

Spring 2020

Econ 135: The History of Economic Growth

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U.C. Berkeley & WCEG

<https://www.icloud.com/pages/0fx5U286eLAN6cj6IBVyrxj-w>
<https://github.com/braddelong/public-files/blob/master/%23econ-115-f-2020-syllabus.pdf>

2020-05-24

Welcome to Econ 135. We are very happy to have you here. We hope to help you obtain a first-class educational experience this fall.

This class is open to all undergraduate and graduate students at UC Berkeley, enrollment limits permitting. Econ 1 or equivalent is a required prerequisite (with exceptions made with the permission of the instructor).

This course examines the idea & the reality of economic growth in historical perspective, beginning with the invention of agriculture & continuing through with forecasts for the 21st century and beyond. Topics covered include, among others:

human language & sociability; the discovery of agriculture & the domestication of animals; the origins & maintenance of gross inequality; Malthusian economies; the commercial & industrial revolutions; modern economic growth; international prosperity differentials; OECD convergence & East Asian growth miracles; the political economy of growth & stagnation; & the stubborn persistence of poverty.

Acknowledgement: This course is borrowed & revised from one taught at Harvard by Melissa Dell: Econ 1342. It was her idea to teach a course like this, & her work that broke the ground, & made this course excellent wherever it is excellent.

-1. Before Class Begins

Acquire: An iClicker, and access to the course readings

Read: Course administration documents <<https://tinyurl.com/dl-2020-01-12b>>

Read: Partha Dasgupta (2007): *Economics: A Very Short Introduction*, Prologue & chs 1-4 <<https://delong.typepad.com/files/dasgupta-economics.pdf>>

Read: Aristotle: *Politics*, Book I <<https://delong.typepad.com/files/aristotle-politics-book-i.pdf>>

Do Assignment 1 (3 pts) <<https://tinyurl.com/dl-2020-01-12a>> : Write & answer a syllabus FAQ question, due T Jan 21 9:00 am.

Notes & Optional Further Readings:

- Reading Notes on Book I of Aristotle's *Politics* <<https://tinyurl.com/dl-2020-01-12d>>
- Reading Notes on Dasgupta's *Economics: A Very Short Introduction* <<https://tinyurl.com/dl-2020-01-12e>>

0. Introduction

0.1. Growth in Historical Perspective, Humans and Their Economies (Tu Jan 21)

Read before: Gregory Clark (2005): *The Condition of the Working Class in England, 1209-2003* <<https://delong.typepad.com/files/clark-condition.pdf>>

Read before: Lant Pritchett (1997): *Divergence, Big Time* <<https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.11.3.3>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-1.pptx>>

Notes & Optional Further Readings:

- Reading Notes on Clark's *The Condition of the Working Class in England, 1209-2003* <<https://github.com/braddelong/public-files/blob/master/article-clark-reading-note.pptx>>

- Reading Notes on **Pritchett's** *Divergence, Big Time* <<https://tinyurl.com/dl-2020-01-18c>>

Notes After 2020-01-21 0. Introduction:

For Lecture 2: 1.1. Theory: Robert Solow's Growth Model <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5660546>, I have moved the "Lecture Notes: Solow Growth Model" reading (parts 1-5) and the second half of Dasgupta to the weekend: I would like people who haven't read Aristotle, Dasgupta (first half), Clark, and Pritchett to catch up first...

Further reading: If you are curious—and have the time—it is worthwhile reading *The Man Who Saw the Deep* (Gilgamesh). It is the oldest significant story that has come down to us, and it is worthy of ancestral respect: <<https://www.bradford-delong.com/2020/01/anonymous-the-man-who-saw-the-deep-gilgamesh-surpassing-all-kings-powerful-and-tall-beyond-all-others-violent.html>>. Also worth reading for the truly ancient—i.e., pre-written history—history of humanity and its material culture is: **David W. Anthony** (2007): *The Horse, the Wheel, and Language: How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World* <<https://delong.typepad.com/files/anthony-horse.pdf>>. But I would much rather you spend your reading time on Aristotle, Dasgupta, Clark, and Pritchett...

