

FRESHMAN SEMINAR 71G

AMERICANS AT WORK IN THE AGE OF ROBOTS AND ARTIFICIAL INTELLIGENCE

Fall 2023

Professor Benjamin M. Friedman

Wednesdays, 3:00-5:00

Seminar Description

Where will the coming generation of Americans (say, today's 18-year-olds) find jobs? And will the jobs be worth having?

People have worried about losing their jobs to technology at least since the Luddites 200 years ago. In the aggregate, they have been wrong. The automobile put lots of stable boys and saddle makers out of work, but it created vastly more jobs making cars, and fueling them and repairing them, and it opened the way for whole new industries like roadside motels and restaurants. With robots increasingly performing the tasks once done by blue-collar labor, however, and computers and artificial intelligence now eliminating the need for many workers once thought to be immune because of their cognitive skills, today's technological threat seems different. It is no longer just the unskilled and undereducated whose jobs are at risk. Moreover, the challenge may be especially acute in America, where wages are far higher than in many other countries and an ever greater share of what we consume and invest not only can be provided from overseas but often is.

Does the next generation of Americans, then, face a genuine threat from advancing workplace technology? If so, what are the dangers – not just economic, but social, political, even moral – to the country as a whole? Most important, what can we do about it?

Weekly Syllabus

September 6. What is the economic and social policy question, and why does it matter?

Richard Baldwin, *The Globotics Upheaval* (2019), Chs. 1, 6, 7

David Autor, "Why Are There Still So Many Jobs? The History and Future of Workplace Automation" (2015)

Daniel Suskind, *A World Without Work* (2020), Chs. 6, 7

Erik Brynjolfsson, "The Turing Trap" (2022)

September 13. How work in America changed in earlier times

Robert J. Gordon, *The Rise and Fall of American Growth* (2016), Ch. 8
 John G. Neihardt, *All Is But a Beginning* (1972), pp. 87-97
 David A. Hounshell, *From the American System to Mass Production, 1800-1932* (1984), pp. 247-261

September 20. The social and psychological value of work

N. Gregory Mankiw, *Principles of Economics* (8th edn., 2018), pp. 368-369
 Alan Krueger, “Where Have All the Workers Gone? An Inquiry into the Decline of the U.S. Labor Force participation Rate” (2017), Sections III, V
 Greg Kaplan and Sam Schulhofer, “The Changing (Dis-)Utility of Work” (2018)
 Rafael Di Tella, Robert J. Mac Culloch and Andrew J. Oswald, “The Macroeconomics of Happiness” (2003), Section VI (no need to read “Part A”)
World Happiness Report (2017), Ch. 6 (examine the charts, but no need to read carefully)

September 27. The moral value of work

Genesis, Ch. 1, 2 (v. 1-3), 6 (v. 5-22)
 Franklin D. Roosevelt, “Inaugural Address” (1933)
 John Steinbeck, *East of Eden* (1952), Ch. 13, Part I
 Edmund Phelps, *Mass Flourishing* (2015), pp. 19-36, 55-62, 268-288

But also consider two contrary views:

Adam Smith, *Wealth of Nations* (1776), pp. 781-782
 P. Gaskell, *The Manufacturing Population of England* (1833), Ch. I

October 4. Early concerns over automation and technological unemployment

Jean-Baptiste Say, *A Treatise on Political Economy* (1803), pp. 86-89
 Lord Byron (yes, it’s the poet), “Speech on the Frame Breaking Act” (1812)
 David Ricardo, *The Principles of Political Economy and Taxation* (3rd edn., 1821), pp. 263-264
 John Maynard Keynes, “Economic Possibilities for Our Grandchildren” (1930)
 Herbert A. Simon, “Will the Corporation be Managed by Machines?” (1960)
 James Meade, *Efficiency, Equality, and the Ownership of Private Capital* (1964), pp. 22-26, 30-41

October 11. Today’s technological optimists versus pessimists

Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age* (2014), Ch. 2, 3, 6-8
 Robert J. Gordon, *The Rise and Fall of American Growth* (2016), Ch. 17
 Joel Mokyr, Chris Vickers and Nicolas Ziebarth, “The History of Technological Anxiety and the Future of Economic Growth: Is This Time Different?” (2015)

October 18. Recent empirical assessments

- David Autor and Anna Salamon, “Is Automation Labor-Displacing? Productivity Growth, Employment, and the Labor Share” (2018), Introduction, Sections 3-5
- Daron Acemoglu and Pascual Restrepo, “Automation and New Tasks: How Technology Displaces and Reinstates Labor” (2019), pp. 3-6, 10-21
- Paul Beaudry, David Green and Benjamin Sand, “The Great Reversal in the Demand for Skill and Cognitive Tasks” (2016), pp. 199-207, 220-236
- Daron Acemoglu, Claire Lelarge and Pascual Restrepo, “Competing with Robots: Firm-Level Evidence from France” (2020)

October 25. Is education the answer?

