

NOTES

PREFACE TO THE PAPERBACK EDITION

1. Zidong An, João Tovar Jalles, and Prakash Loungani, “How Well Do Economists Forecast Recessions?,” IMF working paper no. 18/39, March 5, 2018, www.imf.org/en/Publications/WP/Issues/2018/03/05/How-Well-Do-Economists-Forecast-Recessions-45672.

2. “Grippes: Un virus sous surveillance,” *C’est pas sorcier*, May 22, 2013, www.youtube.com/watch?v=k9U-vSZnOyQ.

3. Lawrence Wright, “The Plague Year,” *New Yorker*, December 28, 2020, www.newyorker.com/magazine/2021/01/04/the-plague-year.

4. IMF fiscal monitor, chapter 1, October 2020, www.imf.org/-/media/Files/Publications/fiscal-monitor/2020/October/English/ch1.ashx.

5. “Kerala: COVID-19 Battle,” GoK Dashboard, accessed March 22, 2021, <https://dashboard.kerala.gov.in/index.php>.

6. Thomas J. Bollyky, Sawyer Crosby, and Samantha Kiernan, “Fighting a Pandemic Requires Trust,” *Foreign Affairs*, October 23, 2020, www.foreignaffairs.com/articles/united-states/2020-10-23/coronavirus-fighting-requires-trust.

7. Qing Han et al., “Trust in Government and Its Associations with Health Behaviour and Prosocial Behaviour During the COVID-19 Pandemic,” PsyArXiv, June 29, 2020, <https://psyarxiv.com/p5gns/>.

8. Noah Smith “No, Pandemic UI Did Not Kill Jobs,” *Noahpinion*, December 8, 2020, <https://noahpinion.substack.com/p/no-pandemic-ui-didnt-kill-jobs>.

9. Corina Boar and Simon Mongey, “Dynamic Trade-Offs and Labor Supply Under the CARES Act,” NBER Working Paper No. 27727, August 2020, www.nber.org/papers/w27727.

10. “Economists vs. Common Sense,” *Wall Street Journal*, August 2, 2020, www.wsj.com/articles/economists-vs-common-sense-11596398926.

11. Anne Case and Angus Deaton, *Deaths of Despair and the Future of Capitalism* (Princeton, NJ: Princeton University Press, 2020).

12. Ellora Derenoncourt and Claire Montialoux, “Minimum Wages and Racial Inequality,” *Quarterly Journal of Economics* 136, no. 1 (February 2021): 169–228.

13. Carlos Torres et al., “Comparison of Knowledge and Behavior Following Physician-Delivered COVID-19 Public Health Messages and Messages Acknowledging Racial Inequity: A Randomized Clinical Trial” (unpublished manuscript, 2021).

CHAPTER 1. MEGA: MAKE ECONOMICS GREAT AGAIN

1. Amber Phillips, “Is Split-Ticket Voting Officially Dead?,” *Washington Post*, 2017, https://www.washingtonpost.com/news/the-fix/wp/2016/11/17/is-split-ticket-voting-officially-dead/?utm_term=.6b57fc114762.

2. “8. Partisan Animosity, Personal Politics, Views of Trump,” Pew Research Center, 2017, <https://www.people-press.org/2017/10/05/8-partisan-animosity-personal-politics-views-of-trump/>.

3. “Poll: Majority of Democrats Think Republicans Are ‘Racist,’ ‘Bigoted’ or ‘Sexist,’” *Axios*, 2017, <https://www.countable.us/articles/14975-poll-majority-democrats-think-republicans-racist-bigoted-sexist>.

4. Stephen Hawkins, Daniel Yudkin, Míriam Juan-Torres, and Tim Dixon, “Hidden Tribes: A Study of America’s Polarized Landscape,” *More in Common*, 2018, <https://www.moreincommon.com/hidden-tribes>.

5. Charles Dickens, *Hard Times, Household Words* weekly journal, London, 1854.

6. Matthew Smith, “Leave Voters Are Less Likely to Trust Any Experts—Even Weather Forecasters,” YouGov, 2017, <https://yougov.co.uk/topics/politics/articles-reports/2017/02/17/leave-voters-are-less-likely-trust-any-experts-eve>.

7. This survey was done in collaboration with Stefanie Stantcheva and is described in Abhijit Banerjee, Esther Duflo, and Stefanie Stantcheva, “Me and Everyone Else: Do People Think Like Economists?,” Mimeo, Massachusetts Institute of Technology, 2019.

8. “Steel and Aluminum Tariffs,” Chicago Booth, IGM Forum, 2018, <http://www.igmchicago.org/surveys/steel-and-aluminum-tariffs>.

9. “Refugees in Germany,” Chicago Booth, IGM Forum, 2017, <http://www.igmchicago.org/surveys/refugees-in-germany> (the answers are normalized by the number of people who give an opinion).

10. “Robots and Artificial Intelligence,” Chicago Booth, IGM Forum, 2017, <http://www.igmchicago.org/surveys/robots-and-artificial-intelligence>.

11. Paola Sapienza and Luigi Zingales, “Economic Experts versus Average Americans,” *American Economic Review* 103, no. 10 (2013): 636–42, <https://doi.org/10.1257/aer.103.3.636>.

12. “A Mean Feat,” *Economist*, January 9, 2016, <https://www.economist.com/finance-and-economics/2016/01/09/a-mean-feat>.

13. Siddhartha Mukherjee, *The Emperor of All Maladies: A Biography of Cancer* (New York: Scribner, 2010).

CHAPTER 2. FROM THE MOUTH OF THE SHARK

1. United Nations International migration report highlight, accessed June 1, 2017, https://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017_Highlights.pdf; Mathias Czaika and Hein de Haas, “The Globalization of Migration: Has the World Become More Migratory?,” *International Migration Review* 48, no. 2 (2014): 283–323.

2. “EU Migrant Crisis: Facts and Figures,” News: European Parliament, June 30, 2017, accessed April 21, 2019, <http://www.europarl.europa.eu/news/en/headlines/society/20170629STO78630/eu-migrant-crisis-facts-and-figures>.

3. Alberto Alesina, Armando Miano, and Stefanie Stantcheva, “Immigration and Redistribution,” NBER Working Paper 24733, 2018.

4. Oscar Barrera Rodriguez, Sergei M. Guriev, Emeric Henry, and Ekaterina Zhuravskaya, “Facts, Alternative Facts, and Fact-Checking in Times of Post-Truth Politics,” *SSRN Electronic Journal* (2017), <https://dx.doi.org/10.2139/ssrn.3004631>.

5. Alesina, Miano, and Stantcheva, “Immigration and Redistribution.”

6. Rodriguez, Guriev, Henry, and Zhuravskaya, “Facts, Alternative Facts, and Fact-Checking in Times of Post-Truth Politics.”

7. Warsan Shire, “Home,” accessed June 5, 2019, <https://www.seekersguidance.org/articles/social-issues/home-warsan-shire/>.

8. Maheshwor Shrestha, “Push and Pull: A Study of International Migration from Nepal,” Policy Research Working Paper WPS 7965 (Washington, DC: World Bank Group, 2017), <http://documents.worldbank.org/curated/en/318581486560991532/Push-and-pull-a-study-of-international-migration-from-Nepal>.

9. *Aparajito*, directed by Satyajit Ray, 1956, Merchant Ivory Productions.

10. Using data from sixty-five countries, Alwyn Young finds that urban dwellers consume 52 percent more than rural dwellers. Alwyn Young, “Inequality, the Urban-Rural Gap, and Migration,” *Quarterly Journal of Economics* 128, no. 4 (2013): 1727–85.

11. Abhijit Banerjee, Nils Enevoldsen, Rohini Pande, and Michael Walton, "Information as an Incentive: Experimental Evidence from Delhi," Mimeo, Harvard, accessed April 21, 2019, https://scholar.harvard.edu/files/rpande/files/delhivoter_shared-14.pdf.

12. Lois Labrianidis and Manolis Pratsinakis, "Greece's New Emigration at Times of Crisis," LSE Hellenic Observatory GreeSE Paper 99, 2016.

13. John Gibson, David McKenzie, Halahingano Rohorua, and Steven Stillman, "The Long-Term Impacts of International Migration: Evidence from a Lottery," *World Bank Economic Review* 32, no. 1 (February 2018): 127–47.

14. Michael Clemens, Claudio Montenegro, and Lant Pritchett, "The Place Premium: Wage Differences for Identical Workers Across the U.S. Border," Center for Global Development Working Paper 148, 2009.

15. Emi Nakamura, Jósef Sigurdsson, and Jón Steinsson, "The Gift of Moving: Intergenerational Consequences of a Mobility Shock," NBER Working Paper 22392, 2017, revised January 2019, DOI: 10.3386/w22392.

16. Ibid.

17. Matti Sarvimäki, Roope Uusitalo, and Markus Jäntti, "Habit Formation and the Misallocation of Labor: Evidence from Forced Migrations," 2019, <https://ssrn.com/abstract=3361356> or <http://dx.doi.org/10.2139/ssrn.3361356>.

18. Gharad Bryan, Shyamal Chowdhury, and Ahmed Mushfiq Mobarak, "Underinvestment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh," *Econometrica* 82, no. 5 (2014): 1671–1748.

19. David Card, "The Impact of the Mariel Boatlift on the Miami Labor Market," *Industrial and Labor Relations Review* 43, no. 2 (1990): 245–57.

20. George J. Borjas, "The Wage Impact of the *Marielitos*: A Reappraisal," *Industrial and Labor Relations Review* 70, no. 5 (February 13, 2017): 1077–1110.

21. Giovanni Peri and Vasil Yassenov, "The Labor Market Effects of a Refugee Wave: Synthetic Control Method Meets the Mariel Boatlift," *Journal of Human Resources* 54, no. 2 (January 2018): 267–309.

22. Ibid.

23. George J. Borjas, "Still More on Mariel: The Role of Race," NBER Working Paper 23504, 2017.

24. Jennifer Hunt, "The Impact of the 1962 Repatriates from Algeria on the French Labor Market," *Industrial and Labor Relations Review* 45, no. 3 (April 1992): 556–72.

25. Rachel M. Friedberg, "The Impact of Mass Migration on the Israeli Labor Market," *Quarterly Journal of Economics* 116, no. 4 (November 2001): 1373–1408.

26. Marco Tabellini, “Gifts of the Immigrants, Woes of the Natives: Lessons from the Age of Mass Migration,” HBS Working Paper 19-005, 2018.

27. Mette Foged and Giovanni Peri, “Immigrants’ Effect on Native Workers: New Analysis on Longitudinal Data,” *American Economic Journal: Applied Economics* 8, no. 2 (2016): 1–34.

28. *The Economic and Fiscal Consequences of Immigration*, National Academies of Sciences, Engineering, and Medicine (Washington, DC: National Academies Press, 2017), <https://doi.org/10.17226/23550>.

29. Christian Dustmann, Uta Schönberg, and Jan Stuhler, “Labor Supply Shocks, Native Wages, and the Adjustment of Local Employment,” *Quarterly Journal of Economics* 132, no. 1 (February 2017): 435–83.

30. Michael A. Clemens, Ethan G. Lewis, and Hannah M. Postel, “Immigration Restrictions as Active Labor Market Policy: Evidence from the Mexican Bracero Exclusion,” *American Economic Review* 108, no. 6 (June 2018): 1468–87.

31. Foged and Peri, “Immigrants’ Effect on Native Workers.”

32. Patricia Cortés, “The Effect of Low-Skilled Immigration on US Prices: Evidence from CPI Data,” *Journal of Political Economy* 116, no. 3 (2008): 381–422.

33. Patricia Cortés and José Tessada, “Low-Skilled Immigration and the Labor Supply of Highly Skilled Women,” *American Economic Journal: Applied Economics* 3, no. 3 (July 2011): 88–123.

34. Emma Lazarus, “The New Colossus,” in *Emma Lazarus: Selected Poems*, ed. John Hollander (New York: Library of America, 2005), 58.

35. Ran Abramitzky, Leah Platt Boustan, and Katherine Eriksson, “Europe’s Tired, Poor, Huddled Masses: Self-Selection and Economic Outcomes in the Age of Mass Migration,” *American Economic Review* 102, no. 5 (2012): 1832–56.

36. “Immigrant Founders of the 2017 Fortune 500,” Center for American Entrepreneurship, 2017, <http://startupsusa.org/fortune500/>.

37. Nakamura, Sigurdsson, and Steinsson, “The Gift of Moving.”

38. Jie Bai, “Melons as Lemons: Asymmetric Information, Consumer Learning, and Quality Provision,” working paper, 2018, accessed June 19, 2019, <https://drive.google.com/file/d/0B52sohAPtnAWYVhBYm11cDBrSmM/view>.

39. “For the conversion of his money into capital, therefore, the owner of money must meet in the market with the free labourer, free in the double sense, that as a free man he can dispose of his labour-power as his own commodity, and that on the other hand he has no other commodity for sale, is

short of everything necessary for the realisation of his labour-power.” From Karl Marx, *Das Kapital* (Hamburg: Verlag von Otto Meissner, 1867).

40. Girm Abebe, Stefano Caria, and Esteban Ortiz-Ospina, “The Selection of Talent: Experimental and Structural Evidence from Ethiopia,” working paper, 2018.

41. Christopher Blattman and Stefan Dercon, “The Impacts of Industrial and Entrepreneurial Work on Income and Health: Experimental Evidence from Ethiopia,” *American Economic Journal: Applied Economics* 10, no. 3 (July 2018): 1–38.

42. Girm Abebe, Stefano Caria, Marcel Fafchamps, Paolo Falco, Simon Franklin, and Simon Quinn, “Anonymity or Distance? Job Search and Labour Market Exclusion in a Growing African City,” CSAE Working Paper WPS/2016-10-2, 2018.

43. Stefano Caria, “Choosing Connections. Experimental Evidence from a Link-Formation Experiment in Urban Ethiopia,” working paper, 2015; Pieter Serneels, “The Nature of Unemployment Among Young Men in Urban Ethiopia,” *Review of Development Economics* 11, no. 1 (2007): 170–86.

44. Carl Shapiro and Joseph E. Stiglitz, “Equilibrium Unemployment as a Worker Discipline Device,” *American Economic Review* 74, no. 3 (June 1984): 433–44.

45. Emily Breza, Supreet Kaur, and Yogita Shamdasani, “The Morale Effects of Pay Inequality,” *Quarterly Journal of Economics* 133, no. 2 (2018): 611–63.

46. Dustmann, Schönberg, and Stuhler, “Labor Supply Shocks, Native Wages, and the Adjustment of Local Employment.”

47. Patricia Cortés and Jessica Pan, “Foreign Nurse Importation and Native Nurse Displacement,” *Journal of Health Economics* 37 (2017): 164–80.

48. Kaivan Munshi, “Networks in the Modern Economy: Mexican Migrants in the U.S. Labor Market,” *Quarterly Journal of Economics* 118, no. 2 (2003): 549–99.

49. Lori Beaman, “Social Networks and the Dynamics of Labor Market Outcomes: Evidence from Refugees Resettled in the U.S.,” *Review of Economic Studies* 79, no. 1 (January 2012): 128–61.

50. George Akerlof, “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism,” *Quarterly Journal of Economics* 84, no. 3 (1970): 488–500.

51. Referees and editors apparently found Akerlof’s paper difficult to understand. Essentially, the kind of circular reasoning that explains the unraveling requires a proper mathematical exposition to make sure it is watertight,

and in 1970 this particular style of mathematical argumentation was unfamiliar to most economists. Therefore, it took some time before a journal ventured to publish it. But once published, it became an instant classic and has remained one of the most influential papers of all time. The kind of mathematics it used, which is an application of the branch of applied math called “game theory,” is now taught to economics undergraduates.

52. Banerjee, Enevoldsen, Pande, and Walton, “Information as an Incentive.”

53. World air quality report, AirVisual, 2018, accessed April 21, 2019, <https://www.airvisual.com/world-most-polluted-cities>.

54. Abhijit Banerjee and Esther Duflo, “The Economic Lives of the Poor,” *Journal of Economic Perspectives* 21, no. 1 (2007): 141–68.

55. Global Infrastructure Hub, *Global Infrastructure Outlook*, Oxford Economics, 2017.

56. Edward Glaeser, *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier* (London: Macmillan, 2011).

57. Jan K. Brueckner, Shihe Fu Yizhen Gu, and Junfu Zhang, “Measuring the Stringency of Land Use Regulation: The Case of China’s Building Height Limits,” *Review of Economics and Statistics* 99, no. 4 (2017) 663–77.

58. Abhijit Banerjee and Esther Duflo, “Barefoot Hedge-Fund Managers,” *Poor Economics* (New York: PublicAffairs, 2011).

59. W. Arthur Lewis, “Economic Development with Unlimited Supplies of Labour,” *Manchester School* 22, no. 2 (1954): 139–91.

60. Robert Jensen and Nolan H. Miller, “Keepin’ ’Em Down on the Farm: Migration and Strategic Investment in Children’s Schooling,” NBER Working Paper 23122, 2017.

61. Robert Jensen, “Do Labor Market Opportunities Affect Young Women’s Work and Family Decisions? Experimental Evidence from India,” *Quarterly Journal of Economics* 127, no. 2 (2012): 753–92.

62. Bryan, Chowdhury, and Mobarak, “Underinvestment in a Profitable Technology.”

63. Maheshwor Shrestha, “Get Rich or Die Tryin’: Perceived Earnings, Perceived Mortality Rate, and the Value of a Statistical Life of Potential Work-Migrants from Nepal,” World Bank Policy Research Working Paper 7945, 2017.

64. Maheshwor Shrestha, “Death Scares: How Potential Work-Migrants Infer Mortality Rates from Migrant Deaths,” World Bank Policy Research Working Paper 7946, 2017.

65. Donald Rumsfeld, *Known and Unknown: A Memoir* (New York: Sentinel, 2012).

66. Frank H. Knight, *Risk, Uncertainty, and Profit* (Boston: Hart, Schaffner, and Marx, 1921).

67. Justin Sydnor, “(Over)insuring Modest Risks,” *American Economic Journal: Applied Economics* 2, no. 4 (2010): 177–99.

68. We will return to the idea of these motivated beliefs in chapter 4. For a reference, see Roland Bénabou and Jean Tirole, “Mindful Economics: The Production, Consumption, and Value of Beliefs,” *Journal of Economic Perspectives* 30, no. 3 (2016): 141–64.

69. Alexis de Tocqueville, *Democracy in America* (London: Saunders and Otley, 1835).

70. Alberto Alesina, Stefanie Stantcheva, and Edoardo Teso, “Intergenerational Mobility and Preferences for Redistribution,” *American Economic Review* 108, no. 2 (2018): 521–54, DOI: 10.1257/aer.20162015.

71. Benjamin Austin, Edward Glaeser, and Lawrence H. Summers, “Saving the Heartland: Place-Based Policies in 21st Century America,” Brookings Papers on Economic Activity Conference Drafts, 2018.