1. Theory

1.1. Robert Solow's Growth Model (Th Jan 23)

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-2.pptx>>

Read after: **J. Bradford DeLong**: *Lecture Notes: The Solow Growth Model* <<https://tinyurl.com/dl-2020-01-18f>>

Read After: **Partha Dasgupta** (2007): *Economics: A Very Short Introduction*, chapters 5-8 & Epilogue <<https://delong.typepad.com/files/dasgupta-economics.pdf>>

Do Assignment 2 (3 pts): Letter to GSI, due Sa Jan 25 9:00 am <<https://tinyurl.com/dl-2020-01-12g>>

Notes & Optional Further Readings:

- Reading Notes on **Dasgupta's** *Economics: A Very Short Introduction* <<https://tinyurl.com/dl-2020-01-12e>>

- **Robert Solow** (1956): *A Contribution to the Theory of Economic Growth* <<http://piketty.pse.ens.fr/files/Solow1956.pdf>>
- **Robert Solow** (1987): *Growth Theory and After* <<https://www.nobelprize.org/prizes/economic-sciences/1987/solow/lecture/>>

More Highly, Highly Optional Readings:

Moses Abramovitz (1956): *Resource and Output Trends in the United States Since 1870* <<https://www.nber.org/chapters/c5650.pdf>>. **Robert Solow** (1957): *Technical Change and the Aggregate Production Function* <<http://www.piketty.pse.ens.fr/files/Solow1957.pdf>>. **N. Gregory Mankiw, David Romer, & David N. Weil** (1992): *A Contribution to the Empirics of Economic Growth* <https://eml.berkeley.edu/~dromer/papers/MRW_OJE1992.pdf>. **Moses Abramovitz** (1986): *Catching Up, Forging Ahead, and Falling Behind* <http://www.j-bradford-delong.net/teaching_Folder/Econ_210c_spring_2002/Readings/Abramovitz.pdf>. **Peter Klenow, Andrés Rodríguez-Clare** (1997): *The Neoclassical Revival in Growth Economics: Has It Gone Too Far?* <<https://www.nber.org/chapters/c11037.pdf>>

1.2. Malthusian Perspectives (Tu Jan 28)

Read before: J. Bradford DeLong: *Lecture Notes: Malthusian Economies* <<https://tinyurl.com/dl-2020-01-18g>>

Read before: Greg Clark: *A Farewell to Alms*, selections <<https://delong.typepad.com/files/clark-als-selections.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-3.pptx>>

Start: Assignment 3: what is economics? Note; due Feb 1

Notes & Optional Further Readings:

- Reading Notes on **Clark's** *A Farewell to Alms*, selections <<https://tinyurl.com/dl-2020-01-18h>>
- **Ian Morris** (2010): *Why the West Rules—For Now*, chapter 3: Taking the Measure of the Past <<https://delong.typepad.com/files/morris-rules-3.pdf>>
- **Patricia Crone:** *Pre-Industrial Societies*, selections <<https://delong.typepad.com/files/crone-pre-selections.pdf>>. (The full thing is worth reading, but not for this week: <<https://delong.typepad.com/files/crone-pre.pdf>>.)

1.3. Determinants of Progress in Technology and Organization (Tu Feb 4)

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-4.pptx>>

Read after: J. Bradford DeLong: *Lecture Notes: Determinants of "Technological" Progress* <<https://nbviewer.jupyter.org/github/braddelong/long-form-drafts/blob/master/solow-model-6-innovation.ipynb>>

Start: Assignment 4: Malthusian economies note; due Feb 12

You should have finished: Assignment 3: what is economics? Note; due Feb 1

2. The Broad Sweep: Agrarian Near-Stagnation

2.1. Malthusian Agricultural Economies (Th Feb 6)

Read before: Jared Diamond (1997): *The Worst Mistake in the History of the Human Race* <<https://www.discovermagazine.com/planet-earth/the-worst-mistake-in-the-history-of-the-human-race>>

Read before: The Man Who Saw the Deep (Gilgamesh), selections <<https://delong.typepad.com/files/gilgamesh-selections.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-5.pptx>>

2.2. Civilizational "Efflorescences" and Imperial Declines (Tu Feb 11)

Read before: Willem M. Jongman (2007): *Gibbon was Right: The Decline and Fall of the Roman Economy* <<https://delong.typepad.com/jongman-gibbon-was-right.pdf>>

Read before: Peter Temin: *The Roman Market Economy, Roman Growth* <<https://delong.typepad.com/files/temin-roman-growth.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-6.pptx>>

Finish: Assignment 4: Malthusian economies note; due Feb 12

2.3. Why Was Pre-Industrial Progress so Slow on Average? (Th Feb 13)

Read before: Josh Ober (2019): Agamemnon's Cluelessness, selections <<https://delong.typepad.com/files/ober-agamemnon-selections.pdf>>

