

Vanderbilt University
Department of Economics
Economics 3160
Economic History of Europe
Spring 2024

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Time: Section 01: TR 1:15pm–2:30pm
 Section 02: TR 2:45pm–4:00pm
Location: Calhoun 337
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Introduction Around the beginning of the nineteenth century, the western world—first Britain and then the rest of western Europe and North America—reached a major economic turning point. Spurred by the Industrial Revolution and the Demographic Transition, western economies gradually emerged from millennia in which any rise in living standards would eventually be reversed, into the period of modern economic growth that persists to today. This transition is arguably one of the most important changes in human history, marking the shift from a world in which poverty was the norm to the modern world in which, in developed countries, average living standards have improved to a level unimaginable just a few centuries ago. But as might be expected with such a fundamental change, this transition was not entirely smooth. This course explores this change and the disruptions it caused.

Course Goals

Content

- Understand the importance and uniqueness of modern economic growth.
- Explain why this change first happened in Europe, and specifically Britain, around the beginning of the nineteenth century. Specifically ...
 - ... what drove the Industrial Revolution?
 - ... what drove the Demographic Transition?
- Investigate some of the disruptions generated by modern economic growth

Skills

- Read, understand, contextualize, and critique professional research papers in the economics literature

Teaching Assistant João Tampellini (joao.p.tampellini@vanderbilt.edu). Office hours TBA or by appointment.

Prerequisites Officially, only ECON 3012 (Intermediate Microeconomics) is required. However, you will find the course very difficult if you have not also taken ECON 1500 (Economic Statistics) or equivalent. If you are missing this course, please speak with me as soon as possible. A familiarity with European history is helpful but not necessary.

Course Structure This course is not a survey of European economic history. There are many interesting and important topics that we will not touch on. Instead, after one week of introduction and two weeks of methodological groundwork, the course will focus on one topic per week, organized thematically rather than chronologically. Each Tuesday, I will give a lecture on the week’s topic, surveying key issues and debates, and focusing on some results of particular interest. Each Thursday, we will discuss one professional research paper in detail.

Note Everything on this syllabus is subject to change. For this reason, be sure to check with me if you are planning to read more than a week ahead, and make sure that you check regularly on Brightspace that you have the most updated version of the syllabus.

Request I welcome feedback and constructive criticism—if you have any questions, concerns, or suggestions, please feel free to discuss them with me. It is most valuable to you if you provide feedback during the course so I can make use of it immediately (rather than it benefitting only next year’s students). Even if I am not able to make changes to address your requests and suggestions, it is helpful to be aware of your perspective.

Course Materials No textbook is required, but those interested in expanding their libraries are encouraged to purchase Allen (2009) and Mokyr (2009), of which we will cover large segments. All readings listed below will be accessible through Brightspace. Let me know if you have trouble finding anything. I will also circulate handouts from time to time that I will distribute in class and through Brightspace.

Evaluation

- *Participation and Attendance* (10%). Participation in class, and in particular in the Thursday paper discussions, is essential for this course’s function. Therefore, participation and attendance are a part of your grade. In order to avoid having the class discussion dominated by a small number of students, I will come to class every day with the class roster in randomized order. **At any time, I may “cold-call” students in the order of the randomized roster.** If your name is called and you are either absent (without a valid excuse) or unprepared to answer the question, your participation grade will negatively impacted. Note that the bar here is very low, and certainly does not require you to answer correctly: it is fine if you do not understand what is going on—that is why we are discussing it.

Note also that the randomization will be independent across class meetings, so just because you are near the top of the list for one class does not mean that you will not be near the top for the next class. To address assorted conflicts that might prevent you from attending class, each student will have 3 “no questions asked” absences. Any further absences will require a valid excuse so as not to affect your grade.

I recognize that it can be uncomfortable to be “put on the spot” by being called on. Please know that the goal here is not to assess, critique, or embarrass you. This is a low stakes method that I have found to be very effective in including everyone in the class discussion and revealing what material I might need to explain better.