72. Peter Ganong and Daniel Shoag, “Why Has Regional Income Convergence in the U.S. Declined?,” *Journal of Urban Economics* 102 (2017): 76–90.

73. Enrico Moretti, *The New Geography of Jobs* (Boston: Houghton Mifflin Harcourt, 2012).

74. Ganong and Shoag, “Why Has Regional Income Convergence in the U.S. Declined?”

75. “Starbucks,” Indeed.com, accessed April 21, 2019, <https://www.indeed.com/q-Starbucks-l-Boston,-MA-jobs.html>; “Starbucks,” Indeed.com, accessed April 21, 2019, <https://www.indeed.com/jobs?q=Starbucks&l=Boise+percent2C+ID>.

76. This example is worked out by Ganong and Shoag in Peter Ganong and Daniel Shoag, “Why Has Regional Income Convergence in the U.S. Declined?”

77. “The San Francisco Rent Explosion: Part II,” Priceonomics, accessed June 4, 2019, <https://priceonomics.com/the-san-francisco-rent-explosion-part-ii/>.

78. According to RentCafé, the average rent in Mission Dolores is \$3,728 for 792 square feet. “San Francisco, CA Rental Market Trends,” accessed June 4, 2019, <https://www.rentcafe.com/average-rent-market-trends/us/ca/san-francisco/>.

79. “New Money Driving Out Working-Class San Franciscans,” *Los Angeles Times*, June 21, 1999, accessed June 4, 2019, <https://www.latimes.com/archives/la-xpm-1999-jun-21-mn-48707-story.html>.

80. Glaeser, *Triumph of the City*.

81. Atif Mian and Amir Sufi have developed these arguments in their book *House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again* (Chicago: University of Chicago Press, 2014), and many articles, including Atif Mian, Kamalesh Rao, and Amir Sufi, “Household Balance Sheets, Consumption, and the Economic Slump,” *Quarterly Journal of Economics* 128, no. 4 (2013): 1687–1726.

82. Matthew Desmond, *Evicted: Poverty and Profit in the American City* (New York: Crown, 2016).

83. Mark Aguiar, Mark Bilal, Kerwin Kofi Charles, and Erik Hurst, “Leisure Luxuries and the Labor Supply of Young Men,” NBER Working Paper 23552, 2017.

84. Kevin Roose, “Silicon Valley Is Over, Says Silicon Valley,” *New York Times*, March 4, 2018.

85. Andrew Ross Sorkin, “From Bezos to Walton, Big Investors Back Fund for ‘Flyover’ Start-Ups,” *New York Times*, December 4, 2017.

86. Glenn Ellison and Edward Glaeser, “Geographic Concentration in U.S. Manufacturing Industries: A Dartboard Approach,” *Journal of Political Economy* 105, no. 5 (1997): 889–927.

87. Bryan, Chowdhury, and Mobarak, “Underinvestment in a Profitable Technology.”

88. Tabellini, “Gifts of the Immigrants, Woes of the Natives.”

CHAPTER 3. THE PAINS FROM TRADE

1. “Steel and Aluminum Tariffs,” Chicago Booth, IGM Forum, 2018, <http://www.igmchicago.org/surveys/steel-and-aluminum-tariffs>.

2. “Import Duties,” Chicago Booth, IGM Forum, 2016, <http://www.igmchicago.org/surveys/import-duties>.

3. Abhijit Banerjee, Esther Duflo, and Stefanie Stantcheva, “Me and Everyone Else: Do People Think Like Economists?,” Mimeo, Massachusetts Institute of Technology, 2019.

4. Ibid.

5. *The Collected Scientific Papers of Paul A. Samuelson*, vol. 3 (Cambridge, MA: MIT Press, 1966), 683.

6. Ibid.

7. David Ricardo, *On the Principles of Political Economy and Taxation* (London: John Murray, 1817).

8. Paul A. Samuelson and William F. Stolper, "Protection and Real Wages," *Review of Economic Studies* 9, no. 1 (1941), 58–73.

9. P. A. Samuelson, "The Gains from International Trade Once Again," *Economic Journal* 72, no. 288 (1962): 820–29, DOI: 10.2307/2228353.

10. John Keats, "Ode on a Grecian Urn," in *The Complete Poems of John Keats*, 3rd ed. (New York: Penguin Classics, 1977).

11. Petia Topalova, "Factor Immobility and Regional Impacts of Trade Liberalization: Evidence on Poverty from India," *American Economic Journal: Applied Economics* 2, no. 4 (2010): 1–41, DOI: 10.1257/app.2.4.1.

12. "GDP Growth (annual %)," World Bank, accessed March 29, 2019, <https://data.worldbank.org/indicator/ny.gdp.mktp.kd.zg?end=2017&start=1988>.

13. Of course, the trade optimists, among them Jagdish Bhagwati, T. N. Srinivasan, and their followers make the argument that pre-1991 growth was about to grind to a halt and the bailout and trade liberalization saved it.

14. Tractatus 7, in Ludwig von Wittgenstein, *Tractatus Logico-Philosophicus*, originally published by *Annalen der Naturphilosophie*, 1921. Published in the original edition by Chiron Academic Press in 2017, with an introduction by Bertrand Russell.

15. "GDP Growth (annual %)," World Bank.

16. The share of GDP for the top 1 percent (in terms of income) rose from a low of 6.1 percent in 1982 to 21.3 percent in 2015. World Inequality Database, accessed March 15, 2019, <https://wid.world/country/india>.

17. Diego Cerdeiro and Andras Komaromi, approved by Valerie Cerra, "The Effect of Trade on Income and Inequality: A Cross-Sectional Approach," International Monetary Fund Background Papers, 2017.

18. Pinelopi Koujianou Goldberg and Nina Pavcnik, "Distributional Effects of Globalization in Developing Countries," *Journal of Economic Literature* 45, no. 1 (March 2007): 39–82.

19. Thomas Piketty, Li Yang, and Gabriel Zucman, "Capital Accumulation, Private Property and Rising Inequality in China, 1978–2015," *American Economic Review*, forthcoming in 2019, working paper version accessed on June 19, 2019, <http://gabriel-zucman.eu/files/PYZ2017.pdf>.

20. Topalova, "Factor Immobility and Regional Impacts of Trade Liberalization."

21. Gaurav Datt, Martin Ravallion, and Rinku Murgai, "Poverty

Reduction in India: Revisiting Past Debates with 60 Years of Data,” VOX CEPR Policy Portal, accessed March 15, 2019, voxcu.org.

22. Eric V. Edmonds, Nina Pavcnik, and Petia Topalova, “Trade Adjustment and Human Capital Investments: Evidence from Indian Tariff Reform,” *American Economic Journal: Applied Economics* 2, no. 4 (2010): 42–75. DOI: 10.1257/app.2.4.42.

23. Orazio Attanasio, Pinelopi K. Goldberg, and Nina Pavcnik, “Trade Reforms and Trade Inequality in Colombia,” *Journal of Development Economics* 74, no. 2 (2004): 331–66; Brian K. Kovak, “Regional Effects of Trade Reform: What Is the Correct Level of Liberalization?” *American Economic Review* 103, no. 5 (2013): 1960–76.

24. Pinelopi K. Goldberg, Amit Khandelwal, Nina Pavcnik, and Petia Topalova, “Trade Liberalization and New Imported Inputs,” *American Economic Review* 99, no. 2 (2009): 494–500.

25. Abhijit Vinayak Banerjee, “Globalization and All That,” in *Understanding Poverty*, ed. Abhijit Vinayak Banerjee, Roland Bénabou, and Dilip Mookherjee (New York: Oxford University Press, 2006).

26. Topalova, “Factor Immobility and Regional Impacts of Trade Liberalization.”

27. Abhijit Banerjee and Esther Dufló, “Growth Theory Through the Lens of Development Economics,” ch. 7, in *The Handbook of Economic Growth*, eds. Philippe Aghion and Stephen Durlauf (Amsterdam: North Holland, 2005), vol. 1, part A: 473–552.

28. Topalova, “Factor Immobility and Regional Impacts of Trade Liberalization.”

29. Pinelopi K. Goldberg, Amit K. Khandelwal, Nina Pavcnik, and Petia Topalova, “Multiproduct Firms and Product Turnover in the Developing World: Evidence from India,” *Review of Economics and Statistics* 92, no. 4 (2010): 1042–49.

30. Robert Grundke and Cristoph Moser, “Hidden Protectionism? Evidence from Non-Tariff Barriers to Trade in the United States,” *Journal of International Economics* 117 (2019): 143–57.

31. World Trade Organization, “Members Reaffirm Commitment to Aid for Trade and to Development Support,” 2017, accessed March 18, 2019, https://www.wto.org/english/news_e/news17_e/gr17_13jul17_c.htm.

32. David Atkin, Amit K. Khandelwal, and Adam Osman, “Exporting and Firm Performance: Evidence from a Randomized Experiment,” *Quarterly Journal of Economics* 132, no. 2 (2017): 551–615.

33. “Rankings by Country of Average Monthly Net Salary (After Tax) (Salaries and Financing),” Numbeo, accessed March 18, 2019, https://www.numbeo.com/cost-of-living/country_price_rankings?itemId=105.

34. Abhijit V. Banerjee and Esther Duflo, “Reputation Effects and the Limits of Contracting: A Study of the Indian Software Industry,” *Quarterly Journal of Economics* 115, no. 3 (2000): 989–1017.

35. Amos Tversky and Daniel Kahneman, “The Framing of Decisions and Psychology of Choice,” *Science* 211 (1981): 453–58.

36. Jean Tirole, “A Theory of Collective Reputations (with Applications to the Persistence of Corruption and to Firm Quality),” *Review of Economic Studies* 63, no. 1 (1996): 1–22.

37. Rocco Machiavello and Ameet Morjaria, “The Value of Relationships: Evidence from Supply Shock to Kenyan Rose Exports,” *American Economic Review* 105, no. 9 (2015): 2911–45.

38. Wang Xiaodong, “Govt Issues Guidance for Quality of Products,” *China Daily*, updated September 14, 2017, accessed March 29, 2019, http://www.chinadaily.com.cn/china/2017-09/14/content_31975019.htm.

39. Gujanita Kalita, “The Emergence of Tirupur as the Export Hub of Knitted Garments in India: A Case Study,” ICRIER, accessed April 21, 2019, <https://www.econ-jobs.com/research/52329-The-Emergence-of-Tirupur-as-the-Export-Hub-of-Knitted-Garments-in-India-A-Case-Study.pdf>.

40. L. N. Revathy, “GST, Export Slump Have Tirupur’s Garment Units Hanging by a Thread,” accessed April 21, 2019, <https://www.thehindubusinessline.com/economy/gst-export-slump-have-tirupurs-garment-units-hanging-by-a-thread/article9968689.ece>.

41. “Clusters 101,” Cluster Mapping, accessed March 18, 2019, <http://www.clustermapping.us/content/clusters-101>.

42. Antonio Gramsci, “‘Wave of Materialism’ and ‘Crisis of Authority,’” in *Selections from the Prison Notebooks* (New York: International Publishers, 1971), 275–76; *Prison Notebooks*, vol. 2, notebook 3, 1930, 2011 edition, SS-34, Past and Present 32–33.

43. According to the World Bank, India’s openness ratio was 42 percent in 2015, compared to 28 percent in the United States and 39 percent in China. “Trade Openness—Country Rankings,” TheGlobalEconomy.com., accessed March 8, 2019, https://www.theglobaleconomy.com/rankings/trade_openness/.

44. Pinelopi K. Goldberg, Amit K. Khandelwal, Nina Pavcnik, and Petia Topalova, “Imported Intermediate Inputs and Domestic Product Growth: Evidence from India,” *Quarterly Journal of Economics* 125, no. 4 (2010): 1727–67.

45. Paul Krugman, "Taking on China," *New York Times*, September 30, 2010.

46. J. D. Vance, *Hillbilly Elegy: A Memoir of a Family and Culture in Crisis* (New York: Harper, 2016).

47. David Autor, David Dorn, and Gordon Hanson, "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," *American Economic Review* 103, no. 6 (2013): 2121–68; David Autor, David Dorn, and Gordon Hanson, "The China Shock: Learning from Labor-Market Adjustment to Large Changes in Trade," *Annual Review of Economics* 8 (2016): 205–40.

48. Ragnhild Balsvik, Sissel Jensen, and Kjell G. Salvanes, "Made in China, Sold in Norway: Local Labor Market Effects of an Import Shock," *Journal of Public Economics* 127 (2015): 137–44; Wolfgang Dauth, Sebastian Findeisen, and Jens Suedekum, "The Rise of the East and the Far East: German Labor Markets and Trade Integration," *Journal of the European Economic Association* 12, no. 6 (2014): 1643–75; Vicente Donoso, Víctor Martín, and Asier Minondo, "Do Differences in the Exposure to Chinese Imports Lead to Differences in Local Labour Market Outcomes? An Analysis for Spanish Provinces," *Regional Studies* 49, no. 10 (2015): 1746–64.

49. M. Allirajan, "Garment Exports Dive 41 Percent in October on GST Woes," *Times of India*, November 16, 2017, <https://timesofindia.indiatimes.com/business/india-business/garment-exports-dive-41-in-october-on-gst-woes/articleshow/61666363.cms>.

50. Atif Mian, Kamalesh Rao, and Amir Sufi, "Housing Balance Sheets, Consumption, and the Economic Slump," *Quarterly Journal of Economics* 128, no. 4 (2013): 1687–1726.

51. The story is reported in an article from the *Atlantic* magazine. Alana Semuels, "Ghost Towns of the 21st Century," *Atlantic*, October 20, 2015.

52. Autor, Dorn, and Hanson, "The China Syndrome."

53. David H. Autor, Mark Duggan, Kyle Greenberg, and David S. Lyle, "The Impact of Disability Benefits on Labor Supply: Evidence from the VA's Disability Compensation Program," *American Economic Journal: Applied Economics* 8, no. 3 (2016): 31–68.

54. David H. Autor, "The Unsustainable Rise of the Disability Rolls in the United States: Causes, Consequences, and Policy Options," in *Social Policies in an Age of Austerity*, eds. John Karl Scholz, Hyunpyo Moon, and Sang-Hyop Lee (Northampton, MA: Edward Elgar, 2015) 107–36.

55. Aparna Soni, Marguerite E. Burns, Laura Dague, and Kosali I. Simon, "Medicaid Expansion and State Trends in Supplemental Security Income Program Participation," *Health Affairs* 36, no. 8 (2017): 1485–88.

56. See, for example, Enrico Moretti and Pat Kline, “People, Places and Public Policy: Some Simple Welfare Economics of Local Economic Development Programs,” *Annual Review of Economics* 6 (2014): 629–62.

57. David Autor, David Dorn, and Gordon H. Hanson, “When Work Disappears: Manufacturing Decline and the Fall of Marriage Market Value of Young Men,” *AER Insights*, forthcoming 2019, available as NBER Working Paper 23173, 2018, DOI: 10.3386/w23173.

58. Anne Case and Angus Deaton, “Rising Morbidity and Mortality in Midlife Among White Non-Hispanic Americans in the 21st Century,” *PNAS* 112, no. 49 (2015): 15078–83, <https://doi.org/10.1073/pnas.1518393112>.

59. Arnaud Costinot and Andrés Rodríguez-Clare, “The US Gains from Trade: Valuation Using the Demand for Foreign Factor Services,” *Journal of Economic Perspectives* 32, no. 2 (Spring 2018): 3–24.

60. Rodrigo Adao, Arnaud Costinot, and Dave Donaldson, “Nonparametric Counterfactual Predictions in Neoclassical Models of International Trade,” *American Economic Review* 107, no. 3 (2017): 633–89; Costinot and Rodríguez-Clare, “The US Gains from Trade.”

61. “GDP Growth (annual %),” World Bank, accessed March 29, 2019, <https://data.worldbank.org/indicator/ny.gdp.mktp.kd.zg>.

62. Costinot and Rodríguez-Clare, “The US Gains from Trade.”

63. Sam Asher and Paul Novosad, “Rural Roads and Local Economic Development,” Policy Research Working Paper 8466 (Washington, DC: World Bank, 2018).

64. Sandra Poncet, “The Fragmentation of the Chinese Domestic Market Peking Struggles to Put an End to Regional Protectionism,” *China Perspectives*, accessed April 21, 2019, <https://journals.openedition.org/chinaperspectives/410>.

65. *Small Is Beautiful* was a book written by the German ecologist Schumacher in 1974 to defend the Gandhian idea of small farms in villages. E. F. Schumacher, *Small Is Beautiful: A Study of Economics as If People Mattered* (London: Blond & Briggs, 1973).

66. Nirmala Banerjee, “Is Small Beautiful?,” in *Change and Choice in Indian Industry*, eds. Amiya Bagchi and Nirmala Banerjee (Calcutta: K. P. Bagchi & Company, 1981).

67. Chang-Tai Hsieh and Benjamin A. Olken, “The Missing ‘Missing Middle,’” *Journal of Economic Perspectives* 28, no. 3 (2014): 89–108.

68. Adam Smith, *The Wealth of Nations* (W. Strahan and T. Cadell, 1776).

69. Dave Donaldson, "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure," *American Economic Review* 108, nos. 4–5 (2018): 899–934.

70. Dave Donaldson and Richard Hornbeck, "Railroads and American Growth: A 'Market Access' Approach," *Quarterly Journal of Economics* 131, no. 2 (2016): 799–858.

71. Arnaud Costinot and Dave Donaldson, "Ricardo's Theory of Comparative Advantage: Old Idea, New Evidence," *American Economic Review* 102, no. 3 (2012): 453–58.

72. Asher and Novosad, "Rural Roads and Local Economic Development."

73. David Atkin and Dave Donaldson, "Who's Getting Globalized? The Size and Implications of Intra-National Trade Costs," NBER Working Paper 21439, 2015.

74. "U.S. Agriculture and Trade at a Glance," US Department of Agriculture Economic Research Service, accessed June 8, 2019, <https://www.ers.usda.gov/topics/international-markets-us-trade/us-agricultural-trade/us-agricultural-trade-at-a-glance/>.

75. Ibid.

76. "Occupational Employment Statistics," Bureau of Labor Statistics, accessed March 29, 2019, <https://www.bls.gov/oes/2017/may/oes452099.htm>.

77. "Quick Facts: United States," US Census Bureau, accessed March 29, 2019, <https://www.census.gov/quickfacts/fact/map/US/INC910217>.

78. Benjamin Hyman, "Can Displaced Labor Be Retrained? Evidence from Quasi-Random Assignment to Trade Adjustment Assistance," January 10, 2018, <https://ssrn.com/abstract=3155386> or <http://dx.doi.org/10.2139/ssrn.3155386>.

79. "Education and Training," Veterans Administration, accessed June 21, 2019, <https://benefits.va.gov/gibill/>.

80. Sewin Chan and Ann Huff Stevens, "Job Loss and Employment Patterns of Older Workers," *Journal of Labor Economics* 19, no. 2 (2001): 484–521.