Read before: Moses Finley: *Technical Innovation and Economic Progress in the Ancient World* <<https://delong.typepad.com/finley-technical.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-7.pptx>>

Start: Assignment 5: Simulations with the Solow growth model; due Feb 19

Notes & Optional Further Readings:

- **Peter Temin:** *Land Tenure and Exploitation from the Roman Empire to Lord Peter Wimsey* <<https://www.bradford-delong.com/2020/02/weekend-reading-peter-temin-land-tenure-and-exploitation-from-the-roman-empire-to-lord-peter-wimsey.html>>.

3. The Broad Sweep: Breaking Through

3.1. Commercial Revolutions (Tu Feb 18)

Read before: Christopher Berry (2018): *Adam Smith: A Very Short Introduction*, chs 1, 4-6 <<https://delong.typepad.com/files/berry-smith.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-8.pptx>>

Finish: Assignment 5: Simulations with the Solow growth model; due Feb 19

3.2. The Industrial Revolution (Th Feb 20 & Tu Feb 25)

Read before: Robert Allen (2017): *The Industrial Revolution: A Very Short Introduction*, chs 3, 5-6 <<https://delong.typepad.com/files/allen-industrial.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-9.pptx>> <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-10.pptx>>

Read after: Joel Mokyr (1990): *Lever of Riches*, ch 5 The Years of Miracles <<https://delong.typepad.com/files/mokyr-lever-revolution.pdf>>

Read after: Karl Marx & Friedrich Engels (1848): *The Communist Manifesto* <<https://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf>>

Start: Assignment 6: slow technological and organizational progress before 1500

3.3. Why Northwest Europe? (Th Feb 27)

Read before: David Landes (2006): *Why Europe and the West? Why Not China?* <<https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.20.2.3>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-11.pptx>>

Notes & Optional Further Readings:

- William Baumol: *Entrepreneurship: Productive, Unproductive, Destructive* <<https://github.com/braddelong/public-files/blob/master/readings/article-baumol-entrepreneurship.pdf>>

Tu Mar 3: EARLY MIDTERM (Instructor Reality Check)

4. The Broad Sweep: Modern Economic Growth

4.1. Modern Economic Growth (Th Mar 5)

Read after: J. Bradford DeLong: *Slouching Towards Utopia?: An Economic History of the Long Twentieth Century DRAFT*, chs 1-5 <<https://delong.typepad.com/files/slouching-towards-utopia-fall-2019.zip>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-12.pptx>>

4.2. U.S. Economic Ascendancy (Tu Mar 10)

Read before: Claudia Goldin & Larry Katz: *The Race Between Education and Technology*, ch 1 <<https://delong.typepad.com/files/goldin-katz-race-i.pdf>>

Read before: Fred Bateman & Thomas Weiss (1981): *A Deplorable Scarcity: The Failure of Industrialization in the Slave Economy*, ch 1 <<https://delong.typepad.com/files/bateman-weiss-deplorable-i.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-13.pptx>> (Links to an external site.)

Lecture Notes: American Exceptionalism <<https://github.com/braddelong/public-files/blob/master/american-exceptionalism-%23TCEH.pdf>>

Finish: Assignment 6: slow technological and organizational progress before 1500

4.3. Globalization Advances & Retreats (Th Mar 12)

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-14.pptx>>

Read after: Ronald Findlay & Kevin O'Rourke (2007): *Power & Plenty: Trade, War, & the World Economy in the Second Millennium*, selections <<https://delong.typepad.com/files/findlay-orourke-selections.pdf>>

4.4. “Convergence” & Its Absence (Tu Mar 17)

Read before: J. Bradford DeLong (1986): *Productivity Growth, Convergence, and Welfare: Comment* <<https://github.com/braddelong/public-files/blob/master/delong-baumol.pdf>>

Read before: Dev Patel, Justin Sandefur, & Arvind Subramanian

(2019): *Everything You Know about Cross-Country Convergence Is (Now) Wrong* <<https://www.piie.com/blogs/realtime-economic-issues-watch/everything-you-know-about-cross-country-convergence-now-wrong>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-15.pptx>>

Zoom: <<https://github.com/braddelong/public-files/blob/master/2020-03-17-09.55.13-Econ-135-Zoom-7584227890-convergence.zip>>

