Economics of Migration

Joan Llull Labor Economics Summer School Barcelona School of Economics

General references and surveys: Borjas (2014), Friedberg and Hunt (1995), Greenwood (1997), Borjas (1999), Card (2005, 2009), Hanson (2006, 2009), Dustmann and Glitz (2011), Molloy, Smith and Wozniak (2011), Moretti (2011, 2012), Kerr and Kerr (2011), Docquier and Rapoport (2012), Beine, Bertoli and Fernández-Huertas Moraga (2015), Borjas (2015b), Dustmann and Görlach (2016), Peri (2016), Dustmann, Schönberg and Stuhler (2017), Abramitzky and Boustan (2017)

Chapter 1: International Migration Decisions

I. Who Migrates and Why? The Roy Model and Migrant Self-Selection

Refs.: Roy (1951), Borjas (1987), Borjas and Bratsberg (1996), Chiquiar and Hanson (2005), Orrenius and Zavodny (2005), McKenzie and Rapoport (2010), Fernández-Huertas Moraga (2011), Abramitzky, Boustan and Eriksson (2012), Bertoli, Fernández-Huertas Moraga and Ortega (2013), Kaestner and Malamud (2014), Angelucci (2015), Gould and Moav (2016), Parey, Ruhose, Waldinger and Netz (2017), Spitzer and Zimran (2018), Bartolucci, Villosio and Wagner (2018), Borjas, Kauppinen and Poutvaara (2019), Patt, Ruhose, Wiederhold and Flores (2021).

II. Random Utility Models and Gravity Equations

Refs.: Docquier and Marfouk (2006), Clark, Hatton and Williamson (2007), Parsons, Skeldon, Walmsley and Winters (2007), OECD (2008), Docquier, Lowell and Marfouk (2009), Mayda (2010), Grogger and Hanson (2011), Beine, Docquier and Çağlar Özden (2011), Özden, Parsons, Schiff and Walmsey (2011), Bertoli and Fernández-Huertas Moraga (2013), Ortega and Peri (2014), Adserà and Pytliková (2015), Artuç, Docquier, Özden and Parsons (2015), Llull (2016).

III. Brain Drain or Brain Gain?

Refs.: Beine, Docquier and Rapoport (2001, 2008), Groizard and Llull (2007), Dustmann, Fadlon and Weiss (2011), Gibson and McKenzie (2012), Batista, Lacuesta and Vicente (2012), Ambler, Ayci-

nena and Yang (2015), Dinkelman and Mariotti (2016), Theoharides (2018a,b), Abarcar and Theoharides (2021)

IV. Policy Incentives to Migration

A. Border Apprehensions and Illegal Immigration

Refs.: Hanson and Spilimbergo (1999), Hanson, Robertson and Spilimbergo (2002), Lessem (2018)

B. Taxation and Migration

Refs.: Kleven, Landais and Saez (2013), Lehmann, Simula and Trannoy (2014), Kleven, Landais, Saez and Schultz (2014), Akcigit, Baslandze and Stantcheva (2016), Suárez Serrato and Zidar (2016), Moretti and Wilson (2017)

C. Networks

Refs.: Munshi (2003), Woodruff and Zenteno (2007)

Chapter 2: Internal Migration

I. Static Models

Refs.: Rosen (1979), Roback (1982), Saiz (2010), Wozniak (2010), Moretti (2013), Eeckhout, Pinheiro and Schmidheiny (2014), Behrens, Duranton and Robert-Nicoud (2014), Diamond (2016), Suárez Serrato and Zidar (2016), Moretti and Wilson (2017), Molloy, Smith and Wozniak (2017), Monte, Redding and Rossi-Hansberg (2018), Davis and Dingel (2019), Hsieh and Moretti (2019), Fajgelbaum, Morales, Suárez Serrato and Zidar (2019)

II. Dynamic Models

Refs.: Kennan and Walker (2011), Gould (2007), Coen-Pirani (2010), Baum-Snow and Pavan (2012), Buchinsky, Gotlibovski and Lifshitz (2014), Bayer, McMillan, Murphy and Timminis (2016), Gemici (2016), Demyanyk, Hryshko, Luengo-Prado and Sørensen (2017), Kaplan and Schulhofer-Wohl (2017), Llull and Miller (2018), Oswald (2018)