- *Weekly Reading Responses* (10%). There will be 10 discussion papers that we cover on Thursdays during the semester, from February 1 to April 11. By **12:00pm each Thursday**, you must complete on Brightspace a response to the reading for that day, following a standard prompt that I will circulate separately. The goal of this assignment is to get you to think seriously about the week’s reading before we discuss it on Thursday. As a result, these assignments will be graded for completion, so it is alright if you didn’t understand the paper fully—as long as it is clear that you made an effort to understand the paper and think seriously about your responses, you will receive full credit; otherwise you will receive no or partial credit at the TA’s discretion. You are encouraged to discuss the week’s reading with your classmates, but each student must complete their own response. To address assorted conflicts

that might prevent you from being able to complete these assignments, your 3 lowest scores on these responses will be dropped.

- *Quizzes* (15%). Approximately every two weeks, there will be a quiz administered through Brightspace. The quiz will be timed (45 minutes) and closed-note. You will not be permitted to discuss the quizzes with other students. Quizzes will **begin at 5:00pm on Thursdays of odd-numbered weeks** (except week 1) and will be **due at 6:00pm on Tuesdays of even-numbered weeks**, except for the last quiz, which will be circulated at the end of week 13 and will be due at the end of week 14. There will be a total of 6 quizzes and the lowest 2 quiz grades will be dropped. Each quiz will cover the material from the previous two weeks (e.g., the quiz beginning on Thursday of week 5 will cover weeks 4 and 5), and will be graded for accuracy.
- *Midterm Examination* (15%). The midterm examination will be an open-note take-home exam in which you will be given a research paper to read and asked to respond to a number of questions about it. During the period of the exam, you are not permitted to discuss it with anyone except me and the TA. I will circulate it at **5:00pm on Thursday, February 29 and it will be due at 12:00pm on Tuesday, March 5**. It will cover all material through week 7 of the course (“Culture”). More details on the exam will be circulated closer to the date. If these dates pose a problem, please inform me immediately.
- *Term Paper* (20%). Each student will write a term paper. The paper will be due on the last day of classes—at **11:59pm on Monday, April 22**. You have two options for the term paper.
 1. *Critical Literature Review*. In consultation with the TA, who must approve your topic no later than **March 21**, select a topic not covered in class or a topic covered in class into which you want to delve in more detail and, in 6–8 pages, review the literature on the topic in a coherent way that goes beyond just summarizing each paper individually and emphasizes the connections between papers. Note that the TA may reject a topic proposal that is too similar to topics that have already been approved. For instance, you could summarize what is known about a particular topic and highlight what questions remain open and why. Or you could summarize each side of a debate, surveying the evidence for and against each side. More details on this assignment will be circulated in class, but I encourage you to already start thinking about a topic—choosing a good topic for a literature review is a process similar to choosing a research question, and we will be talking a lot about research questions in class.
 2. *Research Paper*. Identify any topic in European economic history, on which you will confront a specific research question or hypothesis using data and a carefully constructed empirical strategy. Note that this option is *substantially* more difficult than the literature review and will take a lot more time and effort. If you want to pursue this option, you must get special permission from me by submitting, by **February 29**, a proposal clearly stating the research question to be studied, the data sources that you propose to use, and the empirical strategy to be followed. Based on your proposal, I will either give you permission to pursue this option or require you to write a literature review instead. Depending on how ambitious your project is, it may be possible to increase the weight assigned to your term paper in determining your final grade.
- *Final Examination* (30%). The final examination will be of the same structure as the midterm examination. I will circulate the exam on the last day that our class meets (April 18) and it will be due at **5:00pm on Wednesday, May 1**. Substantial improvement in performance between the midterm and final examinations will be given consideration in assigning final grades.

