Dynamic Macroeconomic Theory. Harvard University Press, Cambridge, MA. A classic macro text that presents the basics of some of the workhorse models in the dynamic general equilibrium area.

* Williamson, Stephen (2008) Macroeconomics, Third (or any) Edition. Addison-Wesley, Reading, MA. This is an intermediate textbook with some more advanced materials, mainly in the appendix, useful for this class. It will be used as general reading and background.

Required Readings (more readings will be tentatively assigned):

Blanchard, Olivier (2000) "What Do We Know About Macroeconomics that Fisher and Wicksell Did Not?" NBER Working Paper Series No 7550, February. An excellent survey of the scientific progress in macroeconomics.

Chari, V. V. and Patrick J. Kehoe (2006) "Modern macroeconomics in practice: how theory is shaping policy," *Journal of Economic Perspectives*, 20 (4), Fall 2006, 1-28. Also, Staff Report 376, Federal Reserve Bank of Minneapolis. To be handed out in class.

Mankiw, N. Gregory (2006) "The Macroeconomist as Scientist and Engineer." *Journal of Economic Perspectives*, 20 (4), Fall 2006, 29-46. To be handed out in class.
(http://www.economics.harvard.edu/faculty/mankiw/papers/Macroeconomist_as_Scientist.pdf)

Orwell, George (1946) "Politics and the English Language." A Collection of Essays, George Orwell. Harcourt Brace, New York, NY (1981). Essay about writing and transmitting ideas and thoughts in the English language. To be handed out in class.

Woodford, Michael (1999) "Revolution and Evolution in Twentieth-Century Macroeconomics." Unpublished Manuscript, Department of Economics, Princeton University, June. An essay about the state of knowledge in the macroeconomics filed and reflections on the recent history of macroeconomic thought.

Other References:

There will be other texts that I may (or may not) refer in my lectures, but are good references for your study in the masters program (this list is not exhaustive):

Adda, Jerome and Russell Cooper (2003) Dynamic Programming: Theory and Applications. The MIT Press, Cambridge: MA. This is an up-to-date graduate book on the dynamic programming methodology that is vastly used in modern macroeconomics.

Aghion, Philippe and Steven Durlauf (Eds.) (2005) Handbooks of Economic Growth. Volumes 1, 2, and 3; North Holland: Amsterdam. Solid, useful and most recent collection of surveys in the field.

Aghion, Philippe and Peter Howitt (1998) Endogenous Growth Theory. The MIT Press, Cambridge, MA. A recent textbook that analyzes the new endogenous growth theory with attention to research and development issues.

Altug, Sumru, Jagjit S. Chandra and Charles Nolan, Eds. (2003) Dynamic Macroeconomic Analysis: Theory and Policy in General Equilibrium. Cambridge University Press, Cambridge, UK. A collection of recent articles and surveys focusing on dynamic stochastic general equilibrium (DSGE) models.

Altug, Sumru and Pamela Labadie (1994) Dynamic Choice and Asset Prices. Academic Press, San Diego, CA. Basic dynamic macroeconomic theory.

Arrow, Kenneth J. and M. Kurz (1970) Public Investment, and Rate of Return, and Optimal Fiscal Policy. Johns Hopkins University Press for Resources for the Future, Inc. The classic on continuous time optimal control applications to macroeconomics, with attention to fiscal policy.

Auerbach, Alan J. and Laurence J. Kotlikoff (1987) Dynamic Fiscal Policy. Cambridge University Press, Cambridge. The life-cycle model examined theoretically and quantitatively in great detail, with attention to fiscal policy.

Azariadis, Costas (1993) Intertemporal Macroeconomics. Basil Blackwell, Cambridge, MA. A solid survey of modern macroeconomic theory, with a useful presentation of the technical tools.

Bagliano, Fabio-Cesare and Guiseppe Bertola (2007) Models for Dynamic Macroeconomics. Oxford University Press, NY, NY. A review of dynamic macroeconomic models.

