Economics 803.01

Advanced Macroeconomic Theory

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Office Hours: W 3:00-5:00

Class Hours: WF 1:30

Class Room: Carney 011

This course covers selected topics in macroeconomic theory. In particular, we will focus on growth. The study of long-term economic performance has generated a vast literature, in which economic growth is linked to capital accumulation, technological innovation and diffusion, population dynamics, government and institutions, and other important economic, political and social variables. We will study some recent contributions to this active and stimulating area of research.

There will be a midterm exam, worth 40% of the course grade, and a final exam, worth 60% of the course grade. Homework assignments will be distributed: cooperation and study groups are encouraged.

Textbook: Robert J. Barro and Xavier Sala-i-Martin, *Economic Growth*, New York: McGraw-Hill, 1995 [BSM].

1. Introduction

BSM [Barro and Sala-i-Martin, *Economic Growth*], Introduction (pp. 1-13).

G. M. Grossman and E. Helpman (1992), *Innovation and Growth in the Global Economy*, Cambridge, The MIT Press, Chapter I (pp. 1-18).

R. Solow (1994), "Perspectives on Growth Theory", *Journal of Economic Perspectives* 8, pp. 45-54.

P. Romer (1994), "The Origins of Endogenous Growth", *Journal of Economic Perspectives* 8, pp. 3-22.

R. J. Barro (1997), *Determinants of Economic Growth.*. A Cross-Country Empirical Study. Cambridge, The MIT Press, Preface and Chapter 1, pp. 1-8.

2. Neoclassical Growth Models

a. The Solow Model

BSM 1.1 and 1.2.

R. Solow (1956), "A Contribution to the Theory of Economic Growth", *Quarterly Journal of Economics*, 70, pp. 65-94.

E. Phelps (1961), "The Golden Rule of Accumulation: A Fable for Growthman", *American Economic Review*, 51, pp. 638-643.

N. G. Mankiw, D. Romer, and D. N. Weil (1992), "A Contribution to the Empirics of Economic Growth", *Quarterly Journal of Economics*, 107, pp. 407-437.

b. The Ramsey -Cass -Koopmans Model

BSM, Chapter 2.

O.J. Blanchard and S. Fischer, *Lectures on Macroeconomics*, Cambridge: MIT Press, 1989, Chapter 2.

c. Growth Accounting and Convergence

Growth Accounting

BSM, 10.4

R. Solow (1957), "Technical Change and the Aggregate Production Function", *Review of Economics and Statistics*, August, 39, pp. 312-20.

A. Young (1995), "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience", *Quarterly Journal of Economics*, August, 110, pp. 641-680.

Convergence

BSM, 11.1-11.4.

R.J. Barro and X. Sala-i-Martin (1992), "Convergence", *Journal of Political Economy*, April, 100(2), pp. 223-51.

R.J. Barro (1997), *Determinants of Economic Growth. A Cross-Country Empirical Study.* Cambridge, The MIT Press, Chapter 1 ("Economic Growth and Convergence").

X. Sala-i-Martin (1996), "The Classical Approach to Convergence Analysis", *Economic Journal*, July, 106, pp. 1019-36.

D. Quah (1993), "Galton's Fallacy and Tests of the Convergence Hypothesis", *Scandinavian Journal of Economics*, 95 (4), pp. 427-443.

O. Galor (1996), "Convergence? Inferences from Theoretical Models", *Economic Journal*, July, 106, pp.1056-69

L. Pritchett (1997), "Divergence, Big Time", *Journal of Economic Perspectives*, Summer, 11 (3), pp. 3-17.

C. I. Jones (1997), "On the Evolution of World Income Distribution", *Journal of Economic Perspectives*, Summer, 11(3), pp. 19-36.

3. Endogenous Growth Models

a. AK Models

BSM, 1.3; 4.1 and 4.2.

S. Rebelo (1991), "Long-Run Policy Analysis and Long-Run Growth", *Journal of Political Economy*, 99, pp. 500-521.

L.E. Jones and R. Manuelli (1990), "A Convex Model of Equilibrium Growth: Theory and Policy Implications", *Journal of Political Economy* 98, pp. 1008-1038.

b. Learning by Doing, Knowledge Spillovers, and Human Capital

BSM, Section 4.3; Chapter 5.

P. Romer (1986), "Increasing Returns and Long-Run Growth", *Journal of Political Economy* 94, pp. 1002-1037.

R.E. Lucas (1988), "On the Mechanics of Economic Development", *Journal of Monetary Economics* 22, pp. 3-42.

C.B. Mulligan and X. Sala-i-Martin (1993), "Transitional Dynamics in Two-Sector Models of Endogenous Growth", *Quarterly Journal of Economics* 108, pp. 737-773.

A. Young (1993), "Invention and Bounded Learning by Doing", *Journal of Political Economy*, 101, pp. 443-72.

c. R&D and Technological Change

G.M. Grossman and E. Helpman (1994), "Endogenous Innovation in the Theory of Growth", *Journal of Economic Perspectives* 8, pp. 23-44.

Models of Expanding Product Variety

BSM, Chapter 6.

P. Romer (1990), "Endogenous Technological Change", *Journal of Political Economy* 98, pp. S71-S102.

Models of Rising Product Quality

BSM, Chapter 7.

G. M. Grossman and E. Helpman (1991), "Quality Ladders in the Theory of Economic Growth", *Review of Economic Studies*, January, 58(1), pp.43-61.

P. Aghion and P. Howitt (1992), "A Model of Growth through Creative Destruction", *Econometrica* 60, pp. 323-351.

d. The Diffusion of Technology

BSM, Chapter 8.