The numerical grades assigned above yield a single score for each student at the end of the semester, on which the final grade is based. I will grade the class on a curve, meaning that—except in unusual cases—the rank of your score in the distribution of scores of the course rather than your score itself is the primary determinant of the final grade (so you should not be alarmed if the score seems low relative to what you are

used to seeing in other classes). Approximately 30 percent of students will receive an A or A-, 40 percent will receive a B+ or B, and 30 percent will receive a B- or below. The cutoff between a B+ and B will be set at approximately the median. Note that this is the combined curve for both sections of ECON 3160, not for each section separately.

Students are often concerned that this method of grading encourages competition between them and their classmates. That is true in the case of a strict curve. But I have never and will never “curve down” anyone: there is not a fixed number of As that I will give out, and I will not give you a lower grade just because others scored higher than you. I have taught this class many times now; based on this experience and through my experience with you during the course of the semester, I set the cutoffs between grade categories taking into account the quality of your work, not just your score. In short, if you deserve an A, you will get an A, no matter what anyone else does. So if you work together and help one another to do better, you can only improve your grade.

Notice that 50% of your total grade is determined after the end of the semester (term paper + final exam). This means that, during the course of the semester, it will be difficult to keep track of where you stand in the class. If being unable to continuously track your grade is an issue, you may find this class very frustrating—my best advice is to focus your energies on learning the material.

How to do well in this course This course is very different from most that you have probably seen, either in economics or history: economic history combines economic theory, data analysis, and the construction and critique of written arguments. Here is a non-comprehensive list of tips on how to well in this class:

- Make sure you don’t fall behind, especially at the beginning of the course—everything we do in weeks 4–14 builds on what we will do in weeks 2 and 3.
- To avoid falling behind, be sure to study the material as we go over it rather than waiting until there is a quiz or exam. That is, make sure that, after each class, you take some time to go back over your notes to see what you understand and what you don’t. This will help you solidify your grasp on the material and will encourage you to get help on things you didn’t understand.
- Take the reading responses seriously. These will provide the most direct practice for the types of questions that I will ask on the midterm and final. If you just copy down what we discuss in class without seriously thinking about the papers on your own, you will not have developed the necessary skills when the time comes to dissect a paper by yourself.
- Many of you will not even have taken econometrics, yet by the end of the semester you will be reading and critiquing papers published in the top professional economics journals. This is a big jump, but I know that you are all capable of it. That said, you should accept that this is not a skill that you will develop over night; it will take practice, hard work, and perseverance. Perhaps as important is to try to develop the skill of picking out what information you can understand from a paper even when you cannot understand all of it. Even by the end of the semester, you will still not understand everything you read, but you will be expected to pick out that information that you can. A good rule of thumb is that if you encounter terms that you haven’t seen in class, you are probably ok not understanding them. Of course, you can always ask me or the TA to help make these distinctions.
- Some degree of frustration in studying and preparing assignments is healthy, and overcoming it is a valuable part of the learning process. But if you are spending hours on end trying to understand something and it isn’t happening, it’s probably time to ask someone for help.
- Building on the above, if you don’t understand something, make sure to ask for help. I suggest that you take advantage of at least the following three mechanisms:
 - Speak up in class. If, at the time I teach something, it doesn’t make sense to you, odds are that you are not the only one who didn’t understand. Don’t be shy to say so—it’s better to resolve the confusion immediately and for the whole class. And if, after studying the material from a previous class, you don’t understand something, please ask in class—I will (almost) always set aside time at the beginning of class for questions. Again, if you are confused by something, odds are that someone else is.

- Do not be shy to ask me or the TA for help in office hours. We are here to help you, but you have to tell us that you need help. Even if you are so confused that you don't know what questions to ask, we can still help.
- Talk to your classmates. You might consider forming a study group if you think that would be helpful.
- On quizzes and exams, you might find that points are deducted for what might seem like a trivial difference between what you wrote and what I say that I am looking for. It's always possible that an error was made in grading, which you should feel free to raise. But, even if economic history is not a science, the methods that we use are, and sometimes small differences in wording that seem trivial might be actually be quite important. I will try to stress some cases of this in class, but if you have questions about this, please feel very free to ask.
- There are a lot of assignments due at the end of the semester. Just because something is due at the end of the semester doesn't mean that you have to wait until the end of the semester to work on it. In particular, I encourage you to work on your literature review throughout the semester rather than just at the end.
- This is a challenging class, and one that requires a lot of work. But all of you are capable of succeeding, and the TA and I are here to help. And I promise that if you put in the effort, you will learn a lot.