Barro, Robert J. and Xavier Sala-i-Martin (1995) Economic Growth. McGraw Hill Book Co., New York, NY. A classic survey on the revival of growth theory in the last 15 years.

Barro, Robert J., (Ed.) (1989) Modern Business Cycle Theory. Harvard University Press, Cambridge, MA. Series of articles discussing the important macroeconomic theories of the time.

Blanchard, Olivier J. and Stanley Fischer (1989) Lectures on Macroeconomics. The MIT Press, Cambridge, MA. A classic textbook.

Chow, Gregory (1997) Dynamic Economics: Optimization by the Lagrangean Method. Oxford University Press, Oxford, UK. This is a solid advanced text that examines several existing applications in dynamic economics and finance using the Lagrangean technique as opposed to Dynamic Programming.

Cooley, Thomas (Ed.) (1995) Frontiers of Business Cycle Research. Princeton University Press, Princeton, NJ. Series of articles discussing the important contributions and advances of the real business cycle research program.

Deaton, Angus (1992) Understanding Consumption. Claredon Lectures in Economics, Claredon Press, Oxford. A primer on consumption theory.

Debreu, Gerard (1959) Theory of Value: An Axiomatic Analysis of Economic Equilibrium. Cowles Foundation Monograph 17, Yale University Press, New Haven, CT. The classic on general equilibrium analysis.

Dixit, Avinash K. (1990) Optimization in Economics, Second Edition. Oxford University Press, New York, NY. A very well written monograph which gives a useful introduction to some basic economic theories and problems.

Dixit, Avinash K. and Robert Pyndyck (1994) Investment Under Uncertainty. Princeton University Press, Princeton, NJ. The classic on the subject.

Duffie, Darrell (1988) Security Markets: Stochastic Models. Academic Press, New York, NY. An advanced text in finance theory and asset pricing.

Duffie, Darrell (1992) Dynamic Asset Pricing Theory. Princeton University Press, Princeton, NJ. A follow up to Duffie (1988), it is an advanced text in finance theory and asset pricing.

Evans, George and Seppo Honkapohja (2001) Learning and Expectations in Macroeconomics. Princeton University Press, Princeton, NJ. This advanced book presents the research agenda of the modern approach to expectation formation and learning activity by economic agents.

Farmer, Roger E. A. (1993) The Macroeconomics of Self-Fulfilling Prophecies. The MIT Press, Cambridge, MA. An useful survey of some of the main modern macroeconomic theories and applications.

Friedman, Benjamin M. and Frank H. Hahn (Eds.) (1990) Handbook of Monetary Economics, Volumes 1 and 2, North Holland: Amsterdam. Collection of surveys in the area of monetary economics.

Harris, Milton (1987) Dynamic Economic Analysis. Oxford University Press, New York, NY. More advanced, this is a monograph that gives a rigorous treatment of topics in capital theory and the dynamics of capital accumulation.

Heijdra, Ben J. and Frederick Van Der Ploeg (2002) Foundations of Modern Macroeconomics. Oxford University Press. Oxford UK. A recent and useful treatise in modern macroeconomics covering a wide range of topics and models.

Huang, Chi-Fu and Robert H. Litzenberger (1988) Foundations for Financial Economics. North Holland: Amsterdam. Classic on modern finance theory and asset pricing.

Judd, Kenneth L. (1999) Numerical Methods in Economics. The MIT Press, Cambridge, MA. A classic on simulation methods in economic analysis.

Lucas, Jr., Robert E. (1987) Models of Business Cycles. Basil Blackwell, Cambridge, MA. An in depth discussion of basic growth theory under uncertainty with special attention to the role of money.

Mas-Colell, Andreu, Michael Whinston and Jerry Green (1995) Microeconomic Theory. Oxford University Press, Cambridge, MA. The most modern synthesis of basic economic theory from a rigorous perspective, it has some of the main microeconomic applications. Highly recommended.

