

World Economic History: Population and Economic Development in the Long Run

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Course Overview

This course aims to present recent research on the origins of modern economic growth. The two main questions that underlie the lectures will be: why are contemporary societies so much wealthier than the past ones and why are there such large differences in living standards across societies today?

To investigate these questions we will overview long run trends in economic and demographic history, and theories that aim to explain patterns in the data. Unlike traditional courses in economic history, that usually present a chronological sequence of key events, this course is organized around important theoretical questions in the fields of economic growth, development economics and political economy. We will see that history is an invaluable source of data, a “natural laboratory” that social scientists have at their disposal to confront their theories with evidence.

In addition, the course focuses on modern empirical methods that are widely used in economics, demography and political science. Discussing papers with interesting research questions, original data and clever empirical strategy will give students a taste for empirical work in social sciences. Thus, it will be complementary to the statistics and econometrics classes and should be viewed as a preparation to one’s own writing of applied research project.

Course Requirements

The prerequisites for the course are some basic microeconomics, macroeconomics and econometrics. If you feel uncomfortable with your knowledge in growth theory, I would suggest that you have a read of the textbooks by Chad Jones (Introduction to Economic Growth), or David Weil (Economic Growth). If you feel uncomfortable with your econometric knowledge, you should consult Joshua Angrist's and Jörn-Steffen Pischke's "Mostly Harmless Econometrics".

Grading

- 20% – presentation of the paper
- 20% – referee report on a chosen NBER or any other working paper
- 20% - classroom participation (discussions after presentation)
- 40% – final exam

Lecture 1. Why Economics Needs History?

Economists increasingly begin to recognize the importance of institutions and culture (formal and informal "rules of the game" in a society) for economic development. Since most institutions and cultural traits have their origins in the past, the study of history becomes invaluable for understanding the economic landscape of the modern world. This lecture presents the main motivation for studying economic history and introduces students to several striking examples of continuing influence of the past on the present, e.g. QWERTY-effect and portage cities.

McCloskey, Deirdre N. (1976). "Does the Past Have Useful Economics?" *Journal of Economic Literature*, 14, no. 2: 434–61.

Nunn, Nathan, (2009). "The Importance of History for Economic Development" *Annual Review of Economics*.

Temin, Peter, (2014). "Economic History and Economic Development: New Economic History in Retrospect and Prospect" NBER Working Paper No. 20107.

Abramitzky, Ran, (2015). "Economics and the Modern Economic Historian" *Journal of Economic History*, 75, no. 4: 1240–1251.

Solow, Robert, (1985). "Economic History and Economics" *The American Economic Review*, Vol. 75, No. 2, Papers and Proceedings, pp. 328-331.

David, Paul, (1985). "Clio and the Economics of QWERTY" *The American Economic Review*, Vol. 75, No. 2, Papers and Proceedings, pp. 332-337

Bleakley, Hoyt and Jeffrey Lin, (2012). "Portage and Path Dependence" *Quarterly Journal of Economics*, 127, 587–644.

Lecture 2. Economic Development in the Long-Run: A Bird-Eye View

In 1800 there were less than 1 billion people on Earth who lived on average less than 40 years with income of less than 1000 dollars per year. Today more than 7 billion people live on average more than 60 years with average income of more than 16 000 dollars per year. And those numbers continue to rise. This lecture gives a general overview of long run patterns in the data. How did population, income, urbanization, longevity and human capital changed over time? Which regions experienced an earlier transition to modern economic growth and which fall behind? What is the level of modern day income, wealth and health inequality in the world?

Galor, Oded, (2011). *Unified Growth Theory*. Princeton University Press. Chapter 1.

Clark, Gregory, (2007). *A Farewell to Alms*. Princeton University Press. Chapter 1.

Madisson A. (2007), *Contours of the world Economy, 1-2030 AD; Essays in Macroeconomic History*, Oxford University Press.

David de la Croix, Omar Licandro, (2015) "The Longevity of Famous People from Hammurabi to Einstein", *Journal of Economic Growth* 20: 263-303.

Easterlin, Richard, (1981). "Why Isn't the Whole World Developed?" *Journal of Economic History*.

Fogel, Robert, (2004). *The Escape from Hunger and Premature Death, 1700-2100. Europe, America and the Third World*. Cambridge University Press.