Policies

- *Minimum Requirements.* To pass the class, students must, at minimum, submit by the applicable deadlines, the term paper and the final examination. Note that this is a necessary condition but not a sufficient condition. The College of Arts and Science's policy on incomplete grades details the circumstances under which these requirements may be completed after the conclusion of the semester. **This means that if you submit the term paper or the final exam late, you will fail the class.**
- *Late Assignments.* **Late assignments will not be accepted. All of your assignments will be submitted via Brightspace, which timestamps your submissions. Any submission that arrives after the deadline, even by just one minute, will not be accepted and you will receive a zero for that assignment. If the assignment in question is the term paper or the final examination, that means that you will fail the course. No extensions will be given at any time for any reason, so please do not ask.** Specific technical difficulties will be addressed if and when they arise. The dropping of three reading responses and two quizzes is there to address cases where you cannot complete one of these assignments for any reason. If you are ill or otherwise unable to complete the midterm for a reason that typically excuses absence from class (which does not include job interviews), we will work out an alternative arrangement. If you cannot complete the term paper or the final exam by the deadline, you will need to seek an incomplete grade in the course (assuming that there is valid reason to do so).
- *Academic Integrity.* I trust that all of you will be honest and honorable in your behavior in this course. Cases of suspected academic dishonesty will be addressed in accordance with Vanderbilt University's Honor System. Each exam and assignment has guidelines listed above as to whether you are permitted to collaborate with your classmates, and I will make these expectations clear again when the assignment is circulated. Please speak to me or the TA if you are ever unsure of what is permissible.
- *Accessibility.* Students should contact Student Access Services for specific accommodations. If there are any circumstances that make our learning environment and activities difficult, please let me know as soon as possible.
- *Use of Artificial Intelligence (adapted from various sources).* The use of AI of any kind on quizzes is strictly prohibited. For other assignments and exams, the use of AI tools, such as ChatGPT, falls under the following three categories.

1. Text-generation tool (prohibited)
2. Use of AI to synthesize or summarize a paper or other scholarly work (prohibited)
3. Background research and editorial aid (permitted)

When considering whether to use AI in this course, keep the following points in mind:

1. In my experience, you are unlikely to get very good results if you were to try to use AI to generate text or to summarize a paper. The tendency for AI to “hallucinate” is common in a specialized field such as economic history, and can make non-permitted uses of AI very obvious to an expert in the field.
2. For any and all assignments and exams in this course, I reserve the right to check for AI-written text and to require a student to take an oral examination and, at my sole discretion, to replace their grade for the assignment or exam with that from the oral examination.
3. In all permitted usages—that is, whenever you have used an AI tool in any way as you worked on an assignment—you must include an explicit description of how AI was used.
4. Failure to adhere to this policy, or to acknowledge your use of such a tool, constitutes a violation of Vanderbilt’s honor code. Please feel free to seek clarification from me if you are even unsure if what you are doing is permitted.

Here are some examples of prohibited and permitted uses of AI:

– Prohibited uses:

- * *Entirely or partially AI-generated exam or assignment.* A student instructs an AI text-generation tool to write their assignment or complete their exam (or any portion of the exam or assignment), then hands in the assignment as if it had been written by the student.
- * *Modified AI-generated exam or assignment.* A student extensively modifies an AI-generated output in a way that results in a hybrid of the student’s own phrasing intermingled with AI-generated text, then hands in the assignment or exam in as if it had been written by the student.
- * *Paraphrased AI-generated exam or assignment.* A student completely paraphrases an AI-generated exam or assignment in ways that result in a new text that is entirely written by the student, but that is merely a thorough rewording of a text generated by the AI. Such a paraphrased text still follows the same overall structure of organization as the AI-generated text, and closely echoes the principal ideas presented in the AI-generated text. The student then hands in the assignment or exam as if it had been conceived and organized by the student alone.
- * *Use of AI to synthesize or summarize a paper or other scholarly work.* Many of the assignments in this class require students to read a paper and write a response to it or answer questions about it. Students may not use an AI tool to synthesize, summarize, or in any way explain the paper.