81. Henry S. Farber, Chris M. Herbst, Dan Silverman, and Till von Wachter, "Whom Do Employers Want? The Role of Recent Employment and Unemployment Status and Age," *Journal of Labor Economics* 37, no. 2 (April 2019): 323–49, <https://doi.org/10.1086/700184>.

82. Benjamin Austin, Edward Glaesar, and Lawrence Summers, "Saving the Heartland: Place-Based policies in 21st Century America," Brookings Papers on Economic Activity conference draft 2018, accessed June 19, 2019, https://www.brookings.edu/wp-content/uploads/2018/03/3_austinetal.pdf.

CHAPTER 4. LIKES, WANTS, AND NEEDS

1. John Sides, Michael Tesler, and Lynn Vavreck, *Identity Crisis: The 2016 Presidential Campaign and the Battle for the Meaning of America* (Princeton, NJ: Princeton University Press, 2018).

2. George Stigler and Gary Becker, "De Gustibus Non Est Disputandum," *American Economic Review* 67, no. 2 (1977): 76–90.

3. Abhijit Banerjee and Esther Duflo, *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty* (New York: PublicAffairs, 2011).

4. Abhijit V. Banerjee, "Policies for a Better-Fed World," *Review of World Economics* 152, no. 1 (2016): 3–17.

5. Abhijit Banerjee, "A Simple Model of Herd Behavior," *Quarterly Journal of Economics* 107, no. 3 (1992): 797–817.

6. Lev Muchnik, Sinan Aral, and Sean J. Taylor, "Social Influence Bias: A Randomized Experiment," *Science* 341, no. 6146 (2013): 647–51.

7. Drew Fudenberg and Eric Maskin, "The Folk Theorem in Repeated Games with Discounting or with Incomplete Information," *Econometrica* 54, no. 3 (1986): 533–54; Dilip Abreu, "On the Theory of Infinitely Repeated Games with Discounting," *Econometrica* 56, no. 2 (1988): 383–96.

8. Elinor Ostrom, *Governing the Commons* (Cambridge: Cambridge University Press, 1990).

9. See, for example, E. R. Prabhakar Somanathan and Bhupendra Singh Mehta, "Decentralization for Cost-Effective Conservation," *Proceedings of the National Academy of Sciences* 106, no. 11 (2009): 4143–47; J. M. Baland, P. Bardhan, S. Das, and D. Mookherjee, "Forests to the People: Decentralization and Forest Degradation in the Indian Himalayas," *World Development* 38, no. 11 (2010): 1642–56. This does not mean community ownership always works. Indeed, even the theory makes it clear that it may not. Suppose for example, that you expect other people in the community will not always play by the rules. The temptation for you to cheat is then stronger, since with some other people overgrazing, the common pasture will not be that great; therefore, the threat of exclusion from it will be less daunting. In fact, the evidence on whether communally owned forest areas are less deforested is not overwhelming.

10. Robert M. Townsend, "Risk and Insurance in Village India," *Econometrica* 62, no. 3 (1994): 539–91; Christopher Udry, "Risk and Insurance in a Rural Credit Market: An Empirical Investigation in Northern Nigeria," *Review of Economic Studies* 61, no. 3 (1994): 495–526.

11. A recent very well-argued book that makes this case is Raghuram Rajan's *The Third Pillar*. Raghuram Rajan, *The Third Pillar: How Markets and the State Leave Community Behind* (New York: HarperCollins, 2019).

12. Harold L. Cole, George J. Mailath, and Andrew Postlewaite, "Social Norms, Savings Behavior, and Growth," *Journal of Political Economy* 100, no. 6 (1992): 1092–1125.

13. Constituent Assembly of India Debates (proceedings), vol. 7, November 4, 1948, https://cadindia.clpr.org.in/constitution_assembly_debates/volume/7/1948-11-04. The relationship between the two men has been widely written about, notably by the novelist Arundhati Roy in her 2017 book, *The Doctor and the Saint* (which focuses more on Ambedkar) and Ramachandra Guha's recent book *Gandhi* (told more from Gandhi's side). The two men did not get along. Gandhi thought Ambedkar was a hothead; Ambedkar implied the old man was a bit of a fraud. Despite their opposition, it is with Gandhi's blessing that Ambedkar ended up drafting the constitution. Arundhati Roy, *The Doctor and the Saint: Caste, War, and the Annihilation of Caste* (Chicago: Haymarket Books, 2017); Ramachandra Guha, *Gandhi: The Years That Changed the World, 1914–1948* (New York: Knopf, 2018).

14. Viktoria Hnatkovska, Amartya Lahiri, and Sourabh Paul, "Castes and Labor Mobility," *American Economic Journal: Applied Economics* 4, no. 2 (2012): 274–307.

15. Karla Hoff, "Caste System," World Bank Policy Research Working Paper 7929, 2016.

16. Kanchan Chandra, *Why Ethnic Parties Succeed: Patronage and Ethnic Headcounts in India* (Cambridge: Cambridge University Press, 2004); Christophe Jaffrelot, *India's Silent Revolution: The Rise of the Lower Castes in North India* (London: Hurst and Company, 2003); Yogendra Yadav, *Understanding the Second Democratic Upsurge: Trends of Bahujan Participation in Electoral Politics in the 1990s* (Delhi: Oxford University Press, 2000).

17. Abhijit Banerjee, Amory Gethin, and Thomas Piketty, "Growing Cleavages in India? Evidence from the Changing Structure of Electorates, 1962–2014," *Economic & Political Weekly* 54, no. 11 (2019): 33–44.

18. Abhijit Banerjee and Rohini Pande, "Parochial Politics: Ethnic Preferences and Politician Corruption," CEPR Discussion Paper DP6381, 2007.

19. "Black Guy Asks Nation for Change," *Onion*, March 19, 2008, accessed June 19, 2019, <https://politics.theonion.com/black-guy-asks-nation-for-change-1819569703>.

20. Eileen Patten, "Racial, Gender Wage Gaps Persist in U.S. Despite Some Progress," Pew Research Center, July 1, 2016.

21. Raj Chetty, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter, "Race and Economic Opportunity in the United States: An Intergenerational Perspective," NBER Working Paper 24441, 2018.

22. According to a study by the Stanford Center on Poverty and Inequality: “At the end of 2015, a full 9.1 percent of young black men (ages 20–34) were incarcerated, a rate that is 5.7 times that of young white men (1.6%). Fully 10 percent of black children had an incarcerated parent in 2015, compared with 3.6 percent of Hispanic children and 1.7 percent of white children.” Becky Pettit and Bryan Sykes, “State of the Union 2017: Incarceration,” Stanford Center on Poverty and Inequality.

23. In this sense, African Americans are more like Muslims in India than the scheduled castes. Muslims are simultaneously falling behind the Hindu population in economic terms and are the target of rising levels of violence from the majority Hindu population.

24. Jane Coaston, “How White Supremacist Candidates Fared in 2018,” *Vox*, November 7, 2018, accessed April 22, 2019, <https://www.vox.com/policy-and-politics/2018/11/7/18064670/white-supremacist-candidates-2018-midterm-elections>.

25. Robert P. Jones, Daniel Cox, Betsy Cooper, and Rachel Lienesch, “How Americans View Immigrants and What They Want from Immigration Reform: Findings from the 2015 American Values Atlas,” Public Religion Research Institute, March 29, 2016.

26. Leonardo Bursztyrn, Georgy Egorov, and Stefano Fiorin, “From Extreme to Mainstream: How Social Norms Unravel,” NBER Working Paper 23415, 2017.

27. Cited in Chris Haynes, Jennifer L. Merolla, and S. Karthik Ramakrishnan, *Framing Immigrants: News Coverage, Public Opinion, and Policy* (New York: Russell Sage Foundation, 2016).

28. Ibid.

29. Anirban Mitra and Debraj Ray, “Implications of an Economic Theory of Conflict: Hindu-Muslim Violence in India,” *Journal of Political Economy* 122, no. 4 (2014): 719–65.

30. Daniel L. Chen, “Club Goods and Group Identity: Evidence from Islamic Resurgence During the Indonesian Financial Crisis,” *Journal of Political Economy* 118, no. 2 (2010): 300–54.

31. Amanda Agan and Sonja Starr, “Ban the Box, Criminal Records, and Statistical Discrimination: A Field Experiment,” *Quarterly Journal of Economics* 133, no. 1 (2017): 191–235.

32. Ibid.

33. Claude M. Steele and Joshua Aronson, “Stereotype Threat and the Intellectual Test Performance of African Americans,” *Journal of Personality and Social Psychology* 69, no. 5 (1995): 797–811.

34. Steven J. Spencer, Claude M. Steele, and Diane M. Quinn, "Stereotype Threat and Women's Math Performance," *Journal of Experimental Social Psychology* 35, no. 1 (1999): 4–28.

35. Joshua Aronson, Michael J. Lustina, Catherine Good, Kelli Keough, Claude M. Steele, and Joseph Brown, "When White Men Can't Do Math: Necessary and Sufficient Factors in Stereotype Threat," *Journal of Experimental Social Psychology* 35, no. 1 (1999): 29–46.

36. Robert Rosenthal and Lenore Jacobson, "Pygmalion in the Classroom," *Urban Review* 3, no. 1 (1968): 16–20.

37. Dylan Glover, Amanda Pallais, and William Pariente, "Discrimination as a Self-Fulfilling Prophecy: Evidence from French Grocery Stores," *Quarterly Journal of Economics* 132, no. 3 (2017): 1219–60.

38. Ariel Ben Yishay, Maria Jones, Florence Kondylis, and Ahmed Mushfiq Mobarak, "Are Gender Differences in Performance Innate or Socially Mediated?," World Bank Policy Research Working Paper 7689, 2016.

39. Rocco Macchiavello, Andreas Menzel, Antonu Rabbani, and Christopher Woodruff, "Challenges of Change: An Experiment Training Women to Manage in the Bangladeshi Garment Sector," University of Warwick Working Paper Series No. 256, 2015.

40. Jeff Stone, Christian I. Lynch, Mike Sjomeling, and John M. Darley, "Stereotype Threat Effects on Black and White Athletic Performance," *Journal of Personality and Social Psychology* 77, no. 6 (1999): 1213–27.

41. *Ibid.*

42. Marco Tabellini, "Racial Heterogeneity and Local Government Finances: Evidence from the Great Migration," Harvard Business School BGIE Unit Working Paper 19-006, 2018, <https://ssrn.com/abstract=3220439> or <http://dx.doi.org/10.2139/ssrn.3220439>; Conrad Miller, "When Work Moves: Job Suburbanization and Black Employment," NBER Working Paper No. 24728, June 2018, DOI: 10.3386/w24728.

43. Ellora Derenoncourt, "Can You Move to Opportunity? Evidence from the Great Migration," working paper, accessed April 22, 2019, https://scholar.harvard.edu/files/elloraderenoncourt/files/derenoncourt_jmp_2018.pdf.

44. Leonardo Burszтын and Robert Jensen, "How Does Peer Pressure Affect Educational Investments?," *Quarterly Journal of Economics* 130, no. 3 (2015): 1329–67.

45. Ernst Fehr, "Degustibus Est Disputandum," Emerging Science of Preference Formation, inaugural talk, Universitat Pompeu Fabra, Barcelona, Spain, October 7, 2015.

46. Alain Cohn, Ernst Fehr, and Michel Andre Marechal, "Business Culture and Dishonesty in the Banking Industry," *Nature* 516 (2014): 86–89.

47. For an overview of their work, see Roland Bénabou and Jean Tirole, "Mindful Economics: The Production, Consumption, and Value of Beliefs," *Journal of Economic Perspectives* 30, no. 3 (2016): 141–64.

48. William Julius Wilson, *When Work Disappears: The World of the New Urban Poor* (New York: Knopf Doubleday, 1997).

49. J. D. Vance, *Hillbilly Elegy: A Memoir of a Family and Culture in Crisis* (New York: Harper, 2016).

50. Dan Ariely, George Loewenstein, and Drazen Prelec, "Coherent Arbitrariness: Stable Demand Curves without Stable Preferences," *Quarterly Journal of Economics* 118, no. 1 (2003): 73–106.

51. Daniel Kahneman, Jack L. Knetsch, and Richard H. Thaler, "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy* 98, no. 6 (1990): 1325–48.

52. Dan Ariely, George Loewenstein, and Drazen Prelec, "Coherent Arbitrariness: Stable Demand Curves without Stable Preferences," *Quarterly Journal of Economics* 118, no. 1 (2003): 73–106.

53. Muzafer Sherif, *The Robber's Cave Experiment: Intergroup Conflict and Cooperation*, (Middletown, CT: Wesleyan University Press, 1998).

54. Gerard Prunier, *The Rwanda Crisis: History of a Genocide* (New York: Columbia University Press, 1997).

55. Paul Lazarsfeld and Robert Merton, "Friendship as a Social Process: A Substantive and Methodological Analysis," in *Freedom and Control in Modern Society*, eds. Morroe Berger, Theodore Abel, and Charles H. Page (New York: Van Nostrand, 1954).

56. Matthew Jackson, "An Overview of Social Networks and Economic Applications," *Handbook of Social Economics*, 2010, accessed January 5, 2019, <https://web.stanford.edu/~jacksonm/socialnetecon-chapter.pdf>.

57. Kristen Bialik, "Key Facts about Race and Marriage, 50 Years after Loving v. Virginia," Pew Research Center, 2017, <http://www.pewresearch.org/fact-tank/2017/06/12/key-facts-about-race-and-marriage-50-years-after-loving-v-virginia/>.

58. Abhijit Banerjee, Esther Duflo, Maitreesh Ghatak, and Jeanne Lafortune, "Marry for What? Caste and Mate Selection in Modern India," *American Economic Journal: Microeconomics* 5, no. 2 (2013), <https://doi.org/10.1257/mic.5.2.33>.

59. Cass R. Sunstein, Republic.com. (Princeton, NJ: Princeton University Press, 2001); Cass R. Sunstein, *#Republic: Divided Democracy in the Age of Social Media* (Princeton, NJ: Princeton University Press, 2017).

60. “Little Consensus on Global Warming: Partisanship Drives Opinion,” Pew Research Center, 2006, <http://www.people-press.org/2006/07/12/little-consensus-on-global-warming/>.

61. R. Cass Sunstein, “On Mandatory Labeling, with Special Reference to Genetically Modified Foods,” *University of Pennsylvania Law Review* 165, no. 5 (2017): 1043–95.

62. Matthew Gentzkow, Jesse M. Shapiro, and Matt Taddy, “Measuring Polarization in High-Dimensional Data: Method and Application to Congressional Speech,” working paper, 2016.

63. Yuriy Gorodnickenko, Tho Pham, and Oleksandr Talavera, “Social Media, Sentiment and Public Opinions: Evidence from #Brexit and #US Election,” National Bureau of Economics Research Working Paper 24631, 2018.

64. Shanto Iyengar, Gaurav Sood, and Yphtach Lelkes, “Affect, Not Ideology: A Social Identity Perspective on Polarization,” *Public Opinion Quarterly*, 2012, <http://doi.org/10.1093/poq/nfs038>.

65. “Most Popular Social Networks Worldwide as of January 2019, Ranked by Number of Active Users (in millions),” Statista.com, 2019, accessed April 21, 2019, <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>.

66. Maeve Duggan, Nicole B. Ellison, Cliff Lampe, Amanda Lenhart, and Mary Madden, “Social Media Update 2014,” Pew Research Center, 2015, <http://www.pewinternet.org/2015/01/09/social-media-update-2014/>.

67. Johan Ugander, Brian Karrer, Lars Backstrom, and Cameron Marlow, “The Anatomy of the Facebook Social Graph,” Cornell University, 2011, <https://arxiv.org/abs/1111.4503v1>.

68. Yosh Halberstam and Brian Knight “Homophily, Group Size, and the Diffusion of Political Information in Social Networks: Evidence from Twitter,” *Journal of Public Economics*, 143 (November 2016), 73–88, <https://doi.org/10.1016/j.jpubeco.2016.08.011>.

69. David Brock, *The Republican Noise Machine* (New York: Crown, 2004).

70. David Yanagizawa-Drott, “Propaganda and Conflict: Evidence from the Rwandan Genocide,” *Quarterly Journal of Economics* 129, no. 4 (2014), <https://doi.org/10.1093/qje/qju020>.

71. Matthew Gentzkow and Jesse Shapiro, “Ideological Segregation Online and Offline,” *Quarterly Journal of Economics* 126, no. 4 (2011), <http://doi.org/10.1093/qje/qjr044>.

72. Levi Boxell, Matthew Gentzkow, and Jesse Shapiro, “Greater Internet Use Is Not Associated with Faster Growth in Political Polarization among US

Demographic Groups,” Proceedings of the National Academy of Sciences of the United States of America, 2017, <https://doi.org/10.1073/pnas.1706588114>.

73. Gregory J. Martin and Ali Yurukoglu, “Bias in Cable News: Persuasion and Polarization,” *American Economic Review* 107, no. 9 (2017), <http://doi.org/10.1257/aer.20160812>.

74. Ibid.

75. Matthew Gentzkow, Jesse M. Shapiro, and Matt Taddy, “Measuring Polarization in High-Dimensional Data: Method and Application to Congressional Speech,” working paper, 2016.

76. Julia Cagé, Nicolas Hervé, and Marie-Luce Viaud, “The Production of Information in an Online World: Is Copy Right?,” Net Institute working paper, 2017, <http://dx.doi.org/10.2139/ssrn.2672050>.

77. “2015 Census,” American Society of News Editors, <https://www.asne.org/diversity-survey-2015>.

78. “Sociocultural Dimensions of Immigrant Integration,” in *The Integration of Immigrants into American Society*, eds. Mary C. Waters and Marissa Gerstein Pineau (Washington, DC: National Academies of Sciences Engineering Medicine, 2015).

79. Hunt Allcott and Matthew Gentzkow, “Social Media and Fake News in the 2016 Election,” *Journal of Economic Perspectives* 31, no. 2 (2017), <http://doi.org/10.1257/jep.31.2.211>.

80. Donghee Jo, “Better the Devil You Know: An Online Field Experiment on News Consumption,” Northeastern University working paper, accessed June 20, 2019, <https://www.dongheejo.com/>.

81. Gordon Allport, *The Nature of Prejudice* (Cambridge, MA: Addison-Wesley, 1954).

82. Elizabeth Levy Paluck, Seth Green, and Donald P. Green, “The Contact Hypothesis Re-evaluated,” *Behavioral Public Policy* (2017): 1–30.

83. Johanne Boisjoly, Greg J. Duncan, Michael Kremer, Dan M. Levy, and Jacque Eccles, “Empathy or Antipathy? The Impact of Diversity,” *American Economic Review* 96, no. 5 (2006): 1890–1905.

84. Gautam Rao, “Familiarity Does Not Breed Contempt: Generosity, Discrimination, and Diversity in Delhi Schools,” *American Economic Review* 109, no. 3 (2019): 774–809.