- David Deming, “Four Facts about Human Capital” (2022)
- Claudia Goldin and Lawrence F. Katz, *The Race Between Education and Technology* (2008), Ch. 3, 9
- David Autor, David, Mindell and Elisabeth Reynolds, *The Work of the Future* (2021), Ch. 4
- Daniel Suskind, *A World Without Work* (2020), Ch. 9

November 1. Should we tax robots?

- William Meisel, *The Software Society* (2013), Ch. 15
- Ryan Abbott and Brett Bogenschneider, “Should Robots Pay Taxes? Tax Policy in the Age of Automation” (2018), pp. 145-152, 163-175 (don’t bother with the lengthy footnotes)
- Daniel Hemel, “Does the Tax Code Favor Robots?” (2019), pp. 1-2, 10-14.

November 8. What about public-sector job creation?

- Nicholas Eberstadt, *Men Without Work* (2016), Introduction and Chs. 3, 8
- Mark Paul, William Darity and Darrick Hamilton, “The Federal Job Guarantee – A Policy to Achieve Permanent Full Employment” (2018)
- John Kenneth Galbraith, *The Affluent Society* (1958), Ch. 17, 21
- Benjamin Austin, Edward Glaeser and Lawrence Summers, “Jobs for the Heartland: Place-Based Policies in 21st-Century America” (2018), Introduction and Sections 1, 6, 7

November 15. Universal income? Other income supports?

- Philippe Van Parijs and Yannick Vanderborght, *Basic Income* (2017), Ch. 1 and pp. 82-93
- Annie Lowrey, *Give People Money* (2018), Ch. 1, 10
- Robert Greenstein, “Why Universal Basic Income Isn’t the Path Forward to Shrink Poverty in the U.S.” (2023)
- Daniel Suskind, *A World Without Work* (2020), Ch. 10

Note: No meeting on November 22

November 29. What do we think?

Note: This meeting will take place over dinner, at 6:00-8:00, not at the usual time.

No assigned readings for the final meeting – only discussion

Readings

Everyone should read the materials designated for each week *before* that week's class meeting. Informed participation in discussion is what a seminar is all about. Readings for each meeting will be available as pdf's on the course website. There are no books or course packs to buy.

Discussion Questions

Two or three specific questions for discussion will be distributed in advance of each meeting. Students should think about these questions in advance, and come to class prepared both to articulate their views and to listen and respond thoughtfully to everyone else's views.

Some meetings, in particular the sessions devoted to specific policy suggestions, will be structured as debates with a few students designated in advance to lead off the discussion by presenting prepared arguments either for or against a designated proposal or idea. But those prepared remarks will take up only a small part of our time. In these sessions too, everyone should come prepared to engage thoughtfully in the discussion.

Assignments

Paper #1 (2-3 pages, due **Friday, October 6**): "What's missing in economists' standard thinking about work and jobs?" Your paper should at least start from the readings discussed in weeks 3 and 4, but feel free to bring in other ideas as well.

Paper #2 (4-5 pages, due **Friday, November 3**): "How serious is the problem America is likely to face?" Your paper should at least start from the readings discussed in weeks 6 and 7, but here again feel free to bring in other ideas as well.

Paper #3 (5-7 pages, due **Wednesday, December 6**): "What should we do?" Your paper can explore in depth any of the policy ideas we will have discussed in weeks 8-11. Or examine a different policy idea. Or, if this is what you think, explain why nothing need be done.

To turn in a paper, simply upload it to the course's Canvas site under the designated tab in "Assignments": PAPER #1 (or #2 or #3). Please upload your paper as a .doc or .docx file, and name the file **Lastname_FirstnameFreshmanSeminar71GPaper1.doc (or .docx)**.

Academic Integrity

Discussing ideas and work-in-progress with others is a natural and healthy part of the intellectual process. It is what professors do, it is what other researchers do, and it is both expected and desirable that students do so as well. But in the end a student's work – in this case the papers each student submits for the course – must be his or her own effort, written by the student him- or herself, and ultimately based on his or her own thinking. Discussing ideas with others is certainly not prohibited. Turning in someone else's work certainly is.

This important principle applies in parallel to the use of electronic tools like generative pre-trained transformers – most obviously ChatGPT. Searching out facts on Google, or having Word spell-check your paper, is of course permitted. Having ChatGPT produce a first draft of your paper is surely not. The ideas in what you submit must be yours.

Office Hours

I want to have an informal "get acquainted" conversation – either in person in my office or via Zoom, whichever turns out to be more convenient – with each student in the seminar, as soon as possible once the semester begins. Please be in touch, once the seminar roster is set, to fix a time.

I also hope students will feel free, throughout the term, either to talk with me during office hours or to make additional appointments if office hours are either insufficient or inconvenient. My regularly scheduled office hours are on **Mondays, 4:30-6:00** (for any week in which Monday is not available, Wednesday, 5:00-6:30). But I'm always glad to find another time to talk if Monday afternoon doesn't work for someone's schedule.

Remember that one-on-one conversation is an important part of the learning process – for both students and professors.

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