Chapter 3: Labor Market Effects of Immigration

I. Natural Experiments

Refs.: Card (1990), Hunt (1992), Angrist and Krueger (1999), Glitz (2012), Dustmann, Schönberg and Stuhler (2017), ?, Anastasopoulos, Borjas, Cook and Lachanski (2018), Clemens and Hunt (2019)

II. Spatial and Skill-Cell Approaches

Refs.: Grossman (1982), Borjas (1983), Altonji and Card (1991), Borjas, Freeman and Katz (1997), Borjas (2003, 2006), Aydemir and Borjas (2007), Llull (2018b), Dustmann, Frattini and Preston (2013)

III. Production Function Approach

Refs.: Borjas (2003), Ottaviano and Peri (2012), Borjas, Grogger and Hanson (2012), Card, Dustmann and Preston (2012), Manacorda, Manning and Wadsworth (2012)

IV. Labor Market Adjustments and Equilibrium Effects

Refs.: Card (2001), Borjas (2006), Aydemir and Borjas (2011), Lewis (2011), Peri and Sparber (2009), Borjas (2013), ?, Llull (2018a)

V. Consequences of Highly Skilled Immigration

Refs.: Peri (2005), Borjas (2009), Hunt and Gauthier-Loiselle (2010), Kerr and Lincoln (2010), Hunt (2011), Borjas and Doran (2012, 2015a,b), Ottaviano, Peri and Wright (2013), Kerr and Kerr (2013), Gaulé and Piacentini (2013), Kato and Sparber (2013), Moser, Voena and Waldinger (2014), Orrenius and Zavodny (2015), Bound, Braga, Golden and Khanna (2015), Peri, Shih and Sparber (2015), Kerr et al. (2015), Hunt (2015), Doran, Gelber and Isen (2016), Llull (2018c)

VI. Other Effects of Immigration

Refs.: Angrist and Kugler (2003), Lach (2007), Cortés (2008), Smith (2012), Borjas (2013), ?, Llull (2018a)

Chapter 4: Labor Market Assimilation of Immigrants

Refs.: Borjas (1985, 1995, 2015a), LaLonde and Topel (1992), Lubotsky (2007)

REFERENCES

- **Abarcar, Paolo and Caroline Theoharides**, "Medical Worker Migration and Origin-Country Human Capital: Evidence from U.S. Visa Policy," *The Review of Economics and Statistics*, 2021, (September), 1–46.
- **Abramitzky, Ran and Leah Platt Boustan**, "Immigration in American Economic History," *Journal of Economic Literature*, 2017, 55 (4), 1311–1345.
- _ , _ , and Katherine Eriksson, "Europe's Tired, Poor, Huddled Masses: Self-Selection and Economic Outcomes in the Age of Mass Migration," *American Economic Review*, 2012, 102 (5), 1832–1856.
- Adserà, Alícia and Mariola Pytliková, "The Role of Language in Shaping International Migration," *Economic Journal*, 2015, 125 (586), F49–F81.
- Akcigit, Uful, Salomé Baslandze, and Stefanie Stantcheva, "Taxation and the International Mobility of Inventors," *American Economic Review*, 2016, 106 (10), 2930–2981.
- **Altonji, Joseph G. and David E. Card**, "The Effects of Immigration on the Labor Market Outcomes of Less-skilled Natives," in John M. Abowd and Richard B. Freeman, eds., *Immigration, Trade and the Labor Market*, Chicago: The University of Chicago Press, 1991, chapter 7, pp. 201–234.
- Ambler, Kate, Diego Aycinena, and Dean Yang, "Channeling Remittances to Education: A Field Experiment among Migrants from El Salvador," *American Economic Journal: Applied Economics*, 2015, 7 (2), 207–232.
- Anastasopoulos, Jason, George J. Borjas, Gavin G. Cook, and Michael Lachanski, "Job Vacancies and Immigration: Evidence from Pre- and Post-Mariel Miami," NBER Working Paper 24580, 2018.
- **Angelucci, Manuela**, "Migration and Financial Contraints: Evidence from Mexico," *Review of Economics and Statistics*, 2015, 97 (1), 224–228.
- Angrist, Joshua D. and Adriana Kugler, "Protective or Counter-Productive? Labour Market Institutions and the Effect of Immigration on EU Natives," *Economic Journal*, 2003, 113 (448), F302–F331.
- and Alan B. Krueger, "Empirical Strategies in Labor Economics," in Orley C. Ashenfelter and David E. Card, eds., *Handbook of Labor Economics*, Vol. 3A, Amsterdam: North-Holland Publishing Company, 1999, chapter 23, pp. 1277–1366.
- Artuç, Erhan, Frédéric Docquier, Çağlar Özden, and Christoper R.