McCandless, George T. with Neil Wallace (1992) An Introduction to Dynamic Macroeconomic Theory: An Overlapping Generations Approach. Harvard University Press, Cambridge, MA. A low-level textbook the introduces the overlapping generations approach to macroeconomic theory.

Romer, David (1995) Advanced Macroeconomics. McGraw Hill Book Co., New York, NY. A well-written and popular textbook of modern macroeconomics with a variety of topics surveyed. (up to the third edition now).

Sargent, Thomas J. (1987) Macroeconomic Theory, Second Edition. Academic Press, San Diego, CA. The first Sargent textbook, has impressive presentations of technical tools and several discussions of useful topics.

Starr, Ross M. (1997) General Equilibrium Theory: An Introduction. Cambridge University Press, Cambridge, UK. A valuable and accessible introduction to abstract general equilibrium theory. Low to medium level.

Stokey, Nancy L., Robert E. Lucas, with Edward C. Prescott (1989) Recursive Methods in Economic Dynamics. Harvard University Press, Cambridge, MA. Advanced book on mathematical methods for economics. This is a book with an in depth presentation of the recursive approach to economics, I recommend it highly. Note: the Harris (1987) book is a "baby" version of some of the chapters in this book.

Sundaram, Rangarajam K. (1996) A First Course in Optimization Theory. Cambridge University Press, Cambridge, UK. This is a very good introduction to the mathematics of (mostly static) optimization used in economics.

Taylor, John and Michael Woodford (Eds.) (2000) Handbooks of Macroeconomics. Volumes 1, 2, and 3; North Holland: Amsterdam. Solid, useful and most recent collection of surveys in the field.

Turnovsky, Stephen J. (2000) Methods of Macroeconomic Dynamics, Second Edition The MIT Press, Cambridge, MA. A solid book presenting the research program of Turnovsky and many of his co-authors in the areas of monetary and fiscal policy. Several analytical technical tools are presented in great detail. Covers mostly continuous time macroeconomic theory.

Turnovsky, Stephen J. (1997) International Macroeconomic Dynamics. The MIT Press, Cambridge, MA. A solid book presenting the research program of Turnovsky and many of his co-authors in the areas of monetary and fiscal policy with attention to the international aspects. Several analytical technical tools are presented in great detail. Covers mostly continuous time macroeconomic theory.

Woodford, Michael (2003) Interest and Prices: Foundations of a Theory of Monetary Policy. Princeton University Press, Princeton, NJ. This is an important recent book. It presents a synthesis of one school of macroeconomic thought, the so-called New-Keynesian approach, and expands into new approaches of price level determination and interaction between monetary and fiscal policy.

- *General References:*

Eatwell, John, M. Milgate and P. Newman (1987) The New Palgrave Dictionary of Economics. The Macmillan Press, New York, NY. A good reference for some topics you where may want to learn the basics. Available at the Tisch Library.

Newman, Peter, M. Milgate, and J. Eatwell, Eds. (1992) The New Palgrave Dictionary of Money and Finance. Stockton Press, New York, NY. A good reference for some topics here you may want to learn the basics. Available at the Tisch Library.

- *An important annual publication is the* NBER(National Bureau of Economic Research) Macroeconomics Annual; various editors, 1986-present. Available at the library.

• *Another important publication is the* NBER Working Papers Series; various authors, 1981-present. Available at the library and on the web: www.nber.org

• *Software Reference: Available at the Tisch Library:*

Hamilton, Lawrence H. (2007) Statistics with STATA. Thomson, Belmont, CA.

Wolfram, Stephen (1996) The Mathematica Book. Cambridge University Press, Cambridge, UK.

COURSE OUTLINE (*Tentative*)

• I provide a brief and restricted set of references to articles in professional journals in the course outline below. Many of the references to professional articles are available in the books referred. Time permitting, we may examine some of those articles, and possibly others, more closely.
Note: Students should be familiar with the material in Bianconi (2003), Chapter 1 (1.1-1.5), and read the Notes on the Literature at the end of each referred chapter.