85. Matthew Lowe, “Types of Contact: A Field Experiment on Collaborative and Adversarial Caste Integration,” OSF, last updated on May 29, 2019, osf.io/u2d9x.

86. Thomas C. Schelling, “Dynamic Models of Segregation,” *Journal of Mathematical Sociology* 1 (1971): 143–186.

87. David Card, Alexandre Mas, and Jesse Rothstein, “Tipping and the Dynamics of Segregation,” *Quarterly Journal of Economics* 123, no. 1 (2008): 177–218.

88. The French system of public housing is not a lottery, but in principle it should work to spread people around: a commission meets at the *departement* level (similar to a county) to allocate vacant units to applicant families across the entire *departement*, based on family size and other priority criteria, but not race. But subsidized housing in nice neighborhoods is so lucrative that the incentive to cheat is very powerful. In the mid-1990s, allocation of housing units in Paris was exposed as a key mechanism of clientelism, put in place and maintained by Jacques Chirac (the mayor of Paris, and later the president of France). Yann Algan, Camille Hémet, and David D. Laitin, “The Social Effects of Ethnic Diversity at the Local Level: A Natural Experiment with Exogenous Residential Allocation,” *Journal of Political Economy* 124, no. 3 (2016): 696–733.

89. Joshua D. Angrist and Kevin Lang, “Does School Integration Generate Peer Effects? Evidence from Boston’s Metco Program,” *American Economic Review* 94, no. 5 (2004): 1613–34.

90. Abhijit Banerjee, Donald Green, Jennifer Green, and Rohini Pande, “Can Voters Be Primed to Choose Better Legislators? Experimental Evidence from Rural India,” Poverty Action Lab working paper, 2010, accessed June 19, 2019, https://www.povertyactionlab.org/sites/default/files/publications/105_419_Can%20Voters%20be%20Primed_Abhijit_Oct2009.pdf.

CHAPTER 5. THE END OF GROWTH?

1. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016).

2. C. I. Jones, “The Facts of Economic Growth,” in *Handbook of Macroeconomics*, vol. 2, eds. John B. Taylor and Harald Uhlig (Amsterdam: North Holland, 2016), 3–69.

3. Angus Maddison, “Historical Statistics of the World Economy: 1–2008 AD,” Groningen Growth and Development Centre: Maddison Project Database (2010).

4. Angus Maddison, “Measuring and Interpreting World Economic Performance 1500–2001,” *Review of Income and Wealth* 51, no. 1 (2005): 1–35, <https://doi.org/10.1111/j.1475-4991.2005.00143.x>.

5. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016), 258.

6. J. Bradford DeLong, Claudia Goldin, and Lawrence F. Katz, “Sustain-

ing U.S. Economic Growth,” in Henry J. Aaron, James M. Lindsay, Pietro S. Nivola, *Agenda for the Nation* (Washington, DC: Brookings Institution, 2003), 17–60.

7. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016), 575, figure 17.2. Annualized TFP growth in the US was 0.46 percent per year between 1880 and 1920 and 1.89 percent per year between 1920 and 1970.

8. Nicholas Crafts, “Fifty Years of Economic Growth in Western Europe: No Longer Catching Up but Falling Behind?,” *World Economics* 5, no. 2 (2004): 131–45.

9. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016).

10. Annualized TFP growth in the US was 1.89 percent per year between 1920 and 1970 and 0.57 between 1970 and 1995; Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016), 575, figure 17.2.

11. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016), 575, figure 17.2. Annual TFP growth was 0.40 from 2004 to 2014, even lower than the 0.70 annual TFP growth during the 1973–1994 period and the annual 0.46 TFP growth during the 1890–1920 period.

12. “Total Factor Productivity,” Federal Reserve Bank of San Francisco, accessed June 19, 2019, <https://www.frbsf.org/economic-research/indicators-data/total-factor-productivity-tfp/>.

13. Robert Gordon and Joel Mokyr, “Boom vs. Doom: Debating the Future of the US Economy,” debate, Chicago Council of Global Affairs, October 31, 2016.

14. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016), 594–603.

15. Robert Gordon and Joel Mokyr, “Boom vs. Doom: Debating the Future of the US Economy,” debate, Chicago Council of Global Affairs, October 31, 2016.

16. Alvin H. Hansen, “Economic Progress and Declining Population Growth,” *American Economic Review* 29, no. 1 (1939): 1–15.

17. Angus Maddison, *Growth and Interaction in the World Economy: The Roots of Modernity* (Washington, DC: AEI Press, 2005).

18. Thomas Piketty, *Capital in the Twenty-First Century* (Cambridge, MA: Harvard University Press, 2013), 73, table 2.1. The data Piketty uses for long-term growth originally comes from Angus Maddison, and can be found

on the Maddison project data base at <https://www.rug.nl/ggdc/historical-development/maddison/releases/maddison-project-database-2018>.

19. For the interested reader who decides to peruse this literature, it will be useful to know that economists call well-being “welfare” (by which they are not referring to welfare programs). So this is what they would call a welfare calculation.

20. Chad Syverson, “Challenges to Mismeasurement Explanations for the US Productivity Slowdown,” *Journal of Economic Perspectives* 31, no. 2 (2017): 165–86, <https://doi.org/10.1257/jep.31.2.165>.

21. Ibid.

22. Hunt Allcott, Luca Braghieri, Sarah Eichmeyer, and Matthew Gentzkow, “The Welfare Effects of Social Media,” NBER Working Paper 25514 (2019).

23. Robert M. Solow, “A Contribution to the Theory of Economic Growth,” *Quarterly Journal of Economics* 70, no. 1 (1956): 65–94, <https://doi.org/10.2307/1884513>.

24. “Estimating the U.S. Labor Share,” Bureau of Labor Statistics, 2017, accessed April 15, 2019, <https://www.bls.gov/opub/mlr/2017/article/estimating-the-us-labor-share.htm>.

25. The Berkeley economist Brad DeLong is famous for making this point in J. Bradford De Long, “Productivity Growth, Convergence, and Welfare: Comment,” *American Economic Review* 78, no. 5 (1988): 1138–54. He recently updated his graph using World Bank data at www.bradford-delong.com/2015/08/in-which-i-once-again-bet-on-a-substantial-growth-slowdown-in-china.html.

26. Archimedes: “Give me a lever and a place to stand and I will move the earth.” *The Library of History of Diodorus Siculus*, Fragments of Book XXVI, as translated by F. R. Walton, in *Loeb Classical Library*, vol. 11 (Cambridge: Harvard University Press 1957).

27. Robert E. Lucas Jr., “On the Mechanics of Economic Development,” *Journal of Monetary Economics* 22, no. 1 (1988): 3–42.

28. Robert E. Lucas Jr., “Why Doesn’t Capital Flow from Rich to Poor Countries?,” *American Economic Review* 80, no. 2 (1990): 92–96.

29. Francesco Caselli, “Accounting for Cross-Country Income Differences,” in *Handbook of Economic Growth*, vol. 1, part A, eds. Philippe Aghion and Steven N. Durlauf (Amsterdam: North Holland, 2005), 679–741.

30. Anne Robert Jacques Turgot, “Sur le Memoire de M. de Saint-Pérvay,” in *Oeuvres de Turgot et documents le concernant, avec biographie et notes*, ed. G. Schelle (Paris : F. Alcan, 1913).

31. Karl Marx, *Das Kapital* (Hamburg: Verlag von Otto Meisner, 1867). Fortunately for capitalism, there was a misstep in Marx's logic. As Solow pointed out, when the return on capital goes down, the speed of accumulation also goes down. Therefore, unless capitalists start saving more precisely when it is less rewarding to do so, accumulation will eventually slow down and the rate of profit will stop falling.

32. Julia Carrie, "Amazon Posts Record 2.5bn Profit Fueled by Ad and Cloud Business," *Guardian*, July 26, 2018. Part of the profits come from Amazon selling cloud storage. But cloud storage is itself a by-product of the excess capacity on the cloud they knew they had to build to remain the dominant market maker. So Amazon cloud business is part and parcel of their gigantic size.

33. Paul M. Romer, "Increasing Returns and Long-Run Growth," *Journal of Political Economy* 94, no. 5 (1986): 1002–37, <https://doi.org/10.1086/261420>.

34. Danielle Paquette, "Scott Walker Just Approved \$3 billion Deal for a New Foxconn Factory in Wisconsin," *Washington Post*, September 18, 2017; Natalie Kitroeff, "Foxconn Affirms Wisconsin Factory Plan, Citing Trump Chat," *New York Times*, February 1, 2019.

35. Enrico Moretti, "Are Cities the New Growth Escalator?" in *The Urban Imperative: Towards Competitive Cities*, ed. Abha Joshi-Ghani and Edward Glaeser (New Delhi: Oxford University Press, 2015), 116–48.

36. Laura Stevens and Shayndi Raice, "How Amazon Picked HQ2 and Jilted 236 Cities," *Wall Street Journal*, November 14, 2018.

37. Amazon HQ2 RFP," September 2017, https://images-na.ssl-images-amazon.com/images/G/01/Anything/test/images/usa/RFP_3._V516043504_.pdf accessed June 14, 2019.

38. Adam B. Jaffe, Manuel Trajtenberg, and Rebecca Henderson, "Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations," *Quarterly Journal of Economics* 108, no. 3 (1993): 577–98, <https://doi.org/10.2307/2118401>.

39. Enrico Moretti. *The New Geography of Jobs*. (Boston: Mariner Books, 2012).

40. Michael Greenstone, Richard Hornbeck, and Enrico Moretti, "Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings," *Journal of Political Economy* 118, no. 3 (June 2010): 536–98, <https://doi.org/10.1086/653714>.

41. Of course, the question being asked in New York was not about the size of the gains (everybody agreed there would be some) but why Amazon was allowed to keep so much of it for themselves. After all, Alexandria offered much less, and Boston nothing at all (but then Boston did not win).

42. Jane Jacobs, “Why TVA Failed,” *New York Review of Books*, May 10, 1984.

43. Patrick Kline and Enrico Moretti, “Local Economic Development, Agglomeration Economies, and the Big Push: 100 Years of Evidence from the Tennessee Valley Authority,” *Quarterly Journal of Economics* 129, no. 1 (2014): 275–331, <https://doi.org/10.1093/qje/qjt034>.

44. Ten percent growth over the past decade will raise growth over the next decade by 20 percent of 10 percent, which is 2 percent. This will create additional growth of 20 percent of 2 percent, or 0.4 percent, over the following decade and so on. It is evident the additional rounds of growth are small to start with and get smaller pretty fast.

45. Patrick Kline and Enrico Moretti, “Local Economic Development, Agglomeration Economies and the Big Push: 100 Years of Evidence from the Tennessee Valley Authority,” *Quarterly Journal of Economics* 129, no. 1 (2014): 275–331, <https://doi.org/10.1093/qje/qjt034>.

46. Enrico Moretti, “Are Cities the New Growth Escalator?,” in *The Urban Imperative: Towards Competitive Cities*, ed. Edward Glaeser and Abha Joshi-Ghani (New Delhi: Oxford University Press, 2015), 116–48.

47. Peter Ellis and Mark Roberts, *Leveraging Urbanization in South Asia: Managing Spatial Transformation for Prosperity and Livability*, South Asia Development Matters (Washington, DC: World Bank, 2016), <https://doi.org/10.1596/978-1-4648-0662-9>. License: Creative Commons Attribution CC BY 3.0 IGO.

48. Paul M. Romer, “Endogenous Technological Change,” *Journal of Political Economy* 98, no. 5, part 2 (1990): S71–S102, <https://doi.org/10.1086/261725>.

49. Philippe Aghion and Peter Howitt, “A Model of Growth Through Creative Destruction,” *Econometrica* 60, no. 2 (1992): 323–51.

50. The Wikipedia entry for Schumpeter reads thus: “Schumpeter claimed that he had set himself three goals in life: to be the greatest economist in the world, to be the best horseman in all of Austria and the greatest lover in all of Vienna. He said he had reached two of his goals, but he never said which two, although he is reported to have said that there were too many fine horsemen in Austria for him to succeed in all his aspirations.” See https://en.wikipedia.org/wiki/Joseph_Schumpeter.

51. Philippe Aghion and Peter Howitt, “A Model of Growth Through Creative Destruction,” *Econometrica* 60, no. 2 (1992): 323–51.

52. “Real GDP Growth,” US Budget and Economy, <http://usbudget.blogspot.fr/2009/02/real-gdp-growth.html>.

53. David Leonardt, “Do Tax Cuts Lead to Economic Growth?,” *New York Times*, September 15, 2012, <https://nyti.ms/2mBjcw0>.

54. Thomas Piketty, Emmanuel Saez, and Stefanie Stantcheva, “Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities,” *American Economic Journal: Economic Policy* 6, no. 1 (2014): 230–71, <https://doi.org/10.1257/pol.6.1.230>.

55. William Gale, “The Kansas Tax Cut Experiment,” Brookings Institution, 2017, <https://www.brookings.edu/blog/unpacked/2017/07/11/the-kansas-tax-cut-experiment/>.

56. Owen Zidar, “Tax Cuts for Whom? Heterogeneous Effects of Income Tax Changes on Growth and Employment,” *Journal of Political Economy* 127, no. 3 (2019): 1437–72, <https://doi.org/10.1086/701424>.

57. Emmanuel Saez, Joel Slemrod, and Seth H. Giertz, “The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review,” *Journal of Economic Literature* 50, no. 1 (2012): 3–50, <https://doi.org/10.1257/jel.50.1.3>.

58. “Tax Reform,” IGM Forum, 2017, <http://www.igmchicago.org/surveys/tax-reform-2>.

59. “Analysis of Growth and Revenue Estimates Based on the US Senate Committee on Finance Tax Reform Plan,” Department of the Treasury, 2017, <https://www.treasury.gov/press-center/press-releases/Documents/TreasuryGrowthMemo12-11-17.pdf>.

60. The signatories were Robert J. Barro, Michael J. Boskin, John Cogan, Douglas Holtz-Eakin, Glenn Hubbard, Lawrence B. Lindsey, Harvey S. Rosen, George P. Shultz, and John B. Taylor. See “How Tax Reform Will Lift the Economy,” *Wall Street Journal: Opinion*, 2017, <https://www.wsj.com/articles/how-tax-reform-will-lift-the-economy-1511729894?mg=prod/accounts-wsj>.

61. Jason Furman and Lawrence Summers, “Dear colleagues: You Responded, but We Have More Questions About Your Tax-Cut Analysis,” *Washington Post*, 2017, https://www.washingtonpost.com/news/wonk/wp/2017/11/30/dear-colleagues-you-responded-but-we-have-more-questions-about-your-tax-cut-analysis/?utm_term=.bbd78b5f1ef9.

62. “Economic Report of the President together with the Annual Report of the Council of Economic Advisers,” 2016, https://obamawhitehouse.archives.gov/sites/default/files/docs/ERP_2016_Book_Complete%20JA.pdf.

63. Thomas Philippon *The Great Reversal: How America Gave up on Free Markets* (Cambridge: Harvard University Press, 2019).

64. David Autor, David Dorn, Lawrence F. Katz, Christina Patterson,

and John Van Reenen, “The Fall of the Labor Share and the Rise of Superstar Firms,” NBER Working Paper 23396, 2017.

65. For powerful arguments that the rise in concentration has been bad for consumers, see Thomas Philippon *The Great Reversal: How America Gave Up on Free Markets* (Cambridge: Harvard University Press, 2019); Jan De Loecker, Jan Eeckhout, and Gabriel Unger, “The Rise of Market Power and the Macroeconomic Implications,” working paper, 2018.

66. Esteban Rossi-Hansberg, Pierre-Daniel Sarte, and Nicholas Trachter, “Diverging Trends in National and Local Concentration,” NBER Working Paper 25066, 2018.

67. Alberto Cavallo, “More Amazon Effects: Online Competition and Pricing Behaviors,” NBER Working Paper 25138, 2018.

68. Germán Gutiérrez and Thomas Philippon, “Ownership, Concentration, and Investment,” *AEA Papers and Proceedings* 108 (2018): 432–37, <https://doi.org/10.1257/pandp.20181010>; Thomas Philippon, *The Great Reversal: How America Gave Up on Free Markets* (Cambridge: Harvard University Press, 2019).

69. Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, “World Inequality Report 2018: Executive Summary,” World Inequality Lab, 2018.

70. Mats Elzén and Per Ferström, “The Ignorance Survey: United States,” Gapminder, 2013, <https://static.gapminder.org/GapminderMedia/wp-uploads/Results-from-the-Ignorance-Survey-in-the-US.pdf>.

71. “Poverty,” World Bank, 2019, accessed April 14, 2019, <https://www.worldbank.org/en/topic/poverty/overview#1>.

72. “The Millennium Development Goals Report 2015: Fact Sheet,” United Nations, 2015.

73. “Child Health,” USAID.com, February 17, 2018, accessed April 14, 2019, <https://www.usaid.gov/what-we-do/global-health/maternal-and-child-health/technical-areas/child-health>.

74. “The Millennium Development Goals Report 2015: Fact Sheet,” United Nations, 2015.

75. “Literacy Rate, Adult Total (% of People Ages 15 and Above),” World Bank Open Data, <https://data.worldbank.org/indicator/se.adt.litr.zs>.

76. “Number of Deaths Due to HIV/AIDS,” World Health Organization, accessed April 14, 2019, https://www.who.int/gho/hiv/epidemic_status/deaths_text/en/.

77. Paul Romer “Economic Growth,” in *Library of Economics and Liberty: Economic Systems*, accessed June 13, 2019, <https://www.econlib.org/library/Enc/EconomicGrowth.html>.

78. William Easterly, *The Elusive Quest for Growth* (Cambridge, MA: MIT Press 2001).

79. Ross Levine and David Renelt, "A Sensitivity Analysis of Cross-Country Growth Regressions," *American Economic Review* 82, no. 4 (September 1992): 942–63.

80. Daron Acemoglu, Simon Johnson, and James A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review* 91, no. 5 (2001): 1369–1401, <https://doi.org/10.1257/aer.91.5.1369>; Daron Acemoglu, Simon Johnson, James A. Robinson, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," *Quarterly Journal of Economics* 117, no. 4 (November 2002): 1231–94, <https://doi.org/10.1162/003355302320935025/>.

81. Dani Rodrik, Arvind Subramanian, and Francesco Trebbi, "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development," *Journal of Economic Growth* 9, no. 2 (2004): 131–65, <https://doi.org/10.1023/B:JOEG.0000031425.72248.85>.

82. "Global 500 2014," *Fortune*, 2014, accessed June 13, 2019, <http://fortune.com/global500/2014/>.

83. William Easterly, "Trust the Development Experts—All 7 Billion," Brookings Institution, 2008, <https://www.brookings.edu/opinions/trust-the-development-experts-all-7-billion/>.

84. "The Impact of the Internet in Africa: Establishing Conditions for Success and Catalyzing Inclusive Growth in Ghana, Kenya, Nigeria and Senegal," Dalberg, 2013.

85. World Development Report 2016: Digital Dividends," World Bank, 2016, <http://www.worldbank.org/en/publication/wdr2016>.