Lecture 3. The Malthusian Trap: Population and Economy Before 1800.

Throughout most of human history both population and income growth were very slow. Only after 1800 in the Western world the growth rates increased tenfold. Why did income stagnate for so long and how did the transition to the modern growth regime finally occurred? This lecture introduces students to the Malthusian model – a very powerful analytical tool that helps to explain the long-run stagnation of income per capita, and the subsequent transition to the modern economic growth. We will also explore the empirical evidence which explicitly tests the Malthusian model and finds support for its main predictions.

Galor, Oded, (2011). *Unified Growth Theory*. Princeton University Press. Chapter 2.

Clark, Gregory, (2007). *A Farewell to Alms*. Princeton University Press. Chapter 2.

Clark, Gregory, (2005). "The Condition of the Working-Class in England, 1209–2004." *Journal of Political Economy* 113(6): 1307–1340.

Ashraf, Quamrul, Galor, Oded, (2011). "Dynamics and Stagnation in the Malthusian Epoch." *American Economic Review* 101 (5), 2003–2041.

Kremer, Michael (1993). "Population Growth and Technological Change: One Million B.C. to 1990." *Quarterly Journal of Economics*, 108(3): 681-716.

Livi-Bacci, Massimo (2001). *A Concise History of World Population*. 3rd ed. Oxford: Blackwell Publishers Ltd.

Lecture 4. The Agricultural (Neolithic) Revolution: Where, When and How?

The transition from hunter-gathering to settled agriculture was one of the most remarkable innovations in economic history. Even today more than 90% of the calories that feed the humanity come from the handful of plants that were domesticated between 9500 and 3500 BC. Today scholars agree that agriculture was invented independently by at least seven different populations. What were the causes and consequences of this innovation? This lecture gives an overview of the state-of-art research in this area.

Maranga, Andrea (2018), "The Ant and the Grasshopper: Seasonality and the Invention of Agriculture", forthcoming *Quarterly Journal of Economics*

Ashraf, Q. and S. Michalopoulos (2013), "Climatic Fluctuations and the Diffusion of Agriculture," *Review of Economics and Statistics*.

Bowles, S. and J. Choi (2013), "Coevolution of farming and private property during the early Holocene," *Proceedings of the National Academy of Sciences of the United States of America*, 110, 8830–8835.

De Saulieu, G. and A. Testart (2015), "Innovations, food storage and the origins of agriculture," *Environmental Archaeology*, 20, 314–320.

Diamond, J. (1987), "The Worst Mistake in the History of the Human Race," *Discover*, 8, 64–66.

Galor, O. and O. Moav (2007), "The Neolithic Revolution and Contemporary Variations in Life Expectancy," Working Papers.

Olsson, O. and C. Paik (2013), "A Western Reversal since the Neolithic? The Longrun Impact of Early Agriculture," Working Paper.

Comin, D., Easterly W., Gong E. (2010) "Was the Wealth of Nations Determined in 1000 BC?" *American Economic Journal: Macroeconomics*

Weisdorf, Jacob L. (2005), "From Foraging to Farming: Explaining the Neolithic Revolution." *Journal of Economic Surveys*, 19(4): 561-86.

Weisdorf, Jacob. (2009), "Why Did the First Farmers Toil? Human Metabolism and the Origins of Agriculture." *European Review of Economic History*, 13(2): 157-72.

Lecture 5. Escape from the Malthusian trap: The First Divergence

In 1500 there were almost no difference in income and urbanization rates between the two most densely populated regions – Europe and China. By 1700 Western Europe was about 30% ahead in terms of income per capita and 50% ahead in terms of urbanization. How did that happened? Was this difference achieved despite or thanks to the Malthusian mechanisms? What was the role of trade and institutions in this first divergence in economic history? This lecture introduces some non-trivial explanations and empirical evidence.

Voigtländer, Nico, and Hans-Joachim Voth, (2013). "The Three Horsemen of Riches: Plague, War, and Urbanization in Early Modern Europe." *Review of Economic Studies* 80 (2): 774–811.

Voigtländer, Nico, and Hans-Joachim Voth, (2013). "How the West 'Invented' Fertility Restriction" *American Economic Review* 103(6): 2227–2264.