0. ***INTRODUCTION*** *(~ one class)*

(i) **Macroeconomic Models and Data**:
Barro (1997), Chapters 7 and 8;
Phelps (1990);
Dornbusch, Fischer and Bossons (1987);
Stock and Watson (1999);
Mankiw (2006); Chari and Kehoe (2006).

I. ***EQUILIBRIUM REAL MACROECONOMIC THEORY WITH FULL INFORMATION: LABOR SUPPLY****, and some fundamental papers (this list is not exhaustive) (about 1 1/2 weeks ~ 3 classes)*

(i) **Static General Equilibrium Theory and Intratemporal Substitution - "Robinson Crusoe" and Pareto Optimality**:
Bianconi (2003), Chapter 6 (6.1-6.2);
Barro (1997), Chapter 2;
Starr (1997), Chapters 1.2 and 1.4;
Farmer (1993), Chapter 4;
Mas-Colell, Whinston and Green (1995), pages 549-552;
Williamson (2008), Chapters 4 and 5 and Appendix.
[Becker (1965)].

(ii) **Static General Equilibrium Theory - "Robinson Crusoe" with Indivisibilities:**
Bianconi (2003), Chapter 6 (6.2-6.6);
Mas-Colell, Whinston and Green (1995), pages 170-175;
Kreps (1990), Chapter 3;
[Hansen (1985), Rogerson (1988); Townsend (1987), Bianconi (2001), Ljungqvist and Sargent (2007)].

Becker, Gary (1965) "A Theory of the Allocation of Time." Economic Journal, 75, 493-517.

Bianconi, M. (2001) "Heterogeneity, Efficiency and Asset Allocation with Endogenous Labor Supply: The Static Case," The Manchester School, 69(3), June, 253-268.

Chari, V. V. and Patrick J. Kehoe (2006) "Modern macroeconomics in practice: how theory is shaping policy," *Journal of Economic Perspectives*, 20 (4), Fall 2006, 1-28. Also, Staff Report 376, Federal Reserve Bank of Minneapolis.

Dornbusch, Rudiger, Stanley Fisher and John Bossons, Eds. (1987) Macroeconomics and Finance: Essays in Honor of Franco Modigliani. The MIT Press, Cambridge, MA.

Hansen, Gary D. (1985) "Indivisible Labor and the Business Cycle". Journal of Monetary Economics, 16, 309-327.

Ljungqvist, Lars & Sargent, Thomas J, (2007) "Do Taxes Explain European Employment? Indivisible Labour, Human Capital, Lotteries and Savings," CEPR Discussion Papers 6196, C.E.P.R. Discussion Papers.

Mankiw, N. Gregory (2006) "The Macroeconomist as Scientist and Engineer." *Journal of Economic Perspectives*, 20 (4), Fall 2006, 29-46. (http://www.economics.harvard.edu/faculty/mankiw/papers/Macroeconomist_as_Scientist.pdf)

Phelps, Edmund S. (1990) Seven Schools of Macroeconomic Thought. The Arne Ryde Memorial Lectures, Claredon Press. Oxford, UK.

Rogerson, Richard (1988) "Indivisible Labor, Lotteries and Equilibrium". Journal of Monetary Economics, 21, 3-16.

Stock, James H. and Watson, Mark W.(1999) "Business cycle fluctuations in US macroeconomic time series," in: J. B. Taylor & M. Woodford (ed.), Handbook of Macroeconomics, edition 1, volume 1, chapter 1, pages 3-64; Elsevier.

Townsend, Robert M. (1987) "Arrow-Debreu Programs as Microfoundations of Macroeconomics". Bewley, Truman F., Editor, Advances in Economic Theory; Fifth World Congress. Cambridge University Press, Cambridge, UK.