- **Parsons**, "A Global Assessment of Human Capital Mobility: The Role of Non-OECD Destinations," World Development, 2015, 65, 6–26.
- **Aydemir, Abdurrahman and George J. Borjas**, "Cross-Country Variation on the Impact of International Migration: Canada, Mexico, and the United States," *Journal of the European Economic Association*, 2007, 5 (4), 663–708.
- _ and _ , "Attenuation Bias in Measuring the Wage Impact of Immigration," Journal of Labor Economics, 2011, 29 (1), 69−112.
- Bartolucci, Cristian, Claudia Villosio, and Mathis Wagner, "Who Migrates and Why? Evidence from Italian Administrative Data," *Journal of Labor Economics*, 2018, 36 (2), 551–588.
- Batista, Catia, Aitor Lacuesta, and Pedro C. Vicente, "Testing the 'Bain Drain' Hypothesis: Micro Evidence from Cape Verde," *Journal of Development Economics*, 2012, 97 (1), 32–45.
- Baum-Snow, Nathaniel and Ronni Pavan, "Understanding the City Size Wage Gap," Review of Economic Studies, 2012, 79 (1), 88–127.
- Bayer, Patrick, Robert McMillan, Alvin Murphy, and Christopher Timminis, "A Dynamic Model of Demand For Houses and Neighborhoods," *Econometrica*, 2016, 84 (3), 893–942.
- Behrens, Kristian, Gilles Duranton, and Frédéric Robert-Nicoud, "Productive Cities: Sorting, Selection, and Agglomeration," *Journal of Political Economy*, 2014, 122 (3), 507–553.
- Beine, Michel, Frédéric Docquier, and Çağlar Özden, "Diasporas," Journal of Development Economics, 2011, 95 (1), 30–41.
- _ , _ , and Hillel Rapoport, "Brain Drain and Economic Growth: Theory and Evidence," Journal of Development Economics, 2001, 64 (1), 275–289.
- _ , _ , and _ , "Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers," *Economic Journal*, 2008, 118 (528), 631–652.
- _ , Simone Bertoli, and Jesús Fernández-Huertas Moraga, "A Practitioners' Guide to Gravity Models of International Migration," *The World Economy*, 2015, *Published Online*, 1–15.
- Bertoli, Simone and Jesús Fernández-Huertas Moraga, "Multilateral Resistance to Migration," *Journal of Development Economics*, 2013, 102 (C), 79–100.
- _ , _ , and Francesc Ortega, "Crossing the Border: Self-selection, Earnings