Voigtländer, Nico, and Hans-Joachim Voth (2009). "Malthusian Dynamism and the Rise of Europe: Make War, not Love", *American Economic Review, Papers and Proceedings*, 99, 248–254.

Greif, Avner, (2006), *Institutions and the Path to the Modern Economy*. Stanford University Press.

Pomeranz, Kenneth, (2000), *The Great Divergence*. Princeton University Press.

Lecture 6. From Malthus to Solow: The British Industrial Revolution

The British Industrial Revolution marks a second major watershed in economic history since the Neolithic. It decisively changed economy wide productivity growth rates. For successful economies, measured efficiency growth rates increased from close to zero to close to 1% per year in the blink of an eye, in terms of the long history of humanity, seemingly within 50 years of 1800 in England. Yet the Industrial Revolution has defied simple economic explanations or modeling. This lecture introduces students to main empirical facts and various opposing views on the causes of the British Industrial revolution.

Allen, Robert C. (2009). *The British Industrial Revolution in Global Perspective*. Cambridge University Press.

Mokyr, Joel (2005). "The Intellectual Origins of Modern Economic Growth" *Journal of Economic History*, 65(2):285–351

Temin, Peter, "Two Views of the British Industrial Revolution," *Journal of Economic History*, 57(1) pp. 63-82 (1997).

Clark, Gregory, (2014). "The Industrial Revolution" *Handbook of Economic Growth*, Volume 2A. Edited by Philippe Aghion and Steven N. Durlauf.

Clark, Gregory, (2007). *A Farewell to Alms*. Princeton University Press. Chapter 5.

Lecture 7. Engines of Growth: Knowledge and Technology

This lecture discusses the precise connection between the Industrial Revolution and the expansion of the set of useful knowledge and applications of natural philosophy to solve technological problems. The appearance of Scientific Revolution in late 16th-early 17th century in Europe was necessary (although not sufficient) condition for bringing about the modern growth. The Enlightenment changed the agenda of scientific research and deepened the connections between theory and practice. The eighteenth-century Enlightenment in the West carried out this program through a series of institutional developments that both created the amount of knowledge and its accessibility to those who could make best use of it.

- Mokyr, Joel, (2005) "Long-term Growth and the History of Technology". *Handbook of Economic Growth*, Volume 1B. Edited by Philippe Aghion and Steven N. Durlauf.
- Mokyr, Joel, (2016) *A Culture of Growth*. Princeton University Press.
- Dittmar, Jeremiah, (2011), "Information Technology and Economic Change: The Impact of the Printing Press." *Quarterly Journal of Economics*.
- Tabellini G., (2017) "Creativity over Time and Space", Working Paper
- Squicciarini, M. P. and N. Voigtländer (2014). Human capital and industrialization: Evidence from the age of enlightenment. *Quarterly Journal of Economics*
- Schich, M., C. Song, Y.-Y. Ahn, A. Mirsky, M. Martino, A.-L. Barabási, and D. Helbing (2014). A network framework of cultural history. *Science* 345(6196), 558–562..

Lecture 8. Engines of Growth: Human Capital and Health

Across countries, income per capita is highly correlated with both education and health, as measured by life expectancy or a number of other indicators. Within countries, there is also a correlation between people's health, education and income. Finally, over time, the historical evolution of cross-country health and education differences has largely paralleled the evolution of income differences, with the exception that in the last half century the convergence of education and health has been much faster than the convergence of income. How are education, health and income related? What were the incentives for investment in

- Becker, S., Woessmann L (2009). "Was Weber Wrong? A Human Capital Theory of Protestant Economic History." *Quarterly Journal of Economics* 124 (2).
- Nunn, Nathan, Nancy, Quan, (2011). "The Potato's Contribution to Population and Urbanization: Evidence from a Historical Experiment". *Quarterly Journal of Economics* 126(2): 593-650.
- A'Hearn, B., Baten, J., and Crayen, D. (2009). Quantifying quantitative literacy: Age heaping and the history of human capital. *Journal of Economic History*, 69(3):783–808
- Voth, H.-J. (1998). Time and work in eighteenth-century London. *Journal of Economic History*, 58(1):29–58
- Putterman, Louis and David N. Weil, (2010), "Post-1500 Population Flows and the Long-Run Determinants of Economic Growth and Inequality." *Quarterly Journal of Economics* 125 (4): 1627-1682.
- Becker, S. O., Hornung, E., and Wößmann, L. (2011). Education and catch-up in the industrial revolution. *American Economic Journal: Macroeconomics*, 3(3):92–126
- Sandberg, L. G. (1979). The case of the impoverished sophisticate: Human capital and swedish economic growth before world war I *Journal of Economic History*, 39(1):225–241