II. ***EQUILIBRIUM REAL MACROECONOMIC THEORY WITH FULL INFORMATION: INTRODUCTION TO DYNAMICS*** *, and some fundamental papers (this list is not exhaustive) (about 3 and 1/2 weeks ~ 7 classes)*

(i) **Simple Intertemporal Allocations - The Two-Period Case in Partial Equilibrium**:
Barro (1997), Chapter 3;
Obstfeld and Rogoff (1996), Chapter 1.1;
Williamson (2008), Chapter 8 and Appendix

(ii) **Real Investment, Competitive Equilibrium and Pareto Optimality - The Two-Period Case**:
Barro (1997), Chapter 9;
Bianconi (2008, 2009);
Manuelli (2007), section 1.3;
Obstfeld and Rogoff (1996), Chapter 1.2;
Williamson (2008), Chapter 9 and Appendix

(iii) **Dynamic Programming and Blackwell's Contraction Mapping Theorem - Optimal Economic Growth (Exogenous)**:
Bianconi (2003), Chapter 1 (1.7)
Barro (1997), Chapter 11;
Obstfeld and Rogoff (1996), Chapter 7.1-7.2;
Sargent (1987), Chapter 1.1-1.3 and Chapter 1.4;
Kreps (1990), Appendix II;
Ljungqvist and Sargent (2000), Chapter 11;
Williamson (2008), Chapter 6 and Appendix
[Solow(1956); Prescott (1988)].

(iv) **Time Consistency and Preferences: Hyperbolic Discounting - Optimal Economic Growth (Exogenous)**
Laibson (1997);
Harris and Laibson (2001).

MID-TERM EXAM – Wednesday, OCTOBER 21 – Covers material from I and part of II to be determined

---

Bianconi, M. (2009) Transfer Programs under Alternative Insurance Schemes and Liquidity Constraints," forthcoming Journal of International Trade and Economic Development, available at web page.

Bianconi, M. (2008) "Heterogeneity, Adverse Selection and Valuation with Endogenous Labor Supply," International Review of Economics and Finance. 17, 113-126, 2008.

Harris, Christopher and David Laibson (2001) "Dynamic Choices of Hyperbolic Consumers." Econometrica, 69, 935-957.

Laibson, David (1997) "Golden Eggs and Hyperbolic Discounting." Quarterly Journal of Economics, 62, 443-478.

Prescott, Edward C. (1988) "Robert M. Solow's Neoclassical Growth Model: An Influential Contribution to Economics". Scandinavian Journal of Economics 90, 7-12.

Solow, Robert M. (1956) “A Contribution to the Theory of Economic Growth.” Quarterly Journal of Economics, 70, 65-94.

III. ***EQUILIBRIUM DYNAMIC REAL MACROECONOMIC THEORY WITH FULL INFORMATION: STOCHASTIC GROWTH AND A PRIMER FROM MALTHUS TO ROMER***, *and some fundamental papers (this list is not exhaustive) (about 1 week ~ 2 classes)*

(i) **Stochastic Growth (Exogenous)**:
Bianconi (2003), Chapter 1 (1.8);
Sargent (1987), Chapters 1.6-1.7;
Obstfeld and Rogoff (1996), Chapter 7.4;
Altug and Labadie (1994), Chapter 4.1;
[Campbell (1994)];

(ii) **Stochastic Growth (Exogenous)** - **Real Business Cycles, Calibration and Costs of Economic Fluctuations**:
Blanchard and Fischer (1989), Chapters 7.1-7.2;
McCallum (1989); Lucas (1987), Chapter 1-2;
Ljungqvist and Sargent (2000), Chapter 3, page 46;
Cooley and Prescott (1995), Chapter 1;
[Eichenbaum (1991); King et al (1988); Long and Plosser (1983); Kydland and Prescott (1981); Stadler (1994); Summers (1986); Christiano (1988); Cochrane (1994)]

Campbell, John Y. (1994) “Inspecting the Mechanism: An Analytical Approach to the Stochastic Growth Model.” Journal of Monetary Economics, 33, 463-506.

Christiano, Lawrence J. (1988) "Why Does Inventory Investment Fluctuate So Much?. Journal of Monetary Economics, 21, 247-280.

Cochrane, John (1994) “Shocks.” Carnegie-Rochester Conference Series on Public Policy, 41, 295-364.