86. Kenneth Lee, Edward Miguel, and Catherine Wolfram, "Experimental Evidence on the Economics of Rural Electrification," working paper, 2018.

87. Julian Cristia, Pablo Ibararán, Santiago Cueta, Ana Santiago, and Eugenio Severín, "Technology and Child Development: Evidence from the One Laptop per Child Program," *American Economic Journal: Applied Economics* 9, no. 3 (2017): 295–320, <https://doi.org/10.1257/app.20150385>.

88. Rema Hanna, Esther Duflo, and Michael Greenstone, "Up in Smoke: The Influence of Household Behavior on the Long-Run Impact of Improved Cooking Stoves," *American Economic Journal: Economic Policy* 8, no. 1 (2016): 80–114, <https://doi.org/10.1257/pol.20140008>.

89. James Berry, Greg Fischer, and Raymond P. Guiteras, "Eliciting and Utilizing Willingness-to-Pay: Evidence from Field Trials in Northern Ghana," CEnREP Working Paper 18-016, May 2018.

90. Rachel Peletz, Alicea Cock-Esteb, Dorothea Ysenburg, Salim Haji, Ranjiv Khush, and Pascaline Dupas, "Supply and Demand for Improved Sanitation: Results from Randomized Pricing Experiments in Rural Tanzania," *Environmental Science and Technology* 51, no. 12 (2017): 7138–47, <https://doi.org/10.1021/acs.est.6b03846>.

91. "India: The Growth Imperative," report, McKinsey Global Institute, 2001.

92. Robert Jensen, "The Digital Divide: Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector," *Quarterly Journal of Economics* 122, no. 3 (August 2007): 879–924. <https://doi.org/10.1162/qjec.122.3.879>.

93. Robert Jensen and Nolan H. Miller, "Market Integration, Demand, and the Growth of Firms: Evidence from a Natural Experiment in India," *American Economic Review* 108 no. 12 (2018): 3583–625, <https://doi.org/10.1257/aer.20161965>.

94. See, for example, the prospectus of one firm in Tirupur: "Prospectus," Vijayeswari Textiles Limited, February 25, 2007, <http://www.idbicapital.com/pdf/IDBICapital-VijayeswariTextilesLtdRedHerringProspectus.pdf>, accessed June 13, 2019.

95. Abhijit Banerjee and Kaivan Munshi, "How Efficiently Is Capital Allocated? Evidence from the Knitted Garment Industry in Tirupur," *Review of Economic Studies* 71, no. 1 (2004): 19–42, <https://doi.org/10.1111/0034-6527.00274>.

96. Nicholas Bloom and John Van Reenen, "Measuring and Explaining Management Practices Across Firms and Countries," *Quarterly Journal of Economics* 122, no. 4 (2007): 1351–1408.

97. Chris Udry, "Gender, Agricultural Production, and the Theory of the Household," *Journal of Political Economy* 104, no. 5 (1996): 1010–46.

98. Francisco Pérez-González, "Inherited Control and Firm Performance," *American Economic Review* 96, no. 5 (2006): 1559–88.

99. Chang-Tai Hsieh and Peter J. Klenow, "Misallocation and Manufacturing TFP in China and India," *Quarterly Journal of Economics* 124, no. 4 (2009): 1403–48, <https://doi.org/10.1162/qjec.2009.124.4.1403>.

100. Chang-Tai Hsieh and Peter Klenow, "The Life Cycle of Plants in India and Mexico," *Quarterly Journal of Economics* 129, no. 3 (2014): 1035–84, <https://doi.org/10.1093/qje/qju014>.

101. Chang-Tai Hsieh and Peter Klenow, "Misallocation and Manufacturing TFP in China and India," *Quarterly Journal of Economics* 124, no. 4 (2009): 1403–48, <https://doi.org/10.1162/qjec.2009.124.4.1403>.

102. Qi Liang,, Pisun Xu, Pornsit Jiraporn, “Board Characteristics and Chinese Bank Performance,” *Journal of Banking and Finance* 37, no. 8 (2013): 2953–68, <https://doi.org/10.1016/j.jbankfin.2013.04.018>.

103. “Bank Lending Rates,” Trading Economics, accessed April 15, 2019, <https://tradingeconomics.com/country-list/bank-lending-rate>.

104. “Interest Rates,” Trading Economics, accessed April 15, 2019, <https://tradingeconomics.com/country-list/interest-rate>.

105. Gilles Duranton, Ejaz Ghani, Arti Grover Goswami, and William Kerr, “The Misallocation of Land and Other Factors of Production in India,” World Bank Group Policy Research Working Paper 7547, (2016), <https://doi.org/10.1596/1813-9450-7221>.

106. Nicholas Bloom, Benn Eifert, Aprajit Mahajan, David McKenzie, and John Roberts, “Does Management Matter? Evidence from India,” *Quarterly Journal of Economics* 128, no. 1 (2013), <https://doi.org/10.1093/qje/qjs044>.

107. Jaideep Prabhu, Navi Radjou, and Simone Ahuja, *Jugaad Innovation: Think Frugal, Be Flexible, Generate Breakthrough Growth* (San Francisco: Jossey-Bass, 2012).

108. Emily Breza, Supreet Kaur, and Nandita Krishnaswamy, “Scabs: The Social Suppression of Labor Supply,” NBER Working Paper 25880 (2019), <https://doi.org/10.3386/w25880>.

109. Authors’ calculation from the National Sample Survey, 66h round, 2009–2010, accessed June 19, <http://www.icsrdataservice.in/datarepository/index.php/catalog/89/overview>.

110. Abhijit Banerjee and Gaurav Chiplunkar, “How Important Are Matching Frictions in the Labor Market? Experimental and Non-Experimental Evidence from a Large Indian Firm,” working paper, 2018, accessed June 19, 2019, https://gauravchiplunkar.com/wp-content/uploads/2018/08/matchingfrictions_banerjeechiplunkar_aug18.pdf.

111. Esther Duflo, Pascaline Dupas, and Michael Kremer, “The impact of Free Secondary Education: Experimental Evidence from Ghana,” Mimeo, Massachusetts Institute of Technology, accessed April 18, 2019, <https://economics.mit.edu/files/16094>.

112. “Unemployment, Youth Total (% of total labor force ages 15–24) (national estimate),” World Bank Open Data, accessed April 15, 2019, <https://data.worldbank.org/indicator/SL.UEM.1524.NE.ZS>.

113. Abhijit Banerjee and Gaurav Chiplunkar, “How Important Are Matching Frictions in the Labor Market? Experimental and Non-Experimental Evidence from a Large Indian Firm,” working paper, 2018.

114. “Labour Market Employment, Employment in Public Sector, Employment in Private Sector Different Categories-wise,” Data.gov.in, accessed April 15, 2019, <https://data.gov.in/resources/labour-market-employment-employment-public-sector-employment-private-sector-different>.

115. Sonalde Desai and Veena Kulkarni, “Changing Educational Inequalities in India in the Context of Affirmative Action,” *Demography* 45, no. 2 (2008): 245–70.

116. Abhijit Banerjee and Sandra Sequeira, “Spatial Mismatches and Beliefs about the Job Search: Evidence from South Africa,” Mimeo, MIT, 2019.

117. Neha Dasgupta, “More Than 25 Million People Apply for Indian Railway Vacancies,” Reuters, March 29, 2018, accessed June 19, 2019, <https://www.reuters.com/article/us-india-unemployment-railways/more-than-25-million-people-apply-for-indian-railway-vacancies-idUSKBN1H524C>.

118. Frederico Finan, Benjamin A. Olken, and Rohini Pande, “The Personnel Economics of the States,” in *Handbook of Field Experiments*, vol. 2, eds. Abhijit Banerjee and Esther Duflo (Amsterdam: North Holland, 2017).

119. Ezra Vogel, *Japan as Number One* (Cambridge, MA: Harvard University Press, 1979), 153–54, 204–205, 159, 166.

120. Ernest Liu, “Industrial Policies in Production Networks,” working paper, 2019.

121. Albert Bollard, Peter J. Klenow, and Gunjan Sharma, “India’s Mysterious Manufacturing Miracle,” *Review of Economic Dynamics* 16, no. 1 (2013): 59–85.

122. Pierre-Richard Agénor and Otaviano Canuto, “Middle-Income Growth Traps,” *Research in Economics* 69, no. 4 (2015): 641–60, <https://doi.org/10.1016/j.ric.2015.04.003>.

123. “Guidance Note for Surveillance under Article IV Consultation,” International Monetary Fund, 2015.

124. In fact, the under-five child mortality in 2017 was only 8.8 deaths per 1,000 live births, much lower than in Guatemala (27.6), but also quite similar to that in the United States (6.6). “Mortality Rate, under-5 (per 1,000 Live Births),” World Bank Data, accessed April 15, 2019, <https://data.worldbank.org/indicator/SH.DYN.MORT?end=2017&locations=GT-LK-US&start=2009>. “Maternal Mortality Rate (National Estimate per 100,000 Live Births),” World Bank Data, accessed April 15, 2019, <https://data.worldbank.org/indicator/SH.STA.MMRT.NE?end=2017&locations=GT-LK-US&start>

=2009. “Mortality Rate, Infant (per 1,000 Live Births),” World Bank Data, accessed April 15, 2019, <https://data.worldbank.org/indicator/SP.DYN.IMRT.IN?end=2017&locations=GT-LK-US&start=2009>.

125. “Mortality Rate, under-5 (per 1,000 Live Births),” World Bank Data, accessed April 16, 2019, <https://data.worldbank.org/indicator/SH.DYN.MORT?end=2017&locations=GT-LK-US&start=2009>.

126. Taz Hussein, Matt Plummer, and Bill Breen (for the *Stanford Social Innovation Review*), “How Field Catalysts Galvanise Social Change,” SocialInnovationExchange.org., 2018, <https://socialinnovationexchange.org/insights/how-field-catalysts-galvanise-social-change>.

127. Christian Lengeler, “Insecticide-Treated Bed Nets and Curtains for Preventing Malaria,” *Cochrane Database of Systematic Reviews* 2, no. 2 (2004), <https://doi.org/10.1002/14651858.CD000363.pub2>.

128. Abhijit Banerjee and Esther Duflo, *Poor Economics* (New York: PublicAffairs, 2011).

129. Jessica Cohen and Pascaline Dupas, “Free Distribution or Cost-Sharing? Evidence from a Randomized Malaria Prevention Experiment,” *Quarterly Journal of Economics* 125, no. 1 (2010): 1–45.

130. “World Malaria Report 2017,” World Health Organization, 2017.

131. S. Bhatt, D. J. Weiss, E. Cameron, D. Bisanzio, B. Mappin, U. Dalrymple, K. Battle, C. L. Moyes, A. Henry, P. A. Eckhoff, E. A. Wenger, O. Briët, M. A. Penny, T. A. Smith, A. Bennett, J. Yukich, T. P. Eisele, J. T. Griffin, C. A. Fergus, M. Lynch, F. Lindgren, J. M. Cohen, C. L. J. Murray, D. L. Smith, S. I. Hay, R. E. Cibulskis, and P. W. Gething, “The Effect on Malaria Control on *Plasmodium falciparum* in Africa between 2000 and 2015,” *Nature* 526 (2015): 207–11, <https://doi.org/10.1038/nature15535>.

132. William Easterly, “Looks like @JeffDSachs got it more right than I did on effectiveness of mass bed net distribution to fight malaria in Africa,” tweet, August 18, 2017, 11:04 a.m.

CHAPTER 6. IN HOT WATER

1. “Global Warming of 1.5°C,” IPCC Special Report, Intergovernmental Panel on Climate Change, 2008, accessed June 16, 2019, <https://www.ipcc.ch/sr15/>.

2. As the October 2018 report of the IPCC states, “Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.”

3. CO₂ equivalent emissions refer to the emissions of greenhouse gas (CO₂, methane, etc.) expressed in a common unit by converting amounts of other gases to the equivalent amount of CO₂ with the same effect on global warming. For example, 1 million metric tonnes of methane represents 25 million metric CO₂e.

4. Lucas Chancel and Thomas Piketty, “Carbon and Inequality: from Kyoto to Paris,” report, Paris School of Economics, 2015, accessed June 16, 2019, <http://piketty.pse.ens.fr/files/ChancelPiketty2015.pdf>.

5. Robin Burgess, Olivier Deschenes, Dave Donaldson, and Michael Greenstone, “Weather, Climate Change and Death in India,” LSE working paper, 2017, accessed June 19, 2018, <http://www.lse.ac.uk/economics/Assets/Documents/personal-pages/robin-burgess/weather-climate-change-and-death.pdf>.

6. Orley C. Ashenfelter and Karl Storchmann, “Measuring the Economic Effect of Global Warming on Viticulture Using Auction, Retail, and Wholesale Prices,” *Review of Industrial Organization* 37, no. 1 (2010): 51–64.

7. Joshua Graff Zivin and Matthew Neidell, “Temperature and the Allocation of Time: Implications for Climate Change,” *Journal of Labor Economics* 32, no. 1 (2014): 1–26.

8. Joshua Goodman, Michael Hurwitz, Jisung Park, and Jonathan Smith, “Heat and Learning,” NBER Working Paper 24639, 2018.

9. Achyuta Adhvaryu, Namrata Kala, and Anant Nyshadham, “The Light and the Heat: Productivity Co-benefits of Energy-saving Technology,” NBER Working Paper 24314, 2018.

10. Melissa Dell, Benjamin F. Jones, and Benjamin A. Olken, “What Do We Learn from the Weather? The New Climate-Economy Literature,” *Journal of Economic Literature* 52, no. 3 (2014): 740–98.

11. Olivier Deschenes and Michael Greenstone, “Climate Change, Mortality, and Adaptation: Evidence from Annual Fluctuations in Weather in the US,” *American Economic Journal: Applied Economics*, 3 no. 4 (2011): 152–85.

12. Robin Burgess, Olivier Deschenes, Dave Donaldson and Michael Greenstone, “Weather, Climate Change and Death in India,” LSE working paper, 2017 accessed June 16, 2019, <http://www.lse.ac.uk/economics/Assets/Documents/personal-pages/robin-burgess/weather-climate-change-and-death.pdf>.

13. Melissa Dell, Benjamin F. Jones, and Benjamin A. Olken, “What Do We Learn from the Weather? The New Climate-Economy Literature,” *Journal of Economic Literature* 52, no. 3 (2014): 740–98.

14. Nihar Shah, Max Wei, Virginie Letschert, and Amol Phadke, “Ben-

efits of Leapfrogging to Superefficiency and Low Global Warming Potential Refrigerants in Room Air Conditioning,” U.S. Department of Energy: Ernest Orlando Lawrence Berkeley National Laboratory Technical Report, 2015, accessed June 16 2019, <https://eta.lbl.gov/publications/benefits-leap-frogging-superefficiency>.

15. Maximilian Auffhammer and Catherine Wolfram, “Powering Up China: Income Distributions and Residential Electricity Consumption,” *American Economic Review: Papers & Proceedings* 104, no. 5 (2014): 575–80.

16. Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge, UK: Cambridge University Press, 2006).

17. Daron Acemoglu, Philippe Aghion, Leonardo Bursztyn, and David Hemous, “The Environment and Directed Technical Change,” *American Economic Review* 102, no. 1 (2012): 131–66.

18. Daron Acemoglu and Joshua Linn, “Market Size in Innovation: Theory and Evidence from the Pharmaceutical Industry,” *Quarterly Journal of Economics* 119, no. 3 (2004): 1049–90.

19. Hannah Choi Granade et al., “Unlocking Energy Efficiency in the U.S. Economy,” executive summary, McKinsey & Company, 2009, accessed June 16, 2019, https://www.mckinsey.com/~media/mckinsey/dotcom/client_service/epng/pdfs/unlocking%20energy%20efficiency/us_energy_efficiency_exc_summary.ashx.

20. “Redrawing the Energy-Climate Map,” technical report, International Energy Agency, 2013. Accessed June 16, 2019, https://www.iea.org/publications/freepublications/publication/WEO_Special_Report_2013_Redrawing_the_Energy_Climate_Map.pdf.

21. Meredith Fowlie, Michael Greenstone, and Catherine Wolfram, “Do Energy Efficiency Investments Deliver? Evidence from the Weatherization Assistance Program,” *Quarterly Journal of Economics* 133, no. 3 (2018): 1597–1644.

22. Nicholas Ryan, “Energy Productivity and Energy Demand: Experimental Evidence from Indian Manufacturing Plants,” NBER Working Paper 24619, 2018.

23. Meredith Fowlie, Catherine Wolfram, C. Anna Spurlock, Annika Todd, Patrick Baylis, and Peter Cappers, “Default Effects and Follow-on Behavior: Evidence from an Electricity Pricing Program,” NBER Working Paper 23553, 2017.

24. Hunt Allcott and Todd Rogers, “The Short-Run and Long-Run Effects of Behavioral Interventions: Experimental Evidence from Energy Conservation,” *American Economic Review* 104, no. 10 (2014): 3003–37.

25. David Atkin, “The Caloric Costs of Culture: Evidence from Indian Migrants,” *American Economic Review* 106, no. 4 (2016): 1144–81.

26. In Bangladesh, a study found that providing incentives to wash your hands for before meals for a few weeks increases handwashing even after the incentives are removed. Furthermore, people warned that they would get incentives in the future started washing their hands in anticipation of the program, to prepare themselves. Hussam, Reshmaan, Atonu Rabbani, Giovanni Regianni, and Natalia Rigol, “Habit Formation and Rational Addiction: A Field Experiment in Handwashing,” Harvard Business School BGIE Unit Working Paper 18-030, 2017.

27. Avraham Ebenstein, Maoyong Fan, Michael Greenstone, Guojun He, and Maigeng Zhou, “New Evidence on the Impact of Sustained Exposure to Air Pollution on Life Expectancy from China’s Huai River Policy,” *PNAS* 114, no. 39 (2017): 10384–89.

28. WHO Global Ambient Air Quality Database (update 2018), <https://www.who.int/airpollution/data/cities/en/>.

29. Umair Irfan, “How Delhi Became the Most Polluted City on Earth,” *Vox*, November 25, 2017.

30. “The Lancet Commission on Pollution and Health,” *Lancet* 391 (2017): 462–512.

31. “The Lancet: Pollution Linked to Nine Million Deaths Worldwide in 2015, Equivalent to One in Six Deaths,” *Lancet*, public release, 2018.

32. Achyuta Adhvaryu, Namrata Kala, and Anant Nyshadham, “Management and Shocks to Worker Productivity: Evidence from Air Pollution Exposure in an Indian Garment Factory,” IGC working paper, 2016, accessed June 16, 2019, <https://www.theigc.org/wp-content/uploads/2017/01/Adhvaryu-et-al-2016-Working-paper.pdf>.

33. Tom Y. Chang, Joshua Graff Zivin, Tal Gross, and Matthew Neidell, “The Effect of Pollution on Worker Productivity: Evidence from Call Center Workers in China,” *American Economic Journal: Applied Economics* 11, no. 1 (2019): 151–72.