- and Individual Migration Decisions," *Journal of Development Economics*, 2013, 101 (C), 75–91.
- Borjas, George J., "The Substitutability of Black, Hispanic, and White Labor," *Economic Inquiry*, 1983, 21 (1), 93–106.
- _ , "Assimilation, Changes in Cohort Quality, and the Earnings of Immigrants," Journal of Labor Economics, 1985, 3 (4), 463–489.
- _ , "Self-Selection and the Earnings of Immigrants," *American Economic Review*, 1987, 77 (4), 531–553.
- _ , "Assimilation and Changes in Cohort Quality Revisited: What Happened to Immigrant Earnings in the 1980s?," *Journal of Labor Economics*, 1995, 13 (2), 201–245.
- _ , "The Economic Analysis of Immigration," in Orley C. Ashenfelter and David E. Card, eds., *Handbook of Labor Economics*, Vol. 3A, Amsterdam: North-Holland Publishing Company, 1999, chapter 28, pp. 1697–1760.
- _ , "The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market," Quarterly Journal of Economics, 2003, 118 (4), 1335–1374.
- _ , "Native Internal Migration and the Labor Market Impact of Immigration," Journal of Human Resources, 2006, 41 (2), 221–258.
- _ , "The Impact of Foreign Students on the Earnings of Doctorates," in Richard B. Freeman and Daniel Goroff, eds., Science and Engineering Careers in the United States: An Analysis of Markets and Employment, Chicago: The University of Chicago Press, 2009, chapter 4, pp. 131–161.
- _ , "The Analytics of the Wage Effect of Immigration," IZA Journal of Migration, 2013, 2 (22), 1–25.
- _ , Immigration Economics, Cambridge: Harvard University Press, 2014.
- _ , "The Slowdown in the Economic Assimilation of Immigrants: Aging and Cohort Effects Revisited Again," *Journal of Human Capital*, 2015, 9 (4), 483–517.
- _ , "Immigration and Globalization: A Review Essay," Journal of Economic Literature, 2015, 53 (4), 961–974.
- _ and Bernt Bratsberg, "Who Leaves? The Outmigration of the Foreign-Born," Review of Economics and Statistics, 1996, 78 (1), 165–176.
- and Kirk B. Doran, "The Collapse of the Soviet Union and the Productivity of American Mathematicians," Quarterly Journal of Economics, 2012, 127 (3),

- 1143-1203.
- _ and _ , "Which Peers Matter? The Relative Impacts of Collaborators, Colleagues, and Competitors," Review of Economics and Statistics, 2015, 97 (5), 1104–1117.
- _ and _ , "Cognitive Mobility: Labor Market Responses to Supply Shocks in the Space of Ideas," *Journal of Labor Economics*, 2015, 33 (S1, Part 2), S109–S145.
- _ , Ilpo Kauppinen, and Panu Poutvaara, "Self-Selection of Emigrants: Theory and Evidence on Stochastic Dominance in Observable and Unobservable Characteristics," *Economic Journal*, 2019, 129 (617), 143–171.
- _ , **Jeffrey T. Grogger**, and **Gordon H. Hanson**, "Comment: On Estimating Elasticities of Substitution," *Journal of the European Economic Association*, 2012, 10 (1), 198–210.
- _ , Richard B. Freeman, and Lawrence F. Katz, "How Much Do Immigration and Trade Affect Labor Market Outcomes?," *Brookings Papers on Economic Activity*, 1997, 1997 (1), 1–67.
- Bound, John, Breno Braga, Joseph M. Golden, and Gaurav Khanna, "Recruitment of Foreigners in the Market for Computer Scientists in the United States," *Journal of Labor Economics*, 2015, 33 (S1, Part 2), S187–S223.
- Buchinsky, Moshe, Chemi Gotlibovski, and Osnat Lifshitz, "Residential Location, Work Location, and Labor Market Outcomes of Immigrants in Israel," *Econometrica*, 2014, 82 (3), 995–1054.
- Card, David E., "The Impact of the Mariel Boatlift on the Miami Labor Market," Industrial and Labor Relations Review, 1990, 43 (2), 245–257.
- _ , "Immigrant Inflows, Native Outflows, and the Local Labor Market Impacts of Higher Immigration," *Journal of Labor Economics*, 2001, 19 (1), 22–64.
- _ , "Is the New Immigration Really So Bad?," *Economic Journal*, 2005, 115 (507), F300–F323.
- _ , "Immigration and Inequality," American Economic Review: Papers and Proceedings, 2009, 99 (2), 1–21.
- _ , Christian Dustmann, and Ian Preston, "Immigration, Wages, and Compositional Amenities," Journal of the European Economic Association, 2012, 10 (1), 78–119.
- Chiquiar, Daniel and Gordon H. Hanson, "International Migration, Self-Selection, and the Distribution of Wages: Evidence from Mexico and the United