Start: Assignment 7 (6 pts): Tell Us What Is Happening to You, and What You Wish For; due Mar 20

4.5. Inequality and Plutocracy (Th Mar 19)

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-16.pptx>>

Zoom: <<https://github.com/braddelong/public-files/blob/master/econ-135-zoom-placeholder-2020-03-19.html>>

Finish: Assignment 7 (6 pts): Tell Us What Is Happening to You, and What You Wish For; due Mar 20

Notes & Optional Further Readings:

- *Lecture Notes on Inequality in Historical Perspective:* <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5725330>

4.6. The Development of Underdevelopment (Tu Mar 31)

Read before: W. Arthur Lewis (1978): *Evolution of the International Economic Order* <<https://github.com/braddelong/public-files/blob/master/lewis-evolution-a.pdf>> <<https://github.com/braddelong/public-files/blob/master/lewis-evolution-b.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-17.pptx>>

Discussion Thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5729013>

Zoom Archive: <<https://github.com/braddelong/public-files/blob/master/econ-135-zoom-2020-03-31-10.05.17-620006822.zip>>

Notes & Optional Further Readings:

- *The Development of Underdevelopment* & W. Arthur Lewis <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5729090>

5. Touring the Continents

5.1. Western Europe, North America, & South America (Th Apr 2)

Read before: Joel Mokyr (1990): *Lever of Riches*, ch 10 Britain & Europe <<https://delong.typepad.com/files/mokyr-lever-europe.pdf>>

Read before: John Coatsworth (2008): *Inequality, Institutions & Economic Growth in Latin America* <<https://delong.typepad.com/files/coatsworth-institutions.pdf>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5734869>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-18.pptx>>

Notes & Optional Further Readings:

- *Lecture Notes on the Tour of the North Atlantic & the Americas* <<https://github.com/braddelong/public-files/blob/master/lecture-europe-%26-americas-text.pdf>>
- **David Atkin (2014):** *Endogenous Skill Acquisition and Export Manufacturing in Mexico* <<https://delong.typepad.com/files/atkin-skill.pdf>>

5.2. Behind the Iron Curtain: The Rise & Fall of Really Existing Socialism (T Apr 7)

(Links to an external site.)

Read before: Richard Ericson (1991): *The Classical Soviet-Type Economy: Nature of the System and Implications for Reform* <<https://delong.typepad.com/files/ericson-soviet.pdf>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5742603>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-19.pptx>> <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-19b.pptx>>

Notes & Optional Further Readings:

- *Lecture Notes on Behind the Iron Curtain:* <<https://github.com/braddelong/public-files/blob/master/lecture-rise-%26-fall-of-res-text.pdf>>

5.3. East Asian Miracles (Th Apr 9)

Read before: Peter Evans (1995): *Embedded Autonomy: States & Industrial Transformation*, ch 1 <<https://delong.typepad.com/files/evans-embedded-i.pdf>>

Read before: Yingyi Qian (2001): *How Reform Worked in China* <<https://delong.typepad.com/files/qian-reform.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-20.pptx>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5742612>

Zoom Q&A Session: <<https://github.com/braddelong/public-files/blob/master/econ-135-zoom-2020-04-09-10.02.48-7744601602-east-asia.zip>>

Notes & Optional Further Readings:

- **Chalmers Johnson:** *MITI & the Japanese Miracle* <<https://github.com/braddelong/public-files/blob/master/readings/book-johnson-miti.pdf>>
- **Yingyi Qian:** *How Reform Worked in China* <<https://github.com/braddelong/public-files/blob/master/readings/article-qian-reform.pdf>>

5.4. Africa (Tu Apr 14)

Read before: Nathan Nunn (2008): *The Long Term Effects of Africa's Slave Trades* <https://dash.harvard.edu/bitstream/handle/1/3710252/Nunn_Long-TermEffects.pdf>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-21b.pptx>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5747048>

Zoom q&a session: <<https://github.com/braddelong/public-files/blob/master/econ-135-zoom-2020-04-14-10.02.09-92696375431-africa.zip>>

Notes & Optional Further Readings:

- Robert Bates: *Markets & States in Tropical Africa* <<https://github.com/braddelong/public-files/blob/master/readings/book-bates-markets-%26-states.pdf>>

5.5. South Asia & Middle East (Th Apr 16)

Read before: Sevket Pamuk (2014): *Institutional Change & Economic Development in the Middle East, 700-1800* <<https://delong.typepad.com/files/pamuk.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-21.pptx>>