34. A short-lived “odd-even” restriction, where cars with license plates ending in odd and even numbers were allowed out on alternate days led to a decline in particulate matter, but was brought down by a cabal of irate elites and environmental experts with “better” plans. Michael Greenstone, Santosh Harish, Rohini Pande, and Anant Sudarshan, “The Solvable Challenge of Air Pollution in India,” in *India Policy Forum* volume conference volume 2017 (New Delhi: Sage Publications, 2017).

35. Kevin Mortimer et al., “A Cleaner-Burning Biomass-Fuelled Cook-stove Intervention to Prevent Pneumonia in Children under 5 Years Old in Rural Malawi (the Cooking and Pneumonia Study): A Cluster Randomised Controlled Trial,” *Lancet* 389, no. 10065 (2016): 167–75.

36. Theresa Beltramo, David L. Levine, and Garrick Blalock, “The Effect of Marketing Messages, Liquidity Constraints, and Household Bargaining on Willingness to Pay for a Nontraditional Cook-stove,” Center for Effective Global Action Working Paper Series No. 035, 2014; Theresa Beltramo, Garrick Blalock, David I. Levine, and Andres M. Simons, “Does Peer Use Influence Adoption of Efficient Cookstoves? Evidence from a Randomized Controlled Trial in Uganda,” *Journal of Health Communication: International Perspectives* 20 (2015): 55–66; David I. Levine, Theresa Beltramo, Garrick Blalock, and Carolyn Cotterman, “What Impedes Efficient Adoption of Products? Evidence from Randomized Variation of Sales Offers for Improved Cookstoves in Uganda,” *Journal of the European Economic Association* 16, no. 6 (2018): 1850–80; Ahmed Mushfiq Mobarak, Puneet Dwivedi, Robert Bailis, Lynn Hildemann, and Grant Miller, “Low Demand for Nontraditional Cookstove Technology,” *Proceedings of the National Academy of Sciences* 109, no. 27 (2012): 10815–20.

37. Rema Hanna, Esther Duflo, and Michael Greenstone, “Up in Smoke: The Influence of Household Behavior on the Long-Run Impact of Improved Cooking Stoves,” *American Economic Journal: Economic Policy* 8, no. 1 (2016): 80–114.

38. Abhijit V. Banerjee, Selvan Kumar, Rohini Pande, and Felix Su, “Do Voters Make Informed Choices? Experimental Evidence from Urban India,” working paper, 2010.

CHAPTER 7. PLAYER PIANO

1. Kurt Vonnegut, *Player Piano* (New York: Charles Scribner’s Sons, 1952).
2. Kurt Vonnegut, *God Bless You, Mr. Rosewater* (New York: Holt, Rinehart and Winston, 1965).
3. Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age* (New York: W. W. Norton & Company, 2014).
4. David H. Autor, “Why Are There Still So Many Jobs? The History and Future of Workplace Automation,” *Journal of Economic Perspectives* 29, no. 3 (2015): 3–30.
5. Ellen Fort, “Robots Are Making \$6 Burgers in San Francisco,” *Eater San Francisco*, June, 21, 2018.
6. Michael Chui, James Manyika, and Mehdi Miremadi, “How Many of Your Daily Tasks Could Be Automated?,” *Harvard Business Review*, December

14, 2015 and “Four Fundamentals of Business Automation,” *McKinsey Quarterly*, November 2016, accessed June 19, 2019, <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/four-fundamentals-of-workplace-automation>.

7. “Automation, Skills Use and Training,” Organisation for Economic Co-operation and Development Library, accessed April 19, 2019, https://www.oecd-ilibrary.org/employment/automation-skills-use-and-training_2e2f4cca-cn.

8. “Robots and Artificial Intelligence,” Chicago Booth: The Initiative on Global Markets, IGM Forum, June 30, 2017.

9. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016).

10. Databases, Tables, and Calculators by Subject, Series LNS14000000, Bureau of Labor Statistics, accessed April 11, 2019, <https://data.bls.gov/timeseries/lns14000000>.

11. Robert Gordon, *The Rise and Fall of American Growth* (Princeton, NJ: Princeton University Press, 2016); “Labor Force Participation Rate, Total (% total population ages 15+) (national estimate),” World Bank Open Data, <https://data.worldbank.org/indicator/SL.TLF.CACT.NE.ZS?locations=US>.

12. Daron Acemoglu and Pascual Restrepo, “Artificial Intelligence, Automation and Work,” NBER Working Paper 24196, 2018.

13. N. F. R. Crafts and Terence C. Mills, “Trends in Real Wages in Britain 1750–1913,” *Explorations in Economic History* 31, no. 2 (1994): 176–94.

14. Robert Fogel and Stanley Engerman, *Time on the Cross* (New York: W. W. Norton & Company, 1974).

15. Daron Acemoglu and Pascual Restrepo, “Robots and Jobs: Evidence from United States Labor Markets,” NBER Working Paper 23285, 2017.

16. Daron Acemoglu and Pascual Restrepo, “The Race Between Machine and Man: Implications of Technology for Growth, Factor Shares and Employment,” NBER Working Paper 22252, 2017.

17. David Autor, “Work of the Past, Work of the Future,” Richard T. Ely Lecture, *American Economic Association: Papers and Proceedings*, 2019.

18. Daron Acemoglu and Pascual Restrepo, “Artificial Intelligence, Automation and Work,” NBER Working Paper 24196, 2018.

19. *Ibid.*

20. *Ibid.*

21. Aaron Smith and Monica Anderson, “Americans’ Attitudes towards a Future in Which Robots and Computers Can Do Many Human Jobs,” Pew

Research Center, October 4, 2017, accessed April 3, 2019, <http://www.pewinternet.org/2017/10/04/americans-attitudes-toward-a-future-in-which-robots-and-computers-can-do-many-human-jobs/>.

22. Jean Tirole and Olivier Blanchard, for example, have argued that the uncertainty in the outcome of a firing could in fact exacerbate unemployment. (David Blanchard and Olivier Tirole, “The Optimal Design of Unemployment Insurance and Employment Protection. A First Pass,” NBER Working Paper 10443, 2004.) However, it does not appear that European countries that have loosened employment protection have lower unemployment. Overall, there seems to be no relationship. Giuseppe Bertola, “Labor Market Regulations: Motives, Measures, Effects,” International Labor Organization, Conditions of Work and Employment Series No. 21, 2009.

23. Kevin J. Delaney, “The Robot That Takes Your Job Should Pay Taxes, Says Bill Gates,” *Quartz*, February 17, 2017, accessed April 13, 2019, <https://qz.com/911968/bill-gates-the-robot-that-takes-your-job-should-pay-taxes/>.

24. “European Parliament Calls for Robot Law, Rejects Robot Tax,” Reuters, February 16, 2017, accessed April 12, 2019, <https://www.reuters.com/article/us-europe-robots-lawmaking/european-parliament-calls-for-robot-law-rejects-robot-tax-idUSKBN15V2KM>.

25. Ryan Abbott and Bret Bogenschneider, “Should Robots Pay Taxes? Tax Policy in the Age of Automation,” *Harvard Law & Policy Review* 12 (2018).

26. John DiNardo, Nicole M. Fortin, and Thomas Lemieux, “Labor Market Institutions and Distribution of Wages, 1973–1990: A Semiparametric Approach,” *Econometrica* 64, no. 5 (1996): 1001–44; David Card, “The Effect of Unions on the Structure of Wages: A Longitudinal Analysis,” *Econometrica* 64, no. 4 (1996): 957–79; Richard B. Freeman, “How Much Has Deunionization Contributed to the Rise of Male Earnings Inequality?,” in eds. Sheldon Danziger and Peter Gottschalk *Uneven Tides: Rising Income Inequality in America* (New York: Russell Sage Foundation, 1993), 133–63.

27. See “UK Public Spending Since 1900,” https://www.ukpublicspending.co.uk/past_spending.

28. John Kenneth Galbraith. “Recession Economics.” *New York Review of Books*, February 4, 1982.

29. Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, “World Inequality Report 2018: Executive Summary,” Wid.World, 2017, accessed April 13, 2019, from the World Inequality Lab website: <https://wir2018.wid.world/files/download/wir2018-summary-english.pdf>.

30. “United Kingdom,” World Inequality Database, Wid.World, accessed April 13, 2019, <https://wid.world/country/united-kingdom/>.

31. Thomas Piketty, Emmanuel Saez, and Stefanie Stantcheva, “Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities,” *American Economic Journal: Economic Policy* 6, no. 1 (2014): 230–71, DOI: 10.1257/pol.6.1.230.

32. Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, “World Inequality Report 2018,” Wid.World, retrieved from the World Inequality Lab website: <https://wir2018.wid.world/files/download/wir2018-full-report-english.pdf>.

33. David Autor, “Work of the Past, Work of the Future,” Richard T. Ely Lecture, *American Economic Review: Papers and Proceedings*, 2019.

34. David Autor, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen, “The Fall of the Labor Share and the Rise of Superstar Firms,” NBER Working Paper 23396, issued in May 2017, DOI: 10.3386/w2339.

35. Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2014).

36. World Bank Data, accessed April 19, 2019, <https://data.worldbank.org/indicator/ne.trd.gnfs.zs>.

37. Claudia Goldin and Lawrence F. Katz, *The Race between Education and Technology* (Cambridge, MA: Harvard University Press, 2010).

38. Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2014).

39. David Autor, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen, “The Fall of the Labor Share and the Rise of Superstar Firms,” NBER Working Paper 23396 10.3386/w2339, 2017.

40. Jason Furman and Peter Orszag, “Slower Productivity and Higher Inequality: Are They Related?,” Peterson Institute for International Economics Working Paper 18-4, 2018.

41. Jae Song, David J Price, Fatih Guvenen, Nicholas Bloom, Till von Wachter, “Firming Up Inequality,” *Quarterly Journal of Economics*, Volume 134, no. 1 (2019): 1–50, <https://doi.org/10.1093/qje/qjy025>.

42. Sherwin Rosen, “The Economics of Superstars,” *American Economic Review* 71, no. 5 (1981): 845–58.

43. Xavier Gabaix and Augustin Landier, “Why Has CEO Pay Increased So Much?,” *Quarterly Journal of Economics* 123, no. 1 (2008): 49–100.

44. Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, “World Inequality Report 2018,” Wid.World,

2017, retrieved from the World Inequality Lab website: <https://wir2018.wid.world/files/download/wir2018-full-report-english.pdf>.

45. World Inequality Database, Wid.World, <https://www.wid.world>.

46. Robin Greenwood and David Scharfstein, "The Growth of Finance," *Journal of Economic Perspectives* 27, no. 2 (2013): 3–28.

47. Thomas Philippon and Ariell Reshef, "Wages and Human Capital in the U.S. Finance Industry: 1909–2006," *Quarterly Journal of Economics* 127, no. 4 (2012): 1551–1609.

48. Brian Bell and John Van Reenen, "Bankers' Pay and Extreme Wage Inequality in the UK," CEP Special Report, 2010.

49. Jon Bakija, Adam Cole, and Bradley T. Heim, "Jobs and Income Growth of Top Earners and the Causes of Changing Income Inequality: Evidence from U.S. Tax Return Data," working paper, Williams College, 2012, accessed June 19, 2019, <https://web.williams.edu/Economics/wp/BakijaColeHeimJobsIncomeGrowthTopEarners.pdf>.

50. Bertrand Garbinti, Jonathan Goupille-Lebret, and Thomas Piketty, "Income Inequality in France, 1900–2014: Evidence from Distributional National Accounts (DINA)," WID.world Working Paper Series No. 2017/4, 2017.

51. Olivier Godechot, "Is Finance Responsible for the Rise in Wage Inequality in France?," *Socio-Economic Review* 10, no. 3 (2012): 447–70.

52. Eugene F. Fama and Kenneth R. French, "Luck Versus Skill in the Cross-Section of Mutual-Fund Returns," *Journal of Finance* 65, no. 5 (2010): 1915–47.

53. Thomas Philippon and Ariell Reshef, "Wages and Human Capital in the U.S. Finance Industry: 1909–2006," *Quarterly Journal of Economics* 127, no. 4 (2012): 1551–1609.

54. Robin Greenwood and David Scharfstein, "The Growth of Finance," *Journal of Economic Perspectives* 27, no. 2 (2013): 3–28.

55. Claudia Goldin and Lawrence F. Katz, "Transitions: Career and Family Life Cycles of the Educational Elite," *American Economic Review* 98, no. 2 (2008): 363–69.

56. Marianne Bertrand and Sendhil Mullainathan, "Are CEO's Rewarded for Luck? The Ones Without Principals Are," *Quarterly Journal of Economics* 116, no. 3 (2001): 901–32.

57. Scharfstein and Greenwood showed that in most continental European countries the share of finance in the economy either did not grow much in the 1990s and 2000s, or it even declined. Robin Greenwood and David Scharfstein, "The Growth of Finance," *Journal of Economic Perspectives* 27, no. 2 (2013): 3–28.

58. Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2014), 550–51, and Emmanuel Saez and Gabriel Zucman, “Alexandria Ocasio-Cortez’s Idea Is Not about Soaking the Rich,” accessed April 20, 2019, <https://www.nytimes.com/2019/01/22/opinion/ocasio-cortez-taxes.html>.

59. Thomas Piketty, Emmanuel Saez, and Stefanie Stantcheva, “Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities,” *American Economic Journal: Economic Policy* 6, no. 1 (2014): 230–71.

60. Maury Brown, “It’s Time to Blowup the Salary Cap Systems in the NFL, NBA, and NHL,” *Forbes*, March 10, 2015, accessed April 11, 2019, <https://www.forbes.com/sites/maurybrown/2015/03/10/its-time-to-blowup-the-salary-cap-systems-in-the-nfl-nba-and-nhl/#1e35ced969b3>.

61. Our discussion in this section and the next draws heavily on the work of Thomas Piketty, Emmanuel Saez, and Gabriel Zucman. A reader who wants to go deeper is enjoined to read Thomas Piketty, *Capital in the Twentieth Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2014); Gabriel Zucman’s *The Hidden Wealth of Nations* (Chicago: University of Chicago Press, 2015); and Saez’s and Zucman’s forthcoming book, *The Triumph of Injustice*.

62. Emmanuel Saez, Joel Slemrod, and Seth H. Giertz, “The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review,” *Journal of Economic Literature* 50, no. 1 (2012): 3–50.

63. Pian Shu, “Career Choice and Skill Development of MIT Graduates: Are the ‘Best and Brightest’ Going into Finance?,” Harvard Business School Working Paper 16-067, 2017.

64. David Autor, “Skills, Education, and the Rise of Earnings Inequality among the ‘Other 99 Percent,’” *Science* 344, no. 6168 (2014): 843–51.

65. Henrik J. Kleven, Camille Landais, and Emmanuel Saez. 2013. “Taxation and International Migration of Superstars: Evidence from the European Football Market,” *American Economic Review* 103, no. 5: 1892–1924.

66. Annette Alstadsæter, Niels Johannesen, and Gabriel Zucman, “Tax Evasion and Inequality,” NBER Working Paper 23772, 2018.

67. Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2014).

68. *Ibid.*

69. The other part is that investment income is taxed at a lower rate anyway. An alternative to a wealth tax would be to tax investment income even when it is not distributed, but it is technically very difficult to account for that income.

70. Ben Casselman and Jim Tankersly, “Democrats Want to Tax the Wealthy. Many Voters Agree.” *New York Times*, February 19, 2019, <https://www.nytimes.com/2019/02/19/business/economy/wealth-tax-elizabeth-warren.html>.

71. H. J. Kleven, Knudsen, M. B., Kreiner, C. T., Pedersen, S. and E. Saez, “Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark,” *Econometrica* 79 (2011): 651–92, doi:10.3982/ECTA9113.

72. Gabriel Zucman, “Sanctions for Offshore Tax Havens, Transparency at Home,” *New York Times*, April 7, 2016; Gabriel Zucman, “The Desperate Inequality behind Global Tax Dodging,” *Guardian*, November 8, 2017.

73. Henrik Jacobsen Kleven, Camille Landais, Emmanuel Saez, and Esben Schultz, “Migration and Wage Effects of Taxing Top Earners: Evidence from the Foreigners’ Tax Scheme in Denmark,” *Quarterly Journal of Economics* 129, no. 1 (2013): 333–78.

74. Ben Casselman and Jim Tankersly, “Democrats Want to Tax the Wealthy. Many Voters Agree,” *New York Times*, February 19, 2019, <https://www.nytimes.com/2019/02/19/business/economy/wealth-tax-elizabeth-warren.html>.

75. Abhijit Banerjee, Esther Duflo, and Stefanie Stantcheva, “Me and Everyone Else: Do People Think Like Economists?,” Mimeo, Massachusetts Institute of Technology, 2019.

76. Erzo F. P. Luttmer, “Neighbors as Negatives: Relative Earnings and Well-Being,” *Quarterly Journal of Economics* 120, no. 3 (2005): 963–1002.

77. Ricardo Perez-Truglia, “The Effects of Income Transparency on Well-Being: Evidence from a Natural Experiment,” NBER Working Paper 25622, 2019.

78. Leonardo Bursztyn, Bruno Ferman, Stefano Fiorin, Martin Kanz, Gautam Rao, “Status Goods: Experimental Evidence from Platinum Credit Cards,” *Quarterly Journal of Economics* 133, no. 3 (2018): 1561–95, <https://doi.org/10.1093/qje/qjx048>.

79. Alberto Alesina, Stefanie Stantcheva, and Edoardo Teso, “Intergenerational Mobility and Preferences for Redistribution,” *American Economic Review* 108, no. 2 (2018): 521–54.

80. Ibid.

81. Ibid.

82. Anne Case and Angus Deaton, “Rising Midlife Morbidity and Mortality, US Whites,” Proceedings of the National Academy of Sciences, December 2015, 112 (49) 15078–15083; DOI:10.1073/pnas.1518393112; Anne

Case and Angus Deaton, “Mortality and Morbidity in the 21st Century,” *Brookings Papers on Economic Activity*, 2017.

83. Tamara Men, Paul Brennan, and David Zaridze, “Russian Mortality Trends for 1991–2001: Analysis by Cause and Region,” *BMJ: British Medical Journal* 327, no. 7421 (2003): 964–66.

84. Anne Case and Angus Deaton, “Mortality and Morbidity in the 21st Century,” *Brookings Papers on Economic Activity*, 2017.

85. Alberto Alesina, Stefanie Stantcheva, and Edoardo Teso, “Intergenerational Mobility and Preferences for Redistribution,” *American Economic Review* 108, no. 2 (2018): 521–54.

86. Emily Breza, Supreet Kaur, and Yogita Shamdasani, “The Morale Effects of Income Inequality,” *Quarterly Journal of Economics* 133, no.2 (2017): 611–63.

87. David Autor, David Dorn, Gordon Hansen, and Kaveh Majlesi, “Importing Political Polarization. The Electoral Consequences of Rising Trade Exposure,” NBER Working Paper 22637, September 2016, revised December 2017.