Lecture 9. The Demographic Transition

In 1870 the average number of births per woman in Europe was 6, now it's less than 2. A similar pattern of decreasing fertility is present in most of the regions of the world. The increase in population growth during the Post-Malthusian Regime has been ultimately reversed, bringing about significant reductions in fertility rates and population growth in various regions of the world. The demographic transition has enabled economies to convert a larger portion of the gains from technological progress into growth of income per capita. This lecture examines various mechanisms that have been proposed as possible triggers for the demographic transition and assesses their empirical significance in understanding the transition from stagnation to growth.

- Becker Gary. *A Treatise on the Family*. Harvard University Press; Cambridge MA: 1981.
- Becker SO, Cinnirella F, Woessmann L. The trade-off between fertility and education: Evidence from before the demographic transition. CESifo Working Paper No. 2775. 2009
- Doepke M. Accounting for Fertility Decline During the Transition to Growth. *Journal of Economic Growth*. 2004;9(3):347–383.
- Galor O, Weil DN. The Gender Gap, Fertility, and Growth. *American Economic Review*. 1996;86(3):374–387.
- Galor O, Weil DN. From Malthusian Stagnation to Modern Growth. *American Economic Review*. 1999;89(2):150–154.
- Galor O, Weil DN. Population, Technology, and Growth: From Malthusian Stagnation to the Demographic Transition and Beyond. *American Economic Review*. 2000;90(4):806–828.
- Hazan M. Longevity and Lifetime Labor Supply: Evidence and Implications. *Econometrica*. 2009;77(6):1829–1863.
- Hazan M, Zoabi H. Does Longevity Cause Growth? A Theoretical Critique. *Journal of Economic Growth*. 2006;11(4):363–376.

Lecture 10. The Role of Political Institutions in Great Divergence

- North, D. C. and Weingast, B. W. (1989). Constitutions and commitment: The evolution of institutions governing public choice in seventeenth-century England. *Journal of Economic History*, 49(4):803–32
- De Long, J. B. and Shleifer, A. (1993). Princes and merchants: European city growth before the industrial revolution. *Journal of Law and Economics*, 36(2):671–702
- Acemoglu, D., Johnson, S., and Robinson, J. (2005a). The Rise of Europe: Atlantic trade, institutional change, and economic growth. *American Economic Review*, 95(3):547–579
- Acemoglu, Daron, Simon Johnson and James Robinson (2002), “Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution”. *Quarterly Journal of Economics*.

Acemoglu, D., Johnson, S., and Robinson, J. A. (2005b). Institutions as a fundamental cause of long-run growth. In Aghion, P. and Durlauf, S. N., editors, *Handbook of Economic Growth*, volume 1, chapter 6, pages 385–472. Elsevier, Amsterdam

Lecture 11. Culture and Growth

Clark, Gregory, "Why Isn't the Whole World Developed? Lessons from the Cotton Mills," *Journal of Economic History*, 47(1), pp. 141-174 (1987)

Tabellini, G. (2010). Culture and institutions: Economic development in the regions of Europe. *Journal of the European Economic Association*, 8(4):677–716

Greif, A. (1994), "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies". *Journal of Political Economy*.

Algan, Y., Cahuc P. (2010) "Inherited Trust and Growth." *American Economic Review*, 100(5): 2060–92.

Guiso, Luigi, Sapienza, Paola and Luigi Zingales (2008) "Long-Term Persistence". NBER Working Paper N°14278.

Spolaore, Enrico and Romain Wacziarg. (2009). "The Diffusion of Development." *Quarterly Journal of Economics* 124 (2): 469-529.

Spolaore, Enrico and Romain Wacziarg, (2014). "Long-Term Barriers to Economic Development" *Handbook of Economic Growth*, Volume 2A. Edited by Philippe Aghion and Steven N. Durlauf.