– Permitted use:

- * AI tools used for background research. A student consults an AI tool by asking it basic factual or thematic questions about a topic, then seeing what kinds of material the AI presents in response. This is similar to consulting Wikipedia at the outset of a project, in order to get a quick sense of the main factual and thematic contours of the subject matter.
- * AI tools to explain a concept or context. A student asks an AI to explain a topic discussed in class, such as a statistical concept or the broad contours of a literature. Again, this is similar to looking these concepts or contexts up in Wikipedia to get another source of information on it.

- * AI-edited version of student’s exam or assignment. A student composes their own entirely original exam or assignment, then submits it to an AI tool to see what kinds of stylistic edits or grammatical modifications the AI recommends. AI must be used solely for spelling, grammar, and minor stylistic issues (as you might get from the “editor” on Word) and should not be used to materially alter content or structure. The student then hands in the assignment after making some or all the editorial changes recommended by the AI.
- *Technology.* Unless required for accessibility reasons, laptops, tablets, and any other electronics are prohibited in class. Mobile phones are to be kept in bags or pockets throughout the class. This means that you will need a pen and paper to take notes, and will need to have a hard copy of the discussion paper on Thursdays to keep up with the class. This policy is based on a considerable body of evidence that shows that learning outcomes are better when technology is excluded from the classroom. Recording or photographing any part of a lecture is also prohibited.

Schedule of Meetings and Topics The readings listed below in roman text form the basis for the Tuesday lecture on that topic; you are responsible for what I cover in class. You may wish to refer back to these readings when you are studying, but be aware that there will likely be large aspects of them that we will not cover, so don’t get caught up on those parts. The reading in italics is the discussion paper for that topic. You should read it closely before Thursday’s class and prepare a response to it, due 12:00pm each Thursday on which we have a discussion.

Week	Dates	Topic	Readings	Notes
1	Jan. 9–11	Course Overview Growth in the Long Run	Clark (2007, ch. 1) Bouscasse et al. (2021) Galor (2011, ch. 2) Mokyr (1990, chs. 1, 5, 6, 9)	
2	Jan. 16–18	Econometrics		
3	Jan. 23–25	Econometrics		Quiz 1 begins 5pm 1/25
4	Jan. 30–Feb. 1	The Malthusian Economy	Clark (2007, ch. 2) Kelly and Ó Gráda (2012, 2014) Chaney and Hornbeck (2015) Voigtländer and Voth (2013) <i>Ashraf and Galor (2011)</i>	Quiz 1 due 6pm 1/30
5	Feb. 6–8	The Rise of Europe	Acemoglu et al. (2005) Becker and Woessmann (2009) Cantoni (2015) Cantoni et al. (2018) <i>Dittmar (2011)</i>	Quiz 2 begins 5pm 2/8
6	Feb. 13–15	Induced Innovation	Crafts (2011) Allen (2009, chs. 2, 6) San (2023) Humphries and Schneider (2019) Kelly et al. (2014) Mokyr (2009, pp. 267–278) <i>Hanlon (2015)</i>	Quiz 2 due 6pm 2/13