CHAPTER 8. LEGIT.GOV

1. “Revenue Statistics 2018 Tax Revenue Trends in the OECD,” Organisation for Economic Co-operation and Development, December 5, 2018, accessed June 18, 2018, <https://www.oecd.org/tax/tax-policy/revenue-statistics-highlights-brochure.pdf>.

2. Emmanuel Saez and Gabriel Zucman to Elizabeth Warren, January 18 2019, <http://gabriel-zucman.eu/files/saez-zucman-wealthtax-warren.pdf>.

3. Ben Casselman and Jim Tankersly, “Democrats Want to Tax the Wealthy. Many Voters Agree,” *New York Times*, February 19, 2019, <https://www.nytimes.com/2019/02/19/business/economy/wealth-tax-elizabeth-warren.html>.

4. Abhijit Banerjee, Esther Dufo, and Stefanie Stantcheva, “Me and Everyone Else: Do People Think Like Economists?,” Mimeo, Massachusetts Institute of Technology, 2019.

5. Cited in *Conservatives Betrayed: How George W. Bush and Other Big Government Republicans Hijacked the Conservative Cause*, by Richard A. Viguerie (Los Angeles: Bonus Books, 2006), 46.

6. Emmanuel Saez, Joel Slemrod, and Seth H. Giertz, “The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review,” *Journal of Economic Literature* 50, no. 1 (2012): 3–50.

7. Isabel Z. Martinez, Emmanuel Saez, and Michael Seigenthaler, “Inter-temporal Labor Supply Substitution? Evidence from the Swiss Income Tax Holidays,” NBER Working Paper 24634, 2018.

8. Emmanuel Saez, Joel Slemrod, and Seth H. Giertz, “The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review,” *Journal of Economic Literature* 50, no. 1 (2012): 3–50.

9. Abhijit Banerjee, Esther Duflo, and Stefanie Stantcheva, “Me and Everyone Else: Do People Think Like Economists?,” Mimeo, Massachusetts Institute of Technology, 2019.

10. Ronald Reagan, Inaugural Address, Washington, DC, 1981.

11. Alberto Alesina, Stefanie Stantcheva, and Edoardo Teso, “Intergenerational Mobility and Preferences for Redistribution,” *American Economic Review* 108, no. 2 (2018): 521–54.

12. Anju Agnihotri Chaba, “Sustainable Agriculture: Punjab Has a New Plan to Move Farmers Away from Water-Guzzling Paddy,” *Indian Express*, March 28 2018, accessed March 4, 2019, <https://indianexpress.com/article/india/sustainable-agriculture-punjab-has-a-new-plan-to-move-farmers-away-from-water-guzzling-paddy-5064481/>.

13. “Which States Rely Most on Federal Aid?,” Tax Foundation, accessed April 19, 2019, <https://taxfoundation.org/states-rely-most-federal-aid/>.

14. An often-cited stock quote of Milton Friedman, who was an inspiration to generations of economists, especially those on the right, popular on twitters and found in all quote repositories said: “The great achievements of civilization have not come from government bureaus.” He went on to add: “Einstein didn’t construct his theory under order from a bureaucrat.” The choice of the example is odd. Einstein was a bureaucrat (in the Swiss Patent Office) when he did his early research, and had he not actually delivered what he delivered, he would be a prime example of waste in government. Milton Friedman Quotes, BrainyQuote.com, BrainyMedia Inc., 2019, accessed June 18, 2019, https://www.brainyquote.com/quotes/milton_friedman_412621.

15. Abhijit Banerjee, Rema Hanna, Jordan Kyle, Benjamin A. Olken, and Sudarno Sumarto, “Tangible Information and Citizen Empowerment: Identification Cards and Food Subsidy Programs in Indonesia,” *Journal of Political Economy* 126, no. 2 (2018).

16. Karthik Muralidharan and Venkatesh Sundararaman, “The Aggregate Effect of School Choice: Evidence from a Two-Stage Experiment in India,” *Quarterly Journal of Economics* 130, no. 3 (2015): 1011–66.

17. Luc Behaghel, Bruno Crépon, and Marc Gurgand, “Private and Public Provision of Counseling to Job Seekers: Evidence from a Large Controlled

Experiment,” *American Economic Journal: Applied Economics* 6, no. 4 (2014): 142–74.

18. Mauricio Romero, Justin Sandefur and Wayne Sandholtz, “Outsourcing Service Delivery in a Fragile State: Experimental Evidence from Liberia,” working paper, ITAM, accessed June 18, 2019, <https://www.dropbox.com/s/o82lfb6tdffedya/MainText.pdf?dl=0>.

19. Finlay Young, “What Will Come of the More Than Me Rape Scandal?,” ProPublica, May 3, 2019, accessed June 18, 2019 <https://www.propublica.org/article/more-than-me-liberia-rape-scandal>.

20. Oriana Bandiera, Andrea Prat, and Tommaso Valletti, “Active and Passive Waste in Government Spending: Evidence from a Policy Experiment,” *American Economic Review* 99, no. 4 (2009): 1278–1308.

21. Abhijit Banerjee, Rema Hanna, Jordan Kyle, Benjamin A. Olken, and Sudarno Sumarto, “Tangible Information and Citizen Empowerment: Identification Cards and Food Subsidy Programs in Indonesia,” *Journal of Political Economy* 126, no. 2 (2018): 451–91

22. Abhijit Banerjee, Esther Duflo, and Stefanie Stantcheva, “Me and Everyone Else: Do People Think Like Economists?,” Mimeo, Massachusetts Institute of Technology, 2019.

23. Alain Cohn, Ernst Fehr, and Michel Andre Marechal, “Business Culture and Dishonesty in the Banking Industry,” *Nature* 516: (2014) 86–89.

24. Reman Hanna and Shing-Yi Wang, “Dishonesty and Selection into Public Service: Evidence from India,” *American Economic Journal: Economic Policy* 9 no. 3 (2017): 262–90.

25. Sebastian Baufort, Nikolaj Harmon, Frederik Hjorth, and Asmus Leth Olsen et al., “Dishonesty and Selection into Public Service in Denmark: Who Runs the World’s Least Corrupt Public Sector?,” Discussion Papers 15–12, University of Copenhagen, Department of Economics, 2015.

26. Oriana Bandiera, Michael Carlos Best, Adnan Khan, and Andrea Prat, “Incentives and the Allocation of Authority in Organizations: A Field Experiment with Bureaucrats,” CEP/DOM Capabilities, Competition and Innovation Seminars, London School of Economics, London, May 24 2018.

27. Clay Johnson and Harper Reed, “Why the Government Never Gets Tech Right,” *New York Times*, October 24, 2013, accessed March 4, 2019, https://www.nytimes.com/2013/10/25/opinion/getting-to-the-bottom-of-healthcaregovs-flop.html?_r=0.

28. Bertrand Garbinti, Jonathan Goupille-Lebret, and Thomas Piketty, “Income Inequality in France, 1900–2014: Evidence from Distributional National Accounts (DINA),” *Journal of Public Economics* 162 (2018): 63–77.

29. Thomas Piketty and Nancy Qian, "Income Inequality and Progressive Income Taxation in China and India, 1986–2015," *American Economic Journal: Applied Economics* 1 no. 2 (2009): 53–63, DOI: 10.1257/app.1.2.53.

30. World Inequality Database, accessed June 19, 2019, <https://wid.world/country/india/> and <https://wid.world/country/china/>.

31. Luis Felipe López-Calva and Nora Lustig, *Declining Inequality in Latin America: A Decade of Progress?* (Washington, DC: Brookings Institution Press, 2010), 1–24.

32. Santiago Levy, *Progress Against Poverty: Sustaining Mexico's PROGRESA-Oportunidades Program* (Washington, DC: Brookings Institution Press, 2006).

33. Dozens of studies have documented various aspects of the Progres a experiment. The first working paper was Paul J. Gertler and Simone Boyce, "An Experiment in Incentive-Based Welfare: The Impact of Progres a on Health in Mexico," working paper, 2003. The studies of this and subsequent experiments are summarized in *Conditional Cash Transfers: Reducing Present and Future Poverty*, ed. Ariel Fiszbein and Norbert Schady, accessed on April 19, 2019, <http://documents.worldbank.org/curated/en/914561468314712643/Conditional-cash-transfers-reducing-present-and-future-poverty>.

34. World Inequality data base, accessed on June 18, 2019, <https://wid.world/country/colombia/>, <https://wid.world/country/chile/>, <https://wid.world/country/brazil/>.

CHAPTER 9. CASH AND CARE

1. Quote by Laticia Animas, who heads the new program. Benjamin Russell, "What AMLO's Anti-Poverty Overhaul Says About His Government," *Americas Quarterly*, February 26, 2019, accessed April 17, 2019, <https://www.americasquarterly.org/content/what-amlos-anti-poverty-overhaul-says-about-his-government>.

2. David Raul Perez Coady and Hadid Vera-Llamas, "Evaluating the Cost of Poverty Alleviation Transfer Programs: An Illustration Based on PROGRESA in Mexico," IFRPI discussion paper, <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/60365/filename/60318.pdf>. See also Natalia Caldes, David Coady, and John A. Maluccio, "The Cost of Poverty Alleviation Transfer Programs: A Comparative Analysis of Three Programs in Latin America," *World Development* 34, no. 5 (2006): 818–37.

3. Florencia Devoto, Esther Dufo, Pascaline Dupas, William Parienté, and Vincent Pons, "Happiness on Tap: Piped Water Adoption in Urban Morocco," *American Economic Journal: Economic Policy* 4 no. 4 (2012): 68–99.

4. Maria Mini Jos, Rinku Murgai, Shrayana Bhattacharya, and Soumya Kapoor Mehta, “From Policy to Practice: How Should Social Pensions Be Scaled Up?,” *Economic and Political Weekly* 50, no. 14 (2015).

5. Sarika Gupta, “Perils of the Paperwork: The Impact of Information and Application Assistance on Welfare Program Take-Up in India,” Harvard University, November 2017, accessed June 19, 2019, https://scholar.harvard.edu/files/sarikagupta/files/gupta_jmp_11_1.pdf.

6. Esther Duflo, “The Economist as Plumber,” *American Economic Review: Papers & Proceedings* 107, no. 5 (2017): 1–26.

7. Amy Finkelstein and Matthew J. Notowidigdo, “Take-up and Targeting: Experimental Evidence from SNAP,” NBER Working Paper 24652, 2018.

8. Diane Whitmore Schanzenbach, “Experimental Estimates to the Barriers of Food Stamp Enrollment,” Institute for Research on Poverty Discussion Paper no. 1367-09, September 2009.

9. Bruno Tardieu, *Quand un peuple parle: ATD, Quarte Monde, un combat radical contre la misère* (Paris: Editions La Découverte, 2015).

10. Najy Benhassine, Florencia Devoto, Esther Duflo, Pascaline Dupas, and Victor Pouliquen, “Turning a Shove into a Nudge? A ‘Labeled Cash Transfer’ for Education,” *American Economic Journal: Economic Policy* 7, no. 3 (2015): 86–125.

11. These key numbers are summarized in Robert Reich’s review of two books on the UBI <https://www.nytimes.com/2018/07/09/books/review/annie-lowrey-give-people-money-andrew-yang-war-on-normal-people.html> and can also be found in the books themselves. Annie Lowrey, *Give People Money: How a Universal Basic Income Would End Poverty, Revolutionize Work, and Remake the World*, 2018, and Andrew Yang, *The War on Normal People: The Truth About America’s Disappearing Jobs and Why Universal Basic Income Is Our Future*, 2018.

12. George Bernard Shaw, *Pygmalion* (London: Penguin Classics, 2013).

13. Map Descriptive of London Poverty 1898–9, accessed April 21, 2019, <https://booth.lse.ac.uk/learn-more/download-maps/sheet9>.

14. “Radio Address to the Nation on Welfare Reform,” Ronald Reagan Presidential Library and Museum, accessed March 20, 2019, <https://www.reaganlibrary.gov/research/speeches/21586a>.

15. Ibid.

16. For the reader who wants more, this literature is summarized in several books: James P. Ziliak, “Temporary Assistance for Needy Families,” in *Economics of Means-Tested Transfer Programs in the United States*, vol. 1, ed. Robert A. Moffitt (National Bureau of Economic Research and University

of Chicago Press, 2016), 303–93; Robert Moffitt “The Temporary Assistance for Needy Families Program,” in *Means-Tested Transfer Programs in the U.S.*, ed. R. Moffitt (University of Chicago Press and NBER, 2003); Robert Moffitt, “The Effect of Welfare on Marriage and Fertility: What Do We Know and What Do We Need to Know?,” in *Welfare, the Family, and Reproductive Behavior*, ed. R. Moffitt (Washington, DC: National Research Council, National Academy of Sciences Press, 1998).

17. Sibith Ndiaye (@SibithNdiaye), “Le Président? Toujours exigeant. Pas encore satisfait du discours qu’il prononcera demain au congrès de la Mutualité, il nous précise donc le brief! Au boulot!,” tweet, June 12, 2018, 3:28 p.m., accessed June 19, 2019, <https://twitter.com/SibethNdiaye/status/1006664614619308033>.

18. “Expanding Work Requirements in Non-Cash Welfare Programs,” Council of Economic Advisors, July 2018, <https://www.whitehouse.gov/wp-content/uploads/2018/07/Expanding-Work-Requirements-in-Non-Cash-Welfare-Programs.pdf>.

19. Shrayana Bhattacharya, Vanita Leah Falcao, and Raghav Puri, “The Public Distribution System in India: Policy Evaluation and Program Delivery Trends,” in *The 1.5 Billion People Question: Food, Vouchers, or Cash Transfers?* (Washington, DC: World Bank, 2017).

20. “Egypt to Raise Food Subsidy Allowance in Bid to Ease Pressure from Austerity,” Reuters, June 20, 2017, accessed June 19, 2019, <https://www.reuters.com/article/us-egypt-economy/egypt-to-raise-food-subsidy-allowance-in-bid-to-ease-pressure-from-austerity-idUSKBN19B2YW>.

21. Peter Timmer, Hastuti, and Sudarno Sumarto, “Evolution and Implementation of the Rastra Program in Indonesia,” in *The 1.5 Billion People Question: Food, Vouchers, or Cash Transfers?* (Washington, DC: World Bank, 2017).

22. Abhijit Banerjee, Rema Hanna, Jordan Kyle, Benjamin A. Olken, and Sudarno Sumarto, “Tangible Information and Citizen Empowerment: Identification Cards and Food Subsidy Programs in Indonesia,” *Journal of Political Economy* 126, no. 2 (2018): 451–91.

23. Reetika Khera, “Cash vs In-Kind Transfers: Indian Data Meets Theory,” *Food Policy* 46 (June 2014): 116–28, <https://doi.org/10.1016/j.foodpol.2014.03.009>.

24. Ugo Gentilini, Maddalena Honorati, and Ruslan Yemtsov, “The State of Social Safety Nets 2014 (English),” World Bank Group, 2014, accessed June 19, 2019, <http://documents.worldbank.org/curated/en/302571468320707386/The-state-of-social-safety-nets-2014>.

25. Abhijit V. Banerjee, "Policies for a Better Fed World," *Review of World Economics* 152, no. 1 (2016): 3–17.
26. David K. Evans and Anna Popova "Cash Transfers and Temptation Goods," *Economic Development and Cultural Change* 65, no. 2 (2017), 189–221.
27. Abhijit V. Banerjee, "Policies for a Better Fed World," *Review of World Economics* 152, no. 1 (2016): 3–17.
28. Johannes Haushofer and Jeremy Shapiro, "The Short-Term Impact of Unconditional Cash Transfers to the Poor: Experimental Evidence from Kenya," *Quarterly Journal of Economics* 131, no. 4 (2016): 1973–2042.
29. Ercia Field, Rohini Pande, Natalia Rigol, Simone Schaner, and Charity Troyer Moore, "On Her Account: Can Strengthening Women's Financial Control Boost Female Labor Supply?," working paper, Harvard University, Cambridge, MA, 2016, accessed June 19, 2019, http://scholar.harvard.edu/files/rpande/files/on_her_account.can_strengthening_womens_financial_control_boost_female_labor_supply.pdf.
30. Abhijit Banerjee, Rema Hanna, Gabriel Kreindler, and Ben Olken, "Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs," *World Bank Research Observer* 32, no. 2 (August 2017) 155–84, <https://doi.org/10.1093/wbro/lkx002>.
31. Abhijit Banerjee, Karlan Dean and Chris Udry, "Does Poverty Increase Labor Supply? Evidence from Multiple Income Effects," Mimeo, Massachusetts Institute of Technology, 2019.
32. David Greenberg and Mark Shroder, "Part 1: Introduction. An Overview of Social Experimentation and the Digest," *Digest of Social Experiments*, accessed March 25, 2019, <https://web.archive.org/web/20111130101109/http://www.urban.org/pubs/digest/introduction.html#n22>.
33. Philip K. Robins, "A Comparison of the Labor Supply Findings from the Four Negative Income Tax Experiments," *Journal of Human Resources* 20, no. 4 (Autumn 1985): 567–82.
34. Orley Ashenfelter and Mark W. Plant, "Nonparametric Estimates of the Labor Supply Effects of Negative Income Tax Programs," *Journal of Labor Economics* 8, no. 1, Part 2: Essays in Honor of Albert Rees (January 1990): S396–S415.
35. Philip K. Robins, "A Comparison of the Labor Supply Findings from the Four Negative Income Tax Experiments," *Journal of Human Resources* 20, no. 4 (Autumn, 1985): 567–82.
36. Ibid.
37. Albert Rees, "An Overview of the Labor-Supply Results," *Journal of Human Resources* 9, no. 2 (Spring 1974): 158–180.

38. Damon Jones and Ioana Marinescu, “The Labor Market Impacts of Universal and Permanent Cash Transfers: Evidence from the Alaska Permanent Fund,” NBER Working Paper 24312.

39. Randall K. Q. Akee, William E. Copeland, Gordon Keeler, Adrian Angold, and E. Jane Costello, “Parents’ Income and Children’s Outcomes: A Quasi-Experiment Using Transfer Payments from Casino Profits,” *American Economic Journal: Applied Economics* 2, no. 1 (2010): 86–115.

40. Vivi Alatas, Abhijit Banerjee, Rema Hanna, Matt Wai-poi, Ririn Purnamasari, Benjamin A. Olken, and Julia Tobias, “Targeting the Poor: Evidence from a Field Experiment in Indonesia,” *American Economic Review* 102, no. 4 (2012): 1206–40, DOI: 10.1257/aer.102.4.1206.

41. Clément Imbert and John Papp, “Labor Market Effects of Social Programs: Evidence from India’s Employment Guarantee,” *American Economic Journal: Applied Economics* 7, no. 2 (2015): 233–63; Muralidharan Karthik, Paul Niehuas, and Sandip Sukhtankar, “General Equilibrium Effects of (Improving) Public Employment Programs: Experimental Evidence from India,” NBER Working Paper 23838, 2018 DOI: 10.3386/w23838.