Lecture 12. The Origins of Cultural Differences: Geography, Genetics and Chance

The previous lecture showed the importance of cultural factors for development. Why do cultures differ? What are the origins of different beliefs and preferences? The lecture will overview some recent and possibly controversial work on the topic.

Alesina, A., Giuliano P., Nunn N. (2011). "On The Origins of Gender Roles: Women and the Plough." *Quarterly Journal of Economics*.

Galor, Oded and Ömer Özak, (2016). "The Agricultural Origins of Time Preference", *American Economic Review*.

Ashraf, Quamrul and Oded Galor (2013a). "The "Out-of-Africa" Hypothesis: Human Genetic Diversity, and Comparative Economic Development" *American Economic Review* 103(1), 1–46.

Galor, Oded and Savitsky, Slava (2018) Climatic Origins of Loss Aversion. Mimeo.

Lecture 13. P.S. Lecture: Topics in Russian Economic History

This lecture gives a short overview of recent research in Russian economic history.

Markevich, Andrei and Mark Harrison, (2011), "Great War, Civil War, and Recovery: Russia's National Income, 1913 to 1928," *Journal of Economic History*.

Markevich, A., Zhuravskaya E. (2013) "Economic Consequences of Emancipation of Serfs: Evidence from Russia". Mimeo, New Economic School.

Nafziger Stephen, (2011) "Did Ivan's Vote Matter? The Political Economy of Local Democracy in Tsarist Russia", *European Review of Economic History*, 15, 393-441

Cheremukhin A., Golosov M., Guriev S., Tsyvinski A. (2013) "Was Stalin Necessary for Russia's Economic Development?". Mimeo. Princeton University

Chernina, E., Dower, P. and Markevich, A. (2013) "Property Rights, Land Liquidity and Internal Migration: The Case of the Stolypin Agrarian Reform in the Russian Empire". *Journal of Development Economics*.

Natkhov, Timur (2015), *Colonization and Development: The Long-Term Effect of Russian Settlement in the North Caucasus*, *Journal of Comparative Economics*.

Matranga, Andrea, Natkhov, Timur, (2018) "All Along the Watchtower: Tatar Slave Raids and the Origins of Russian Serfdom", Mimeo.

Papers for presentation on seminars

- Dittmar, J. (2010). Ideas, technology, and economic change: The impact of the printing press. Manuscript, American University
- Feyrer, J. and Sacerdote, B. (2009). Colonialism and modern income: Islands as natural experiments. *Review of Economics and Statistics*, 91(2):245–262
- Hornbeck, R. (2010). Barbed wire: Property rights and agricultural development. *Quarterly Journal of Economics*, 125(2):767–810
- Hornbeck, R. (2012). The enduring impact of the american dust bowl: Short- and long-run adjustments to environmental catastrophe. *American Economic Review*, 102(4):1477–1507
- Nunn, N. and Puga, D. (2010). Ruggedness: The blessing of bad geography in africa. Forthcoming, *Review of Economics and Statistics*
- Nunn, N. and Qian, N. (2010). The potato's contribution to population and urbanization: Evidence from a natural experiment. Forthcoming, *Quarterly Journal of Economics*
- Voigtländer, N. and Voth, H.-J. (2010). The three horsemen of riches: Plague, war and urbanization in early modern europe. Manuscript, Universitat Pompeu Fabra
- Acemoglu, D., Hassan, T. A., and Robinson, J. A. (2011b). Social structure and development: A legacy of the holocaust in russia. *Quarterly Journal of Economics*, 126(1)
- Bruhn, M. and Gallego, F. (2009). Good, bad and ugly colonial activities: Do they matter for economic development? Unpublished, Pontificia Universidad Católica de Chile
- Dell, M. (2010). The persistent effects of peru's mining *Mita*. *Econometrica*, 78(6):1863–1903
- Huillery, E. (2009). History matters: The long term impact of colonial public investments in french west africa. *American Economic Journal: Applied Economics*, 1(2):176–215
- Iyer, L. (2010). Direct versus indirect colonial rule in india: Long-term consequences. *Review of Economics and Statistics*, 92(4):693–713
- Maloney, W. F. and Valencia Caicedo, F. (2012). The persistence of (subnational) fortune: Geography, agglomeration, and institutions in the new world. *World Bank Policy Research Working Papers*, 6187
- Michalopoulos, S. and Papaioannou, E. (2012). Pre-colonial ethnic institutions and contemporary african development. Forthcoming, *Econometrica*
- Naidu, S. (2012). Suffrage, schooling, and sorting in the post-bellum u.s. south. Manuscript, Columbia University
- Andersen, T. B., Bentzen, J., Dalgaard, C.-J., and Sharp, P. (2011). Religious orders and growth through cultural change in pre-industrial england. *University of Copenhagen*
- Chaney, E. (2012). Revolt on the Nile: Economic shocks, religion and political power. Unpublished, Harvard University
- Doepke, M. and Zilibotti, F. (2008). Occupational choice and the spirit of capitalism. *Quarterly Journal of Economics*, 123(2):747–793

