

Theo Eicher (University of Washington):

**Advanced Topics in Economic Growth
(short course)**

Winter term 2003/04

at ETH Zurich

organised by the group Economics/ Resource Economics

Details

| Date | Time | Room* |
|---------------------|------------------------------------|--------------|
| 28.1.04 (Wednesday) | 13:15 – 16:45 (Break: 14:45-15:15) | HG F33.1 |
| 29.1.04 (Thursday) | 10:15 – 14:45 (Break: 11:45-13:15) | HG F33.1 |
| 30.1.04 (Friday) | 10:15 – 14:45 (Break: 11:45-13:15) | HG F33.1 |

* ETH Main Building, Rämistrasse 101, Zurich

In case of questions please contact: Thomas Steger (steger@wif.gess.ethz.ch)

Short description

Economic growth is central to the study of economics. What determines whether future generations share increasing standards of living? Why is Britain richer than Burma? Why do lifetime incomes of observationally equivalent workers differ dramatically? Can governments undertake simple policies to double the average income in ten to twenty-five years? The answers to such questions require an understanding of the basic mechanics of economic growth. The consequences for human welfare are staggering.

These lectures provide (1) a brief survey of the historical development in Growth Theory, (2) a brief critique of the New Growth Theory, (3) an in-depth explanation empirically consistent models of growth, and (4) a look ahead. The emphasis is on intuition of the mechanics, and all results are derived from detailed theoretical models. Mastery of dynamic optimization is a prerequisite.

Class 1 A Brief History of Growth

- Harrod, R.F., "An Essay in Dynamic Theory." *Economic Journal* 1939p 14.
- Domar, E.D., "Capital Expansion, Rate of Growth, and employment", *Econometrica* 1946p 157.
- *Solow, R. M., Technical Change and the Aggregate Production Function, *Review of Economics and Statistics*, 39, 1957:312-320
- *Solow, R. M., Perspectives on Growth Theory, *Journal-of-Economic-Perspectives*; 8, 1994:
- *Solow R. M., A Contribution to the Theory of Economic Growth, *Quarterly Journal of Economics*, 70, 1956:65-94

Class 2 Scale Effects: The Holy Grail

- *Baumol, W. J. (1986). Productivity growth, convergence and welfare: what the long-run data show. *American Economic Review*, 1072-1085.
- *De Long, J. B. (1988). Productivity growth, convergence and welfare: comment. *American Economic Review*, 1138-1154.
- *Islam, N. (1995). Growth empirics: a panel data approach. *Quarterly Journal of Economics*, 1127-1170.
- *Mankiw, N. G., Romer, D. and Weil, D. N. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 407-437.
- *Romer P. M., Increasing Returns and Long Run Growth, *Journal of Political Economy*, 94, 1986:1002-37
- *Romer P.M., Endogenous Technological Change, *Journal of Political Economy*, 98, 1990:S71-102
- Barro, R. J. and Sala-i-Martin, X. (1992). Convergence. *Journal of Political Economy*, 100(2), 223-251.
- Caselli, F., Esquivel, G. and Lefort, F. (1996). Reopening the convergence debate: a new look at cross-country growth empirics, *Journal of Economic Growth*, September, 1(3), 363-90.
- Jones, Charles I. (1997). On the evolution of the world income distribution. *Journal of Economic Perspectives*, Summer, 11(3), 19-36.
- Klenow, Peter J. and Rodriguez-Clare, Andres (1997). The neoclassical revival in growth economics: has it gone too far? *NBER Macroeconomics Annual*, 73-103.
- Romer, P. M., Capital Accumulation and the Theory of Long Run Growth, in Barro Ed.: *Modern Business Cycle Theory*, Harvard Univ. Press (1989)

Class 3 Back to the Roots: Empirical Evidence and New Theories

- *Eicher, T. S. and S. Turnovsky "A Generalized Model of Economic Growth," *Economic Journal*, 109, (July 1999):394-415.
- *Jones, Charles I. (1995): "R&D-Based Models of Economic Growth." *Journal of Political Economy*, **103**(4):759-784.
- *Jones, Charles I. (1995): "Time Series Tests of Endogenous Growth Models." *Quarterly Journal of Economics*, **110**:495-525.
- Backus, David K., Patrick J. Kehoe and Timothy J. Kehoe (1992): "In Search of Scale Effects in Trade and Growth." *Journal of Economic Theory*, **58**:377-409.

- Dinopoulos, Elias, and Peter Thompson (1998): "Schumpeterian Growth Without Scale Effects." *Journal of Economic Growth*, **3**(4):313-336.
- Dinopoulos, Elias, and Peter Thompson (1999): "Scale Effects in Schumpeterian Models of Economic Growth." *Journal of Evolutionary Economics*, **9**:157-185.
- Eicher T. S. and S. J. Turnovsky and U. Walz, Optimal Policies for Financial Liberalizations, German Economic Review, 1, 2000
- Eicher T. S. and S. J. Turnovsky, International Capital Markets and Non Scale Growth, Review of International Economics, 7, 1999:1-27.
- Howitt, Peter (1999): "Steady Endogenous Growth with Population and R&D Inputs Growing." *Journal of Political Economy*, **107**(4):715-730.
- Jones, Charles I. (1999): "Growth: With or Without Scale Effects." *American Economic Review, Papers and Proceedings*, **89**(2):139-144.
- Segerstrom, Paul S. (1998): "Endogenous Growth Without Scale Effects." *American Economic Review*, **88**:1290-1310.
- Young, Alwyn (1998): "Growth Without Scale Effects." *Journal of Political Economy*, **106**:41-63.