42. Martin Ravalion, “Is a Decentralized Right to Work Policy Feasible?,” NBER Working Paper 25687, March 2019.

43. Abhijit Banerjee, Esther Duflo, Clement Imbert, Santhos Matthews, and Rohini Pande, “E-Governance, Accountability, and Leakage in Public Programs: Experimental Evidence from a Financial Management Reform in India,” NBER Working Paper 22803, 2016.

44. “Economic Survey 2016–17,” Government of India, Ministry of Finance, Department of Economic Affairs, Economic Division, 2017, 188–90.

45. Nur Cahyadi, Rema Hanna, Benjamin A. Olken, Rizal Adi Prima, Elan Satriawan, and Ekki Syamsulhakim, “Cumulative Impacts of Conditional Cash Transfer Programs: Experimental Evidence from Indonesia,” NBER Working Paper 24670, 2018.

46. Najy Benhassine, Florencia Devoto, Esther Duflo, Pascaline Dupas, and Victor Pouliquen, “Turning a Shove into a Nudge? A “Labeled Cash Transfer” for Education,” *American Economic Journal: Economic Policy* 7, no. 3 (2015): 86–125.

47. Aaron Smith and Monica Anderson, “Americans’ Attitudes towards a Future in Which Robots and Computers Can Do Many Human Jobs,” Pew Research Center, October 4, 2017, accessed April 3, 2019, <http://www.pewinternet.org/2017/10/04/americans-attitudes-toward-a-future-in-which-robots-and-computers-can-do-many-human-jobs/>.

48. Robert B. Reich, “What If the Government Gave Everyone a Paycheck?,” July 9, 2018, <https://www.nytimes.com/2018/07/09/books/review/annie-lowrey-give-people-money-andrew-yang-war-on-normal-people.html>.

49. Olli Kangas, Signe Jauhiainen, Miska Simanainen, Mina Ylikännö, eds., “The Basic Income Experiment 2017–2018 in Finland. Preliminary Results,” Reports and Memorandums of the Ministry of Social Affairs and Health, 2019, 9.

50. Abhijit Banerjee, Esther Duflo, and Stefanie Stantcheva, “Me and Everyone Else: Do People Think Like Economists?,” Mimeo, Massachusetts Institute of Technology, 2019.

51. Nicole Maestas, Kathleen J. Mullen, David Powell, Till von Wachter, and Jeffrey B. Wenger, “Working Conditions in the United States: Results of the 2015 American Working Conditions Survey,” Rand Corporation, 2017.

52. “The State of American Jobs: How the Shifting Economic Landscape Is Reshaping Work and Society and Affecting the Way People Think about the Skills and Training They Need to Get Ahead,” ch. 3, Pew Research Center, October 2016, accessed April 21, 2019, <http://www.pewsocialtrends.org/2016/10/06/3-how-americans-view-their-jobs/#fn-22004-26>.

53. See Steve Davis and Till Von Wachter, “Recession and the Costs of Job Loss,” Brookings Papers on Economic Activity, Brookings Institution, Washington, DC, 2011, https://www.brookings.edu/wp-content/uploads/2011/09/2011b_bpea_davis.pdf, and references therein.

54. Daniel Sullivan and Till Von Wachter, “Job Displacement and Mortality: An Analysis Using Administrative Data,” *Quarterly Journal of Economics* 124, no. 3 (2009): 1265–1306.

55. Mark Aguiar and Erik Hurst, “Measuring Trends in Leisure: The Allocation of Time over Five Decades,” *Quarterly Journal of Economics* 122, no. 3 (2007): 969–100.

56. Mark Aguiar, Mark Bilal, Kerwin Kofi Charles, and Erik Hurst, “Leisure Luxuries and the Labor Supply of Young Men,” NBER Working Paper 23552, June 2007.

57. “American Time Use Survey—2017 Results,” news release, Bureau of Labor Statistics, US Department of Labor, June 28, 2018, accessed June 19, 2019, <https://www.bls.gov/news.release/atus.nro.htm>.

58. Mark Aguiar, Erik Hurst, and Loukas Karabarbounis, “Time Use During the Great Recession,” *American Economic Review* 103, no. 5 (2013): 1664–96.

59. Daniel Kahneman and Alan G. Krueger, “Developments in the Measurement of Subjective Well-Being,” *Journal of Economic Perspectives* 20, no. 1 (2006): 3–24.

60. Aaron Smith and Monica Anderson, “Americans’ Attitudes towards a Future in Which Robots and Computers Can Do Many Human Jobs,” Pew Research Center, October 4, 2017, accessed April 3, 2019, <http://www.pewinternet.org/2017/10/04/americans-attitudes-toward-a-future-in-which-robots-and-computers-can-do-many-human-jobs/>.

61. “Volunteering in the United States, 2015,” Economic News Release, February 25, 2016, accessed April 21, 2019, <https://www.bls.gov/news.release/volun.nro.htm>.

62. David Deming, “The Growing Importance of Social Skills in the Labor Market,” *Quarterly Journal of Economics* 132, no. 4 (2017): 1593–1640, <https://doi.org/10.1093/qje/qjx022>.

63. Román Zárate, “Social and Cognitive Peer Effects: Experimental Evidence from Selective High Schools in Peru,” MIT Economics, 2019, accessed June 19, 2019, <https://economics.mit.edu/files/16276>.

64. Raj Chetty, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez, “Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States,” *Quarterly Journal of Economics* 129, no. 4 (2014): 1553–1623, <https://doi.org/10.1093/qje/qju022>.

65. Lawrence F. Katz, Jeffrey R. Kling, and Jeffrey B. Liebman, “Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment,” *Quarterly Journal of Economics* 116 no. 2 (2001): 607–54, <https://doi.org/10.1162/00335530151144113>.

66. Ra Chetty, Nathaniel Hendren, and Lawrence F. Katz, “The Effect of Exposure to Better Neighborhoods and Children: New Evidence from the Moving to Opportunity Experiment,” *American Economic Review* 106, no. 4 (2016): 855–902.

67. Raj Chetty and Nathaniel Hendren, “The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates,” *Quarterly Journal of Economics* 133, no. 3 (2018): 1163–1228.

68. Roland G. Fryer Jr., “The Production of Human Capital in Developed Countries: Evidence from 196 Randomized Field Experiments,” in *Handbook of Economic Field Experiments* 2 (Amsterdam: North-Holland, 2017): 95–322.

69. Abhijit Banerjee, Rukmini Banerji, James Berry, Esther Duflo, Harini Kannan, Shobhini Mukerji, Marc Shotland, and Michael Walton, “From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application,” *Journal of Economic Perspectives* 31, no. 4 (2017): 73–102.

70. Raj Chetty, John Friedman, Nathaniel Hilger, Emmanuel Saez, Diane Whitmore Schanzenbach, and Danny Yagan, “How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project Star,” *Quarterly Journal of Economics* 126, no. 4 (2011): 1593–1660.

71. Ajay Chaudry and Rupa Datta, “The Current Landscape for Public Pre-Kindergarten Programs,” in *The Current State of Scientific Knowledge on Pre-Kindergarten Effects*, Brookings Institution, Washington, DC, 2017, accessed June 19, 2019 https://www.brookings.edu/wp-content/uploads/2017/04/duke_prekstudy_final_4-4-17_hires.pdf.

72. Maria Stephens, Laura K. Warren, and Ariana L. Harner, “Comparative Indicators of Education in the United States and Other G-20 Countries: 2015. NCES 2016-100,” National Center for Education Statistics, 2015.

73. All the references to Heckman’s research on the long-term impact of preschool education can be found at <https://heckmanequation.org/>. Among other references, see Jorge Luis García, James J. Heckman, Duncan Ermini Leaf, and María José Prados, “The Life-Cycle Benefits of an Influential Early Childhood Program,” NBER Working Paper 22993, 2016.

74. Michael Puma, Stephen Bell, Ronna Cook, and Camilla Heid, “Head Start Impact Study Final Report,” US Department of Health and Human Services, Administration for Children and Families, 2010, https://www.acf.hhs.gov/sites/default/files/opre/executive_summary_final.pdf; Mark Lipsey, Dale Farran, and Kelley Durkin, “Effects of the Tennessee Prekindergarten Program on Children’s Achievement and Behavior through Third Grade,” *Early Childhood Research Quarterly* 45 (2017): 155–76.

75. R. M. Ford, S. J. McDougall, and D. Evans, “Parent-Delivered Compensatory Education for Children at Risk of Educational Failure: Improving the Academic and Self-Regulatory Skills of a Sure Start Preschool Sample,” *British Journal of Psychology* 100, no. 4 (2009), 773–97. A. J. L. Baker, C. S. Piotrkowski, and J. Brooks-Gunn, “The Effects of the Home Instruction Program for Preschool Youngsters on Children’s School Performance at the End of the Program and One Year Later,” *Early Childhood Research Quarterly* 13, no. 4 (1998), 571–86. K. L. Bierman, J. Welsh, B. S. Heinrichs, R. L. Nix, and E. T. Mathis, “Helping Head Start Parents Promote Their Children’s Kindergarten Adjustment: The REDI Parent Program,” *Child Development*, 2015. James J. Heckman, Margaret L. Holland, Kevin K. Makinom Rodrigo Pinto, and Maria Rosales-Rueda, “An Analysis of the Memphis Nurse-Family Partnership Program,” NBER Working Paper 23610, July 2017, <http://www.nber.org/papers/w23610>. Orazio Attanasio, C. Fernández, E. Fitzsimons, S. M. Grantham-McGregor, C. Meghir, and M. Rubio-Codina, “Using the Infrastructure of a Conditional Cash Transfer Programme to Deliver a Scalable Integrated Early Child Development Programme in Colombia: A Cluster Randomised Controlled Trial,” *British Medical Journal* 349 (September 29, 2014): g5785. Paul Gertler, James Heckman, Rodrigo Pinto, Arianna Zan-

olini, Christel Vermeerch, Susan Walker, Susan Chang-Lopez, and Sally Grantham-McGregor, "Labor Market Returns to an Early Childhood Stimulation Intervention in Jamaica," *Science* 344, no. 6187 (2014): 998–1001.

76. Moira R. Dillon, Harini Kannan, Joshua T. Dean, Elizabeth S. Spelke, and Esther Duflo, "Cognitive Science in the Field: A Preschool Intervention Durably Enhances Intuitive but Not Formal Mathematics," *Science* 357, no. 6346 (2017): 47–55.

77. Henrik Kleven, Camille Landais, Johanna Posch, Andreas Steinhauer, and Josef Zweimüller, "Child Penalties Across Countries: Evidence and Explanations," no. w25524, National Bureau of Economic Research, 2019.

78. Henrik Kleven, Camille Landais, and Jakob Egholt Søgaaard, "Children and Gender Inequality: Evidence from Denmark," no. w24219, National Bureau of Economic Research, 2018.

79. "Denmark: Long-term Care," Organisation for Economic Co-Operation and Development, 2011, <http://www.oecd.org/denmark/47877588.pdf>.

80. Bruno Crépon and Gerard van den Berg, "Active Labor Market Policies," *Annual Review of Economics*, <https://doi.org/10.1146/annurev-economics-080614-115738>; Bruno Crépon, Esther Duflo, Marc Gurgand, Roland Rathelot, and Philippe Zamora, "Do Labor Market Policies Have Displacement Effects? Evidence from a Clustered Randomized Experiment," *Quarterly Journal of Economics* 128, no. 2 (2013): 531–80.

81. Sheila Maguire, Joshua Freely, Carol Clymer, Maureen Conway, and Deena Schwartz, "Tuning In to Local Labor Markets: Findings from the Sectoral Employment Impact Study," Public/Private Ventures, 2010, accessed April 21, 2019, <http://ppv.issuelab.org/resources/5101/5101.pdf>.

82. Yann Algan, Bruno Crépon, Dylan Glover, "The Value of a Vacancy: Evidence from a Randomized Evaluation with Local Employment Agencies in France," J-PAL working paper, 2018, accessed April 21, 2019, https://www.povertyactionlab.org/sites/default/files/publications/5484_The-Value-of-a-vacancy_Algan-Crepon-Glover_June2018.pdf.

83. "Employment Database—Labour Market Policies And Institutions," Organisation for Economic Co-operation and Development.

84. "Active Labour Market Policies: Connecting People with Jobs," Organisation for Economic Co-operation and Development, <http://www.oecd.org/employment/activation.htm>.

85. Benjamin Hyman, "Can Displaced Labor Be Retrained? Evidence from Quasi-Random Assignment to Trade Adjustment Assistance," January 10, 2018, <https://ssrn.com/abstract=3155386> or <http://dx.doi.org/10.2139/ssrn.3155386>.

86. Aaron Smith and Monica Anderson, "Automation in Everyday Life: Chapter 2," Pew Research Center, 2017, accessed April 21, 2019, <https://www.pewinternet.org/2017/10/04/americans-attitudes-toward-a-future-in-which-robots-and-computers-can-do-many-human-jobs/>.

87. Bruno Tardieu, *Quand un peuple parle* (Paris: La Découverte, 2015).

88. Abhijit Banerjee, Esther Duflo, Nathanael Goldberg, Dean Karlan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, and Christopher Udry, "A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries," *Science* 348, no. 6236 (2015): 1260799.

89. Esther Duflo, Abhijit Banerjee, Raghavendra Chattopadhyay, Jeremy Shapiro, "The Long Term Impacts of a 'Graduation' Program: Evidence from West Bengal," Mimeo, Massachusetts Institute of Technology, 2019.

90. Christopher Blattman, Nathan Fiala, and Sebastian Martinez, "The Long Term Impacts of Grants on Poverty: 9-Year Evidence from Uganda's Youth Opportunities Program," April 5, 2019, <https://ssrn.com/abstract=3223028> or <http://dx.doi.org/10.2139/ssrn.3223028>.

91. Bruno Crépon, Esther Duflo, Éllise Huillery, William Pariente, Juliette Seban, and Paul-Armand Veillon, "Cream Skimming and the Comparison between Social Interventions Evidence from Entrepreneurship Programs for At-Risk Youth in France," 2018.

92. Ibid.

93. Robert Rosenthal and Lenore Jacobson, "Pygmalion in the Classroom," *Urban Review* 3, no. 1 (1968): 16–20.

94. Angela Duckworth, *Grit: The Power of Passion and Perseverance* (New York; Scribner, 2016).

95. Yann Algan, Adrien Bouguen, Axelle Charpentier, Coralie Chevalier, and Éllise Huillery, "The Impact of a Large-Scale Mindset Intervention on School Outcomes: Experimental Evidence from France," Mimeo, 2018.

96. Sara B. Heller, Anuj K. Shah, Jonathan Guryan, Jens Ludwig, Sendhil Mullainathan, and Harold A. Pollack, "Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago," *Quarterly Journal of Economics* 132k, no. 1 (2017): 1–54.

CONCLUSION: GOOD AND BAD ECONOMICS

1. Chang-Tai Hsieh and Peter J. Klenow, "The Life Cycle of Plants in India and Mexico," *Quarterly Journal of Economics* 129, no. 3 (August 2014): 1035–84, <https://doi.org/10.1093/qje/qju014>.

ACKNOWLEDGMENTS

All books are the product of many minds but this one more so than most. Chiki Sarkar encouraged us to pursue this project before we had any idea of where we were headed. Her enthusiasm, lively intelligence, and faith in our abilities led us and supported us throughout this project. A little bit later in the project Andrew Wylie joined in. The backing of his vast experience gave us the confidence to proceed. Neel Mukherjee read the entire manuscript in its first, raw, version and gave us direction, style advice, and above all reassurance that this was a book worth writing and perhaps even reading. Maddie McKelway did extraordinary work to ensure that every fact in the manuscript was correctly checked and cited, and that every sentence made (at least some) sense. Clive Priddle, as with our previous book, understood exactly where we were trying to go, often before we did so ourselves. His edits made this a book.

In writing a book that ventures much beyond our “core competence,” we had to rely heavily on the wisdom of many of our economist friends. Being surrounded by so many brilliant people, it is impossible to remember where every idea came from. Listing some risks excluding many others, but we feel compelled to name (without implicating, of course) Daron Acemoglu, David Atkin, Arnaud Costinot, Dave Donaldson, Rachel Glennerster, Penny Goldberg, Michael Greenstone, Bengt Holmstrom, Michael Kremer, Ben Olken, Thomas Piketty, Emma Rothschild, Emmanuel Saez, Frank Schilbach, Stefanie Stantcheva, and Ivan Werning. Thank you so much for educating us. Thank you also to our PhD advisors, Josh Angrist, Jerry Green, Andreu Mas Colell, Eric Maskin, and Larry Summers; and our many teachers, collaborators, friends, and students, all of whose imprints are everywhere in the book. Again at the risk of being grossly unfair, the book would not be the way it is without the influence of, among others,

Philippe Aghion, Marianne Bertrand, Arun Chandrasekhar, Daniel Cohen, Bruno Crepon, Ernst Fehr, Amy Finkelstein, Maitreesh Ghatak, Rema Hanna, Matt Jackson, Dean Karlan, Eliana La Ferrara, Matt Low, Ben Moll, Sendhil Mullainathan, Kaivan Munshi, Andrew Newman, Paul Niehaus, Rohini Pande, Nancy Qian, Amartya Sen, Bob Solow, Cass Sunstein, Tavneet Suri, and Robert Townsend.

Our year of leave at the Paris School of Economics was a godsend. It was a pleasant and fun place to work, both collegial and lively. We are especially grateful to Luc Behagel, Denis Cogneau, Olivier Compte, H el ene Giacobino, Mark Gurgand, Sylvie Lambert, and Karen Marcours; and to Gilles Postel-Vinay and Katia Zhuravskaya for their always-welcoming smiles, much fun conversation, and many sweaty games of tennis. Our MIT colleagues Glenn and Sara Ellison, who coordinated their sabbaticals with us, made the year all the more wonderful. We gratefully acknowledge financial support from the R egion  le-de-France (Chaire Blaise Pascal), the Axa Research Fund, the ENS Foundation, Paris School of Economics, and MIT. We thank them for their support.

For over 15 years, the J-PAL crew has not only fed our research fire, but also kept us optimistic about both economics and humankind. We are infinitely fortunate to work with kind, generous and dedicated people every day, year after year. Thank to Iqbal Dhaliwal who steers the ship and to John Floretta, Shobhini Mukherjee, Laura Poswell and Anna Schrimpf, who are our daily companions, seen and unseen. And, of course, to Heather McCurdy and Jovanna Mason for valiantly attempting to put some semblance of order into our lives.

Esther's parents, Michel and Violaine Duflo, and her brother Colas and his family were a huge part of why we had such a lovely time in Paris. Thank you for everything you do for us, year after year.

Abhijit's parents, Dipak and Nirmala Banerjee, are for him always the ideal readers for what he writes. He thanks them for teaching him so much of the economics he knows and, perhaps more importantly, the reasons why he should care.