E. Brezis, P. Krugman, and D. Tsiddon (1993), "Leapfrogging in International Competition: A Theory of Cycles in National Technological Leadership", *American Economic Review* 83, pp. 1211-1219.

G.M. Grossman and E. Helpman (1995), "Technology and Trade", Chapter 25 in *Handbook of International Economics*, Volume III, eds. G.M. Grossman and K. Rogoff, Amsterdam: Elsevier Science Publishers, pp. 1279-1337.

4. Population and Growth

BSM, Chapter 9.

R.J. Barro and G.S. Becker (1989), "Fertility Choice in a Model of Economic Growth", *Econometrica*, 57, pp. 481-501.

O. Galor and D.N. Weil (1993), "The Gender Gap, Fertility, and Growth", *American Economic Review*, 86, pp. 374-387.

M. Kremer (1993), "Population Growth and Technological Change: One Million B.C. to 1990", *Quarterly Journal of Economics*, 108, pp. 681-716.

5. Institutions, Politics and Economic Performance

a. Government and Growth

BSM, Chapter 4, Section 4.4.

R. J. Barro (1990), "Government Spending in a Simple Model of Endogenous Growth", *Journal of Political Economy*, 98, pp. S103-S125.

R.J. Barro and X. Sala-i-Martin (1992), "Public Finance in Models of Economic Growth", *Review of Economic Studies*, 59, pp. 645-661.

A. Alesina and D. Rodrik (1994), "Distributive Policy and Economic Growth", *Quarterly Journal of Economics*, pp. 465-90.

T. Persson and G. Tabellini (1992), "Growth, Distribution, and Politics", in A. Cuckierman, C. Hercowitz and L. Leiderman, (eds.), *The Political Economy of Business Cycles and Growth*, Cambridge: MIT Press

A. Alesina and R. Perotti (1994), "The Political Economy of Growth: A Critical Survey of the Recent Literature", World Bank Economic Review, 8(3), September, pp. 351-71.

R.J. Barro (1996), "Democracy and Growth", Journal of Economic Growth, pp. 1-27.

R.J. Barro (1997), *Determinants of Economic Growth. A Cross-Country Empirical Study*, Cambridge, The MIT Press, Chapter 2 ("The Interplay between Economic and Political Development").

b. Rent-Seeking, Allocation of Talent and Growth

W. J. Baumol (1990), "Entrepreneurship: Productive, Unproductive, and Destructive", *Journal of Political Economy*, 98, pp. 893-921.

K.M. Murphy, A. Shleifer and R.W. Vishny (1991), "The Allocation of Talent: Implications for Growth", *Quarterly Journal of Economics*, May, 106, pp. 503-30.

K.M. Murphy, A. Shleifer and R.W. Vishny (1993), "Why is Rent-Seeking So Costly to Growth?", *American Economic Review*, May, 83, pp. 409-414.

P. Mauro (1996), "Corruption and Growth", *Quarterly Journal of Economics*, pp. 681-712.

c. Economic and Political Integration

P. Bolton, G. Roland and E. Spolaore (1996), "Economic Theories of the Integration and Break-up of Nations", *European Economic Review*, 40, pp. 697-705.

A. Alesina and E. Spolaore (1997), "On the Number and Size of Nations", *Quarterly Journal of Economics*, November.

E. Spolaore (1995), "Enlargement Dynamics in Political and Economic Unions", Yrjio Jahnsson European Integration Lectures, 7, Helsinki.

A. Alesina, E. Spolaore and R. Wacziarg (1997), "Economic Integration and Political Disintegration", NBER Working Paper.

d. Economic Policy Reform

D. Rodrik (1996), "Understanding Economic Policy Reform", *Journal of Economic Literature*, 34, pp. 9-41.

A. Alesina and A. Drazen (1991), "Why Are Stabilizations Delayed?", *American Economic Review*, 81, pp. 1170-1188.

R. Fernandez and D. Rodrik (1991), "Resistance to Reform: Status Quo Bias in the Presence of Individual-Specific Uncertainty", *American Economic Review*, 81, pp. 1146-1155.

R. H. Bates and A. Krueger (1993), *Political and Economic Interactions in Economic Policy Reform*, Oxford: Blackwell.

6. Growth Theory and Empirical Growth Research

BSM, Chapters 12

R.J. Barro (1997), *Determinants of Growth. A Cross-Country Empirical Study*, Cambridge, The MIT Press.

R.J. Barro (1991), "Economic Growth in a Cross Section of Countries", *Quarterly Journal of Economics*, May, 106, pp.407-44.

R. Levine and D. Renelt (1992), "A Sensitivity Analysis of Cross-Country Growth Regressions", *American Economic Review*, September, 82, pp. 942-63.

X. Sala-i-Martin (1997), "I Just Ran Four Million Regressions", *American Economic Review*, May, 87(2), pp. 178-183.

C.I. Jones (1995), "R&D-Based Models of Economic Growth", *Journal of Political Economy*, 103 (4), pp. 759-784.

C. I. Jones (1995), "Time Series Tests of Endogenous Growth Models", *Quarterly Journal of Economics*, May, 105(2), pp.495-526.

R. Hall and C. I.Jones (1996), "The Productivity of Nations", NBER Working Paper No. 5812.

J. Sachs and A. Warner (1997), "Fundamental Sources of Long-Run Growth", *American Economic Review*, May, 87(2), pp. 184-188.

F. Caselli, G. Esquivel, and Fernando Lefort (1996), "Reopening the Convergence Debate: A New Look at Cross-Country Growth Empirics", *Journal of Economic Growth*, September 1(3), pp.363-389.