Zoom q&a session: <<https://github.com/braddelong/public-files/blob/master/econ-135-zoom-2020-04-16-09.59.01-99819691485.zip>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5747048>

6. Policy Issues

6.1. "Deep Roots", Path Dependence, & "Institutions" (Tu Apr 21)

Read before: Nathan Nunn (2012): *Culture and the Historical Process*

<<https://delong.typepad.com/files/nunn-culture.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-22.pptx>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5756985>

Notes & Optional Further Readings:

- Melissa Dell (2015): *Path Dependence in Development: Evidence from the Mexican Revolution* <<https://scholar.harvard.edu/files/dell/files/revolutiondraft.pdf>>
- Melissa Dell *et al.* (2014). *What Do We Learn from the Weather? The New Climate-Economy Literature* <<https://economics.mit.edu/files/9138>>

6.2. Trade and Development, Foreign Aid; Foreign Intervention (Th Apr 23)

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-23.pptx>>

Discussion Thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5756985>

Notes & Optional Further Readings:

- *Industrial Policy in Europe* <<https://github.com/braddelong/public-files/blob/master/readings/book-european-industrial-policy.pdf>>

6.3. Growth & Fluctuations (Tu Apr 28)

Read before: Barry Eichengreen (2015): *Hall of Mirrors: The Great Depression, The Great Recession, and the Uses—& Misuses—of History*, selections <<https://github.com/braddelong/public-files/blob/master/readings/book-eichengreen-selections-mirrors.pdf>>

Read before: Brad DeLong (2020): *The Near-Second Great Depression* <<https://github.com/braddelong/public-files/blob/master/econ-115/Slouching%3F%2024%20The%20Near-Second%20Great%20Depression%202019-09-01.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-23b.pptx>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5756990>

Notes & Optional Further Readings:

- Charles Kindleberger: *Manias, Panics, and Crashes* <<https://github.com/braddelong/public-files/blob/master/readings/book-kindleberger-manias.pdf>>

6.4. Global North Institutional Decline?: Populism, Plutocracy, Kleptocracy, & Neo-Fascism (Th Apr 30)

Read before: Barry Eichengreen (2018): *The Populist Temptation Economic Grievance & Political Reaction in the Modern Era*, selections <<https://delong.typepad.com/files/eichengreen-populist.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-24.pptx>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5756990>

Notes & Optional Further Readings:

- Ernest Gellner (1973): *Nations & Nationalism*, selections <<https://delong.typepad.com/files/gellner-nations.pdf>>

6.5. The Pace and Meaning of Economic Growth (Tu May 5)

Read before: William Nordhaus: *Do Real-Output and Real-Wage Measures Capture Reality?* <<https://www.nber.org/chapters/c6064.pdf>>

Read before: John Maynard Keynes: *Economic Possibilities for Our Grandchildren* <<https://delong.typepad.com/files/keynes-persuasion.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-26.pptx>>

Discussion thread: <https://bcourses.berkeley.edu/courses/1487685/discussion_topics/5769165>

Notes & Optional Further Readings:

- **Edward Bellamy (1887):** *Looking Backward 2000-1887*, selections <<https://delong.typepad.com/files/bellamy-backward.pdf>>

7. Conclusion

7.1. The Future? (Th May 7)

Read before: Robert Allen (2011): *Global Economic History: A Very Short Introduction*, selections <<https://delong.typepad.com/files/allen-geh.pdf>>

Slides: <<https://github.com/braddelong/public-files/blob/master/econ-135-lecture-27.pptx>>

Mo May 18 11:59 PM PDT: Final Paper Due

8. Global Warming (Summer)

Read before: Marshal Burke & al.: Global Non-Linear Effect of Temperature on Economic Production <<https://github.com/braddelong/public-files/blob/master/readings/article-burke-article-global-nonlinear.pdf>>

Solomon Hsiang & al.: *Estimating Economic Damage from Climate Change in the United States* <<https://github.com/braddelong/public-files/blob/master/readings/article-hsiang-estimating-economic-damage.pdf>>

Solomon Hsiang & Robert Kopp: *An Economist's Guide to Climate Change Science* <<https://github.com/braddelong/public-files/blob/master/readings/article-hsiang-guide.pdf>>

Melissa Dell et al. (2012): *Temperature Shocks & Economic Growth: Evidence from the Last Half Century* <https://scholar.harvard.edu/files/dell/files/aej_temperature.pdf>