- Durante, R. (2010). Risk, cooperation, and the economic origins of social trust: An empirical investigation. Unpublished, Sciences Po
- Grosjean, P. (2011). A history of violence: The culture of honor as a determinant of homicide in the us south. *University of New South Wales Discussion Papers*, 2011(13)
- Greif, A. and Tabellini, G. (2012). The clan and the city: Sustaining cooperation in china and europe. *IGIER Working Paper Series*, 445
- Jacob, M. (2010). Long-term persistence: The free and imperial city experience in germany. Unpublished, WHU-Otto Beisheim School of Management
- Nunn, N. and Wantchekon, L. (2010). The slave trade and the origins of mistrust in africa. *American Economic Review*, 101(7):3221–3252

Books recommended for the entire course:

- Mokyr, Joel, (1990) *The Lever of Riches: Technological Creativity and Economic Progress*. Oxford University Press.
- Diamond, Jared, (1997) *Guns, Germs and Steel: The Fates of Human Societies*. W.W. Norton, New York
- Pomeranz, Kenneth, (2000), *The Great Divergence: China, Europe, and the Making of the Modern World Economy*. Princeton University Press.
- Clark, Gregory, (2007) *A Farewell to Alms: A Brief Economic History of the World*. Princeton University Press.
- Harari Yuval, (2014) *Sapiens: A Brief History of Humankind*. London: Harvill Secker.
- Oded Galor, (2011) *Unified Growth Theory*. Princeton University Press.

Video Lectures:

- Joel Mokyr “[Culture of Growth: Origins of the Modern Economy](#)”
 “[Long-Term Economic Change in China and Europe: The Needham Paradox Revisited](#)”
- Hans-Joachim Voth “[Malthus and the First Divergence: How Did Europe Pull Ahead of China?](#)”
- Avner Greif “[The Clan and the City: Sustaining Cooperation in China and Europe](#)”
- Daron Acemoglu “[Why Nations Fail: The Origins of Power, Prosperity and Poverty](#)”
- James Robinson “[Why Nations Fail: The Origins of Power, Prosperity and Poverty](#)”
- Gregory Clark “[A Farewell to Alms](#)”
- Conference on “[Historical Persistence in Comparative Development](#)”

Additional (non-academic) materials:

Films:

- "Black Death" (2010), Director: Christopher Smith
- "1492: The Conquest of Paradise" (1992). Director: Ridley Scott
- "The New World» (2005). Director: Terrence Malik
- "The Merchant of Venice" (2004), Director: Michael Radford
- "Seven Samurai" (1954), Director: Akira Kurosava
- "Barry Lindon" (1975), Director: Stanley Kubric
- "Amistad" (1997), Director: Steven Spielberg
- "Agora" (2009), Director: Alejandro Amenabar
- "Elizabeth" (1998), «Elizabeth: the Golden Age» (2007), Director: Shekhar Kapur
- "Gandhi" (1992), Director: Richard Attenborough
- "Kon-Tiki" (2012), Directors: Joachim Rønning, Espen Sandberg
- "The Mission" (1986), Director: Roland Joffé
- "Mongol" (2007), Director: Sergey Bodrov
- "The Wind That Shakes the Barley" (2006), Director: Ken Loach
- "Gettysburg" (1993), Director: Ron Maxwell
- "A Man for All Seasons" (1966), Director: Fred Zinnemann