Class 4 Growth in the Open Economy

- *David Dollar and Aart Kraay 2002 "Institutions, Trade and Growth" Carnegie-Rochester Conference and World Bank working paper.
- *Eicher, T.S., Uwe Walz and Stephen Turnovsky "Optimal Policies for Financial Liberalizations" German Economic Review, 1, (February 2000):19-42. (With Steve Turnovsky and Uwe Walz)
- *Grossman and Helpman, *Growth and Innovation*. MIT Press (1991) selected chapters
- *Rivera Batiz, L. A. and P.M. Romer, Economic Integration and Endogenous Growth, Quarterly Journal of Economics, 1991:531-55.
- *Rodriguez, Francisco and Dani Rodrik (2001), "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence," in Ben Bernanke and Kenneth S. Rogoff, eds., NBER Macroeconomics Annual 2000, Cambridge, MA: MIT Press for NBER.
- *Young, "Learning By Doing and the Dynamic Effects of International Trade" *QJE* (1991).
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- Baldwin, Robert :Openness and Growth: What's the empirical relationship? NBER 9578 2003
- Clemens, Michael A., and Jeffrey G. Williamson, "A Tariff-Growth Paradox? Protection's Impact the World Around 1875-1997," NBER Working Paper No. 8459, September 2001.
- Countries," Journal of Economic Literature, XXXI, 1358-1393.
- Documents, XXII, no. 172, Washington: US Congress.
- Dollar, David (1992), "Outward-oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-1985," Economic Development and Cultural Change, 523-544.
- Edwards, Sebastian (1993), "Openness, Trade Liberalization, and Growth in Developing
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- Eicher T.S., Trade Development and Converging Growth Rates, Dynamic Gains from Trade Revisited, Journal of International Economics, 48, 1999:179-198
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- Harrison, Ann (1996), "Openness and Growth: A Time-Series, Cross-Country Analysis for Developing Countries," *Journal of Development Economics*, 48, 419-447.
- Hausmann, Ricardo and Dani Rodrik (2002), "Economic Development as Self Discovery," Centre for Economic Policy Research Discussion Paper No. 3356 (May).
- Irwin, Douglas A. (2002), "Did Import Substitution Promote Growth in the Late Nineteenth Century," NBER Working Paper No. 8751 (February).
- Krueger, Anne O. (1997), "Trade Policy and Economic Development: How We Learn,"
- Lant Pritchett 2003 Discussion Comment on: Institutions, trade, and growth *Journal of Monetary Economics* 50 (2003) 163–165
- Rodrik, Dani (February 2002), "Institutions, Integration, and Geography: In Search of the Deep Determinants of Economic Growth," NBER 2002 NOV
- Sachs, Jeffrey and Andrew Warner, "Economic Reform and the Process of Global Integration," *Brookings Papers on Economic Activity*, 1995:1, 1-118.

Class 5 Final Frontier? Institution Empirics

- *Acemoglu, Daron and Simon Johnson and James A. Robinson "The Colonial Origins of Comparative Development: An Empirical Investigation," NBER #7771, 2001 (AER Dec 2001)
- *Hall, Robert E. and Charles I Jones, "Why Do Some Countries Produce So Much More Output per Worker than Others?" *Quarterly Journal of Economics*, Vol. 114, 1999, pp. 83-116
- *Keefer, Philip and Knack, Stephen (1997). Why don't poor countries catch up? A cross-national test of an institutional explanation. *Economic Inquiry*, 35(3), July, 590-602.
- *Sachs Jeff "Institutions Don't Rule: Direct Effects of Geography on Per Capita Income" NBER 9490 2003
- Acemoglu, Daron, Simon Johnson, and James A. Robinson, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," *Quarterly Journal of Economics*, 2002, Vol. 107, pp. 1231-1294.
- Bardhan, Pranab, "Corruption and Development," *Journal of Economic Literature*, Vol 35, 1997, pp1320-1346
- Dani Rodrik "GROWTH STRATEGIES" NBER 10050
- Easterly and Levine "Tropics, Germs and Crops: how Endowments Influence Economic Development" NBER 9106 2002
- Grigorian, David A and Albert Martinez, "Industrial Growth and Quality of Institutions: What Do (Transition) Economies Have To Gain From The Rule of Law?" World Bank Working Paper, (2002).
- Knack, S. and P. Keefer "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures," *Economics and Politics*, 7, 1995, pp. 207-227
- Mauro, P., "Corruption and Growth," *QJE*, 110, 3, 1995, pp681-712

Class 6 Institution Models

- *Eicher and Garcia Penalosa "Endogenous Institutions" 2003 mimeo
- *Tornell, Aaron, "Economic Growth and Decline with Endogenous Property Rights," *Journal of Economic Growth*, (2) 3, 1997, pp219-51.
- Grossman, Herschel I. and M. Kim, "Predation and Accumulation," *Journal of Economic Growth*, vol. 1, 1996, pp. 333-350
- North, Douglass and Robert P. Thomas "The Rise of the Western World," Cambridge: Cambridge Univ. Press, 1973.

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- Olsen, Mancur, “The Logic of Collective Action, Cambridge: Cambridge University Press, 1965
- Zak, Paul J, “Institutions, Property Rights and Growth,” Louvain Economic Review, forthcoming (2002)