Macroeconomics, 4th module, academic year 2002-2003

Components of the Aggregate Demand and Financial Markets

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"Zvi Grilliches taught me how to do economic research, which basically comes down to two things: 1) know your data, and 2) keep searching."

Olivier Blanchard at the first Zvi Grilliches memorial lecture, New Economic School, November 2001

The motivation of the course.

The goal of the previous, third module, was to introduce the basic methodological tools for analyzing dynamic models commonly used in macroeconomics. In this fourth module, we will use this methodology to analyze components of the aggregate demand (such as consumption and investment) and the behavior of financial markets in greater detail. To an extent, most of the theories studied here should be familiar already from the traditional Ramsey-Cass model. Hence, we will concentrate on their modern extensions and empirical relevance. Particular emphasis will be made on studying decisions made under uncertainty.

Primary texts.

Romer, David, Advanced Macroeconomics. New York: McGrow-Hill, 1996. (**further Romer**)

Blanchard, Olivier J. and Stanley Fischer, Lectures on Macroeconomics. Cambridge, MA: MIT Press, 1989 (**further BF**)

Readings (articles and book chapters) are provided below. The starred (*) readings are assigned and it will be assumed at the exam that the students have read them. Other readings are suggested, and are listed in the order of priority.

Grading system.

There will be two exams during the course: a midterm, which will take place in section during the fourth week, and the final exam. The course grade will be determined 30% from the midterm and 70% from the final. There will also be four mandatory homework assignments during the course, which can influence the final grade.

There will be no make-up for the midterm exam. If a student needs to miss the mid-term due to an emergency, this emergency needs to be documented (if possible, prior to the exam), and 100% of the grade will then be determined from the final examination.

Tentative schedule.

I. **From Keynes to Lucas: the rational expectations revolution.** (1 lecture)

*Romer, 5.2
Mankiw N. Gregory, "A Quick Refresher Course in Macroeconomics," JEL 28 (1990)
Blanchard, Olivier, "What Do we Know about Macroeconomics That Fisher and Wicksell Did Not?" QJE 115(4), 2000.
Friedman, Milton, "The Role of Monetary Policy," AER 58 (1968)
Lucas, Robert, "Econometric Policy Evaluation: A Critique," CR 1 (1976).

II. **Modeling rational expectations** (1 lecture)

*Bennett T. McCallum, Monetary Economics: Theory and Policy (New York: Macmillan Publishing Company, 1989), Ch 8.
BF, Appendix to Ch. 5.
Blanchard, Olivier J., and Kahn, Charles M., "The Solution of Linear Difference Models under rational Expectations," Ema 48, 1980.

III. **Consumption** (4 lectures)

A. Introduction to Life-Cycle and Permanent Income Hypotheses

*Romer, Ch. 7.1
Franco Modigliani, "Life Cycle, Individual Thrift, and the Wealth of Nations,: AER 76 (1986)

B. Empirical puzzles in consumption: excess smoothness and excess sensitivity.

*Romer, Ch. 7.2-7.4
Hall, Robert E, "Stochastic Implications of the Life Cycle – Permanent Income Hypothesis: Theory and Evidence," JPE 96, 1978.
John Campbell and N. Gregory Mankiw, "Consumption, Income, and Interest Rates: Reinterpreting the Time Series Evidence," in Olivier Blanchard and Stanley Fischer, eds., NBER Macroeconomic Annual 1989. Cambridge, MA: MIT Press, pp. 185-216.
Deaton, Angus, Understanding Consumption (Oxford: Clarendon Press, 1992)

C. Extensions: Precautionary savings, hyperbolic discounting, and habit formation.

*Romer, Ch. 7.6
*BF, Ch. 6.2
Caballero, Ricardo, "Consumption Puzzles and Precautionary Savings," JME 25, 1990, pp. 113-36.
George-Marios Angeletos, David Laibson, Andrea Repetto, Jeremy Tobacman, and Stephen Weinberg, "The Hyperbolic Buffer Stock Model: Calibration, Simulation, and Empirical Evaluation," JEP, 15(3), Summer 2001, 47-68.
Dynan, Karen E., "Habit Formation in Consumer Preferences: Evidence from Panel Data," AER 90(3), June 2000, pp. 391-406

IV. **Investment** (4 lectures)

A. Neoclassical model, convex adjustment costs

*Romer, Ch. 8.1-8.5
Abel, Andrew B. and Olivier Blanchard, "The Present Value of Profits and Cyclical Movements in Investment," Ema 54(2), March 1986, pp. 249-74.

B. Non-convex adjustment costs

*Romer, Ch. 8.6
Andrew B. Abel and Janice C. Eberly, "Investment and q with Fixed Costs: An Empirical Analysis," unpublished manuscript, the Wharton School of Business, University of Pennsylvania, 2001.
Caballero, Ricardo, "Aggregate Investment," Handbook of Macroeconomics, edited by J. Taylor and M. Woodford, North Holland, 1999, pp. 813-62.
Andrew B. Abel and Janice C. Eberly, "A Unified Model of Investment Under Uncertainty," AER 1994.

C. Credit rationing

*BF, Ch. 9.6
Joseph E. Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information," AER 71 (June 1981). Reprinted in New Keynesian Economics, N. Gregory Mankiw and David Romer, eds.
Hubbard, R. Glenn, "Capital-Market Imperfections and Investment," JEL 36, March 1998, pp. 193-225.

D. International investment and sovereign debt (time permitting)

*Obstfeld, Maurice and Kenneth Rogoff, Foundations of International Macroeconomics, The MIT Press, 1996, Ch. 1.2, 6.2
Agenor, Pierre-Richard and Peter J. Montiel, Development Macroeconomics, Princeton University Press, 1996, Ch. 13.

E. Informational externalities and search (time permitting)

Andrew Caplin and John Leahy, "Miracle on Sixth Avenue: Information Externalities and Search," Economic Journal 108, January 1998, pp.60-74.

V. **Financial and credit markets.** (4 lectures)

A. CAPM and the Consumption CAPM

*Romer, Ch. 7.5
*BF, Ch. 10.1
Mehra, Rajnish and Prescott, Edward C., "The Equity Premium: a Puzzle," JME 15(2), March 1985, pp. 145-61.
Kocherlakota, Narayana R., "The Equity Premium: It's Still a Puzzle," JEL 34(1), March 1996, pp. 42-71.

B. The Lucas asset-pricing model

*BF, Ch. 10.1

C. Stock market valuation; bubbles.

*Shiller, Market Volatility (Cambridge, MA: MIT Press, 1989), Ch. 4
*BF, Ch. 5.2
Campbell, Lo, and MacKinlay, The Econometrics of Financial Markets (Princeton, NJ: Princeton University Press, 1997) , Ch. 7

D. The term structure of interest rates

*Romer, Ch. 9.3
Mankiw, "The Term Structure of Interest Rates Revisited," BPEA (1:1986)
Mankiw and Jeffrey Miron, "The Changing Behavior of the Term Structure of Interest Rates," QJE 101 (1986)

Abbreviations:

AER = American Economic Review
BPEA = Brookings Papers on Economic Activity
CR = Carnegie-Rochester Series on Public Policy
Ema = Econometrica
JEL = Journal of Economic Literature
JEP = Journal of Economic Perspectives
JME = Journal of Monetary Economics
JPE = Journal or Political Economy
QJE = Quarterly Journal of Economics