- States," Journal of Political Economy, 2005, 113 (2), 239–281.
- Clark, Ximena, Timothy J. Hatton, and Jeffrey G. Williamson, "Explaining U.S. Immigration, 1971-1998," Review of Economics and Statistics, 2007, 89 (2), 359–373.
- Clemens, Michael A. and Jennifer Hunt, "The Labor Market Effects of Refugee Waves: Reconciling Conflicting Results," *International Labor Relations Review*, 2019, 72 (4), 818–857.
- Coen-Pirani, Daniele, "Understanding Gross Worker Flows Across U.S. States," *Journal of Monetary Economics*, 2010, 57 (7), 769–784.
- Cortés, Patricia, "The Effect of Low-Skilled Immigration on U.S. Prices: Evidence from CPI Data," *Journal of Political Economy*, 2008, 116 (3), 381–422.
- **Davis, Donald R. and Jonathan I. Dingel**, "A Spatial Knowledge Economy," *American Economic Review*, 2019, 109 (1), 153–170.
- Demyanyk, Yuliya, Dmytro Hryshko, María Jose Luengo-Prado, and Bent E. Sørensen, "Moving to a Job: The Role of Home Equity, Debt, and Access to Credit," *American Economic Journal: Macroeconomics*, 2017, 9 (2), 149–181.
- **Diamond, Rebecca**, "The Determinants and Welfare Implications of US Workers' Diverging Location Choices by Skill: 1980-2000," *American Economic Review*, 2016, 106 (3), 479–524.
- Dinkelman, Taryn and Martine Mariotti, "The Long-Run Effects of Labor Migration on Human Capital Formation in Communities of Origin," *American Economic Journal: Applied Economics*, 2016, 8 (4), 1–35.
- **Docquier, Frédéric and Abdeslam Marfouk**, "International Migration by Educational Attainment, 1990-2000," in Çağlar Özden and Maurice W. Schiff, eds., *International Migration, Remittances and the Brain Drain*, New York: Palgrave Macmillan, 2006, chapter 5, pp. 151–200.
- **Docquier, Frédéric and Hilel Rapoport**, "Globalization, Brain Drain, and Development," *Journal of Economic Literature*, 2012, 50 (3), 681–730.
- Docquier, Frédéric, B. Lindsay Lowell, and Abdeslam Marfouk, "A Gendered Assessment of Highly Skilled Emigration," *Population and Development Review*, 2009, 35 (2), 297–321.
- Doran, Kirk B., Alexander Gelber, and Adam Isen, "The Effects of High-Skilled Immigration Policy on Firms: Evidence from Visa Lotteries," NBER Working Paper No. 20668, 2016.

- **Dustmann, Christian and Albrecht Glitz**, "Migration and Education," in Eric Hanushek, Stephen Machin, and Ludger Woessmann, eds., *Handbook of the Economics of Education*, Vol. 4, Amsterdam: North-Holland Publishing Company, 2011, chapter 4, pp. 327–479.
- _ and Joseph-Simon Görlach, "The Economics of Temporary Migrations," Journal of Economic Literature, 2016, 54 (1), 98–136.
- _ , Itzhak Fadlon, and Yoram Weiss, "Return Migration, Human Capital Accumulation, and the Brain Drain," Journal of Development Economics, 2011, 95 (1), 58–67.
- _ , Tommaso Frattini, and Ian Preston, "The Effect of Immigration along the Distribution of Wages," Review of Economic Studies, 2013, 80 (1), 145–173.
- _ , Uta Schönberg, and Jan Stuhler, "The Impact of Immigration on Local Labor Markets: Evidence from the Opening of the Czech-German Border," Quarterly Journal of Economics, 2017, 132 (1), 435–483.
- Eeckhout, Jan, Roberto Pinheiro, and Kurt Schmidheiny, "Spatial Sorting," Journal of Political Economy, 2014, 122 (3), 554–620.
- Fajgelbaum, Pablo D, Eduardo Morales, Juan Carlos Suárez Serrato, and Owen Zidar, "State Taxes and Spatial Misallocation," Review of Economic Studies, 2019, 86 (1), 333–376.
- Fernández-Huertas Moraga, Jesús, "New Evidence on Emigrant Selection," Review of Economics and Statistics, 2011, 93 (1), 72–96.
- Friedberg, Rachel M. and Jennifer Hunt, "The Impact of Immigrants on Host Country Wages, Employment and Growth," *Journal of Economic Perspectives*, 1995, 9 (2), 23–44.
- Gaulé, Patrick and Mario Piacentini, "Chinese Graduate Students and U.S. Scientific Productivity," *Review of Economics and Statistics*, 2013, 95 (2), 698–701.
- **Gemici, Ahu**, "Family Migration and Labor Market Outcomes," mimeo Royal Holloway, University of London, 2016.
- Gibson, John and David McKenzie, "The Economic Consequences of 'Brain Drain' of the Best and Brightest: Microeconomic Evidence from Five Countries," *Economic Journal*, 2012, 122 (560), 339–375.
- Glitz, Albrecht, "The Labor Market Impact of Immigration: A Quasi-Experiment Exploiting Immigrant Location Rules in Germany," Journal of Labor Economics, 2012, 30 (1), 175–213.