7	Feb. 20–22	Culture	Crafts (2011) Mokyr (2009, chs. 3, 5, 6) Mokyr et al. (2022) Kelly et al. (2023) Cinnirella et al. (2022) Allen (2009, ch. 10) <i>Squicciarini and Voigtländer (2015)</i>	Quiz 3 begins 5pm 2/22
8	Feb. 27–29	Institutions	North and Weingast (1989) Acemoglu et al. (2001) Acemoglu and Johnson (2005) Shiue and Keller (2007) <i>Acemoglu et al. (2011)</i>	Quiz 3 due 6pm 2/27 Midterm be- gins 5pm 2/29
9	Mar. 5–7	Leaders and Followers	Becker et al. (2011) Mitch (1993) Squicciarini (2021) Hornung (2015) <i>Juhász (2018)</i>	Midterm due 12pm 3/5 Quiz 4 begins 5pm 3/7
	Mar. 12–14	Spring Break		No class
10	Mar. 19–21	Demographic Transition	Galor (2011, ch. 2) Guinnane (2011) Becker et al. (2010) Beach and Hanlon (2023) <i>Ager et al. (2018)</i>	Quiz 4 due 6pm 3/19
11	Mar. 26–28	Living Standards	Voth (2003) Antràs and Voth (2003) Lindert and Williamson (1983) Mokyr (1988) Feinstein (1998) Mokyr and Ó Gráda (1996) <i>Beach and Hanlon (2018)</i>	Quiz 5 begins 5pm 3/28
12	Apr. 2–4	The Age of Mass Migration	Hatton and Williamson (1998, ch. 2, 3) Spitzer and Zimran (2023) Spitzer (2021) <i>Karadja and Prawitz (2019)</i>	Quiz 5 due 6pm 4/2
13	Apr. 9–11	The Age of Mass Migration	Spitzer and Zimran (2018) Hatton and Williamson (1998, ch. 9) Abramitzky et al. (2012) <i>Collins and Zimran (2023)</i>	Quiz 6 begins 5pm 4/11
14	Apr. 16–18	Wrap Up, Review, & Flex		Quiz 6 due 6pm 4/18 Final Exam Distributed 4/18
	April 22	Term Paper Due at 11:59pm		
	May 1	Final Exam Due at 5:00pm		

References

- Abramitzky, Ran, Leah Platt Boustan, and Katherine Eriksson (2012). “Europe’s Tired, Poor, Huddled Masses: Self-Selection and Economic Outcomes in the Age of Mass Migration.” *American Economic Review* 102:5, pp. 1832–1856.
- Acemoglu, Daron, Davide Cantoni, Simon Johnson, and James A. Robinson (2011). “The Consequences of Radical Reform: The French Revolution.” *American Economic Review* 101:7, pp. 3286–3307.
- Acemoglu, Daron and Simon Johnson (2005). “Unbundling Institutions.” *Journal of Political Economy* 113:5, pp. 949–995.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson (2001). “The Colonial Origins of Comparative Development: An Empirical Investigation.” *American Economic Review* 91:5, pp. 1369–1401.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson (2005). “The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth.” *American Economic Review* 95:3, pp. 546–579.
- Ager, Philipp, Casper Worm Hansen, and Peter Sandholt Jensen (2018). “Fertility and Early-Life Mortality: Evidence from Smallpox Vaccination in Sweden.” *Journal of the European Economic Association* 16:2, pp. 487–521.
- Allen, Robert C. (2009). *The British Industrial Revolution in Global Perspective*. Cambridge: Cambridge University Press.
- Antràs, Pol and Hans-Joachim Voth (2003). “Factor Prices and Productivity Growth during the British Industrial Revolution.” *Explorations in Economic History* 40, pp. 52–77.
- Ashraf, Quamrul and Oded Galor (2011). “Dynamics and Stagnation in the Malthusian Epoch.” *American Economic Review* 101:5, pp. 2003–2041.
- Beach, Brian and W. Walker Hanlon (2018). “Coal Smoke and Mortality in an Early Industrial Economy.” *Economic Journal* 128, pp. 2652–2675.
- Beach, Brian and W. Walker Hanlon (2023). “Culture and the Historical Fertility Transition.” *Review of Economic Studies* 90:4, pp. 1669–1700.
- Becker, Sascha O., Francesco Cinnirella, and Ludger Woessmann (2010). “The Trade-Off Between Fertility and Education: Evidence from before the Demographic Transition.” *Journal of Economic Growth* 15:3, pp. 177–204.
- Becker, Sascha O., Erik Hornung, and Ludger Woessmann (2011). “Education and Catch-up in the Industrial Revolution.” *American Economic Journal: Macroeconomics* 3:3, pp. 92–126.
- Becker, Sascha O. and Ludger Woessmann (2009). “Was Weber Wrong? A Human Capital Theory of Protestant Economic History.” *Quarterly Journal of Economics* 124:2, pp. 531–596.
- Bouscasse, Paul, Emi Nakamura, and Jón Steinsson (2021). “When Did Growth Begin? New Estimates of Productivity Growth in England from 1250 to 1870.” NBER Working Paper 28623.
- Cantoni, Davide (2015). “The Economic Effects of the Protestant Reformation: Testing the Weber Hypothesis in the German Lands.” *Journal of the European Economic Association* 13:4, pp. 561–598.
- Cantoni, Davide, Jeremiah E. Dittmar, and Noam Yuchtman (2018). “Religious Competition and Reallocation: The Political Economy of Secularization in the Protestant Reformation.” *Quarterly Journal of Economics* 133:4, pp. 2037–2096.
- Chaney, Eric and Richard Hornbeck (2015). “Economic Dynamics in the Malthusian Era: Evidence from the 1609 Spanish Expulsion of the Moriscos.” *Economic Journal* 126, pp. 1404–1440.