Cooley, Thomas and Edward C. Prescott (1995) "Economic Growth and Business Cycles". In Cooley, Thomas (Ed.) Frontiers of Business Cycle Research. Princeton University Press, Princeton, NJ.

Eichenbaum, Martin (1991) "Real Business-Cycle Theory: Wisdom or Whimsy?". Journal of Economic Dynamics and Control, 15, 4, 607-626.

King, Robert G., Charles I. Plosser, and Sergio T. Rebelo (1988) "Production, Growth, and Business Cycles: I. The Basic Neoclassical Growth Model". Journal of Monetary Economics, 21, 195-232.

King, Robert G., Charles I. Plosser, and Sergio T. Rebelo (1988) "Production, Growth, and Business Cycles: II. New Directions". Journal of Monetary Economics, 21, 309-341.

Kydland, Finn E. and Edward C. Prescott (1982) "Time to Build and Aggregate Fluctuations". Econometrica, 50, 6, 1345-1370.

Long, John B. and Charles I. Plosser (1983) "Real Business Cycles". Journal of Political Economy, 91, 1, 39-69.

McCallum, Bennett T. (1989) "Real Business Cycle Models". Barro, Robert J., Editor, Modern Business Cycle Theory. Harvard University Press, Cambridge, MA.

Prescott, Edward C. (1986) "Theory Ahead of Business Cycle Measurement". Federal Reserve Bank of Minneapolis Quarterly Review, 10, 9-22.

Stadler, George W. (1994) "Real Business Cycles". Journal of Economic Literature, 32, 1750-1783.

Summers, Lawrence (1986) "Some Skeptical Observations of Real Business Cycle Theory". Federal Reserve Bank of Minneapolis Quarterly Review, 10, 23-27.

IV. ***GENERAL EQUILIBRIUM VALUATION AND INSURANCE***, *and some fundamental papers (this list is not exhaustive) (~ 2 weeks – 4 classes)*

(i) **Static Valuation with Full Information: Complete versus Incomplete Markets**
Bianconi (2003), Chapter 4 (e.g. Notes on the Literature);

(ii) **Dynamic Valuation with Full Information: General Equilibrium and Asset Pricing under Uncertainty with Complete Markets**
Bianconi (2003), Chapter 7 (7.4-7.10); Bianconi (2003);
Sargent (1987), Chapters 1.6-1.7, Chapter 3;
Obstfeld and Rogoff (1996), Chapters 5.1-5.4;
Lucas (1987), Chapters 3-5;
Deaton (1992), Chapters 1-3;
Altug and Labadie (1994), Chapter 1;
Ljungqvist and Sargent (2000), Chapter 7;
Obstfeld and Rogoff (1996), Chapter 5;
[Hansen and Singleton (1983); Svensson (1988); Campbell (1998)].

(iii) **Dynamic Valuation with Full Information: Excess Returns**
Bianconi (2003), Chapter 7 (7.11-7.12);
Sargent (1987), Chapters 1.6-1.7;
Altug and Labadie (1994), Chapter 1;
Ljungqvist and Sargent (2000), Chapter 10;
Cochrane (2000), Chapter 21
[Barro (2005, 2009), Mehra and Prescott (1985), Hansen and Jagannathan (1991), Weil (1991)].

MID-TERM – Wed, NOVEMBER 18 – Covers material from I to parts of IV to be determined

---

Barro, Robert (2009) "Rare Disasters, Asset Prices and Welfare Costs." American Economic Review, 99, 243-264.

Barro, Robert (2005) "Rare Disasters and Asset Prices in the 20th Century." Working Paper, Harvard University: Cambridge: MA (http://www.economics.harvard.edu/faculty/barro/papers/equity%20premium%2012-1-05.pdf).

Bianconi, M. (2003) "Private Information, Growth and Asset Prices with Stochastic Disturbances," International Review of Economics and Finance, 12, 1-24.