- Cinnirella, Francesco, Erik Hornung, and Julius Koschnick (2022). “Flow of Ideas: Economic Societies and the Rise of Useful Knowledge.” CEPR Discussion Paper 17442.
- Clark, Gregory (2007). *A Farewell to Alms*. Princeton: Princeton University Press.
- Collins, William J. and Ariell Zimran (2023). “Working Their Way Up? Us Immigrants’ Changing Labor Market Assimilation in the Age of Mass Migration.” *American Economic Journal: Applied Economics* 15:3, pp. 238–269.
- Crafts, Nicholas (2011). “Explaining the First Industrial Revolution: Two Views.” *European Review of Economic History* 15, pp. 153–168.
- Dittmar, Jeremiah E. (2011). “Information Technology and Economic Change: The Impact of the Printing Press.” *Quarterly Journal of Economics* 126:3, pp. 1133–1172.
- Feinstein, Charles H. (1998). “Pessimism Perpetuated: Real Wages and the Standard of Living in Britain during and after the Industrial Revolution.” *Journal of Economic History* 58:3, pp. 625–658.
- Galor, Oded (2011). *Unified Growth Theory*. Princeton: Princeton University Press.
- Guinnane, Timothy W. (2011). “The Historical Fertility Transition: A Guide for Economists.” *Journal of Economic Literature* 49:3, pp. 589–614.
- Hanlon, W. Walker (2015). “Necessity is the Mother of Invention: Input Supplies and Directed Technical Change.” *Econometrica* 83:1, pp. 67–100.
- Hatton, Timothy J. and Jeffrey G. Williamson (1998). *The Age of Mass Migration: Causes and Economic Impact*. New York: Oxford University Press.
- Hornung, Erik (2015). “Railroads and Growth in Prussia.” *Journal of the European Economic Association* 13:4, pp. 699–736.
- Humphries, Jane and Benjamin Schneider (2019). “Spinning the Industrial Revolution.” *Economic History Review* 72:1, pp. 126–155.
- Juhász, Réka (2018). “Temporary Protection and Technology Adoption: Evidence from the Napoleonic Blockade.” *American Economic Review* 108:11, pp. 3339–3376.
- Karadja, Mounir and Erik Prawitz (2019). “Exit, Voice, and Political Change: Evidence from Swedish Mass Migration to the United States.” *Journal of Political Economy* 127:4, pp. 1864–1925.
- Kelly, Morgan, Joel Mokyr, and Cormac Ó Gráda (2014). “Precocious Albion: A New Interpretation of the British Industrial Revolution.” *Annual Review of Economics* 6, pp. 363–389.
- Kelly, Morgan, Joel Mokyr, and Cormac Ó Gráda (2023). “The Mechanics of the Industrial Revolution.” *Journal of Political Economy* 131:1, pp. 59–94.
- Kelly, Morgan and Cormac Ó Gráda (2012). “The Preventive Check in Medieval and Preindustrial England.” *Journal of Economic History* 72:4, pp. 1015–1035.
- Kelly, Morgan and Cormac Ó Gráda (2014). “Living Standards and Mortality Since the Middle Ages.” *Economic History Review* 67:2, pp. 358–381.
- Lindert, Peter H. and Jeffrey G. Williamson (1983). “English Workers’ Living Standards during the Industrial Revolution: A New Look.” *Economic History Review* 36:1, pp. 1–25.
- Mitch, David (1993). “The Role of Human Capital in the First Industrial Revolution.” In *The British Industrial Revolution: An Economic Perspective*. Joel Mokyr (ed.). Boulder: Westview.
- Mokyr, Joel (1988). “Is There Still Life in the Pessimist Case? Consumption during the Industrial Revolution, 1790–1850.” *Journal of Economic History* 48:1, pp. 69–92.

- Mokyr, Joel (1990). *The Lever of Riches: Technological Creativity and Economic Progress*. New York: Oxford University Press.
- Mokyr, Joel (2009). *The Enlightened Economy: An Economic History of Britain 1700–1850*. New Haven: Yale University Press.
- Mokyr, Joel and Cormac Ó Gráda (1996). “Height and Health in the United Kingdom, 1815–1860: Evidence from the East India Company Army.” *Explorations in Economic History* 33, pp. 141–168.
- Mokyr, Joel, Assaf Sarid, and Karine van der Beek (2022). “The Wheels of Change: Technology Adoption, Millwrights, and Persistence in Britain’s Industrialization.” *Economic Journal* 132, pp. 1894–1926.
- North, Douglass C. and Barry R. Weingast (1989). “Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England.” *Journal of Economic History* 49:4, pp. 803–832.
- San, Shmuel (2023). “Labor Supply and Directed Technical Change: Evidence from the Termination of the Bracero Program in 1964.” *American Economic Journal: Applied Economics* 15:1, pp. 136–163.
- Shiue, Carol H. and Wolfgang Keller (2007). “Markets in China and Europe on the Eve of the Industrial Revolution.” *American Economic Review* 97:4, pp. 1189–1216.
- Spitzer, Yannay (2021). “Pogroms, Networks, and Migration: The Jewish Migration from the Russian Empire to the United States 1881–1914.” Mimeo., The Hebrew University of Jerusalem.
- Spitzer, Yannay and Ariell Zimran (2018). “Migrant Self-Selection: Anthropometric Evidence from the Mass Migration of Italians to the United States, 1907–1925.” *Journal of Development Economics* 134, pp. 226–247.
- Spitzer, Yannay and Ariell Zimran (2023). “Like an Ink Blot on Paper: Testing the Diffusion Hypothesis of Mass Migration, Italy 1875–1920.” NBER Working Paper 30847.
- Squicciarini, Mara P. (2021). “Devotion and Development: Religiosity, Education, and Economic Progress in 19th-Century France.” *American Economic Review* 110:11, pp. 3454–3491.
- Squicciarini, Mara P. and Nico Voigtländer (2015). “Human Capital and Industrialization: Evidence from the Age of Enlightenment.” *Quarterly Journal of Economics* 130:4, pp. 1825–1883.
- 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, pp. 774–811.
- Voth, Hans-Joachim (2003). “Living Standards during the Industrial Revolution: An Economist’s Guide.” *American Economic Review, Papers and Proceedings* 93:2, pp. 221–226.