Campbell, John Y. (1998) "Asset Prices, Consumption and the Business Cycle." NBER Working Papers Series No. 6485, March. In Taylor, John and Michael Woodford (Eds.) Handbook of Macroeconomics. Volumes 1, 2, and 3; North Holland: Amsterdam.

Hansen, Lars P. and Kenneth Singleton (1983) "Stochastic Consumption, Risk Aversion, and the Temporal Behavior of Asset Returns". Journal of Political Economy, 91, 249-265.

Hansen, Lars P. and Ravi Jagannathan (1991) "Implications of Security Market Data for Models of Dynamic Economies". Journal of Political Economy, 99, 225-262.

Mehra, Rajnish and Edward C. Prescott (1985) "The Equity Premium: A Puzzle". Journal of Monetary Economics, 15, 145-162.

Svensson, Lars E. O. (1988) "Trade in Risky Assets." American Economic Review, 78, 375-394.

Weil, Phillipe (1991) "The Equity Premium Puzzle and the Risk-Free Rate Puzzle." Journal of Monetary Economics, 24, 401-421.

V. ***INTRODUCTION TO MONETARY AND FISCAL POLICY IN GENERAL EQUILIBRIUM****, and some fundamental papers (this list is not exhaustive) (about 2 weeks ~ 4 classes)*

(i) **Classical Price Level Determination and Market Clearing Monetary Models**:
Bianconi (2003), Chapter 7 (7.13-7.15);
Barro (1997), Chapters 7 and 8;
Sargent (1997), Chapters 4 and 5;
Blanchard and Fischer (1989), Chapter 4;
Ljungqvist and Sargent (2000), Chapter 17;
Williamson (2008), Chapter 10 and Appendix.
[Abel (1985); Stockman (1981); Woodford (1990); Bianconi (1992)].

(ii) **Basics of Fiscal Policy, Time Consistency and the Government Budget Constraint:**
Fisher (1980);
Barro (1997), Chapters 12-14;
Sargent (1987), Chapter 6;
Ljungqvist and Sargent (2000), Chapter 9;
Williamson (2008), Chapter 8 and Appendix
[Barro (1974, 1989); Baxter and King (1993); Chamley (1986); Cogan, John F. & Cwik, Tobias & Taylor & Wieland(2009)].

FINAL EXAM – Thursday, DECEMBER 17 – Covers all course material

---

Abel, Andrew (1985) "Dynamic Behavior of Capital Accumulation in a Cash-in Advance Economy". Journal of Monetary Economics, 16, 55-71.

Barro, Robert J. (1974) "Are Government Bonds Net Wealth?". Journal of Political Economy, 82, 1095-1117.

Barro, Robert J. (1989) “The Neoclassical Approach to Fiscal Policy.” In Barro, R. J. (Ed.) Modern Business Cycle Theory, Harvard University Press, Cambridge, MA.

Baxter, Marianne and Robert King (1993) "Fiscal Policy in General Equilibrium". American Economic Review, 83, 315-334.

Bianconi, M. (1992) "Monetary Growth Innovations in a Simple Cash-in-Advance Asset-Pricing Model". European Economic Review, 36, 1501-1521.

Chamley, Christophe (1986) "Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives". Econometrica, 54, 607-622.

Cogan, John F. & Cwik, Tobias & Taylor, John B. & Wieland, Volker (2009)"New Keynesian versus old Keynesian government spending multipliers," CEPR Discussion Papers 7236, C.E.P.R. Discussion Papers.

Fischer, Stanley (1980) "Dynamic Inconsistency, Cooperation and the Benevolent Dissembling Government". Journal of Economic Dynamics and Control, 2, 93-107.

Stockman, Alan C. (1981) "Anticipated Inflation and the Capital Stock in a Cash-in-advance Economy". Journal of Monetary Economics, 8, 387-394.

Woodford, Michael (1990) "The Optimum Quantity of Money". Friedman, Benjamin M. and Frank H. Hahn (Eds.) Handbook of Monetary Economics, Volume 2, Chapter 20. North Holland: Amsterdam.

M. Bianconi; September 2009