- Gould, Eric D., "Cities, Workers, and Wages: A Structural Analysis of the Urban Wage Premium," Review of Economic Studies, 2007, 74 (2), 477–506.
- and Omer Moav, "Does High Inequality Attract High Skilled Immigrants?," Economic Journal, 2016, 126 (593), 1055–1091.
- Greenwood, Michael J., "Internal Migration in Developed Countries," in Mark R. Rosenzweig and Oded Stark, eds., Handbook of Population and Family Economics, Vol. 1B, Amsterdam: North-Holland Publishing Company, 1997, chapter 12, pp. 647–720.
- **Grogger, Jeffrey T. and Gordon H. Hanson**, "Income Maximization and the Selection and Sorting of International Migrants," *Journal of Development Economics*, 2011, 95 (1), 42–57.
- **Groizard, José L. and Joan Llull**, "Skilled migration and growth. Testing brain drain and brain gain theories," DEA Working Papers 20, Universitat de les Illes Balears, 2007.
- **Grossman, Jean B.**, "The Substitutability of Natives and Immigrants in Production," *Review of Economics and Statistics*, 1982, 64 (4), 596–603.
- **Hanson, Gordon H.**, "Illegal Migration from Mexico to the United States," Journal of Economic Literature, 2006, 44 (4), 869–924.
- _ , "The Economic Consequences of the International Migration of Labor," Annual Review of Economics, 2009, 1 (1), 179–207.
- _ and Antonio Spilimbergo, "Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border," American Economic Review, 1999, 89 (5), 1337–1357.
- _ , Raymond Robertson, and Antonio Spilimbergo, "Does Border Enforcement Protect U.S. Workers from Illegal Immigration?," Review of Economics and Statistics, 2002, 84 (1), 73–92.
- **Hsieh, Chang-Tai and Enrico Moretti**, "Housing Constraints and Spatial Misallocation," *American Economic Journal: Macroeconomics*, 2019, 11 (2), 1–39.
- **Hunt, Jennifer**, "The Impact of the 1962 Repatriates from Algeria on the French Labor Market," *Industrial and Labor Relations Review*, 1992, 45 (3), 556–572.
- _ , "Which Immigrants Are Most Innovative and Entrepreneurial? Distinctions by Entry Visa," *Journal of Labor Economics*, 2011, 29 (3), 417–457.
- _ , "Are Immigrants the Most Skilled U.S. Computer and Engineering Workers?,"

- Journal of Labor Economics, 2015, 33 (S1), S39–S77.
- _ and Marjolaine Gauthier-Loiselle, "How Much Does Immigration Boost Innovation?," American Economic Journal: Macroeconomics, 2010, 2 (2), 31–56.
- **Kaestner, Robert and Ofer Malamud**, "Self-Selection and International Migration: New Evidence from Mexico," *Review of Economics and Statistics*, 2014, 96 (1), 78–91.
- **Kaplan, Greg and Sam Schulhofer-Wohl**, "Understanding the Long-Run Decline in Interstate Migration," *International Economic Review*, 2017, 58 (1), 57–94.
- **Kato, Takao and Chad Sparber**, "Quotas and Quality: The Effect of H-1B Visa Restrictions on the Pool of Prospective Undergraduate Students from Abroad," *Review of Economics and Statistics*, 2013, 95 (1), 109–126.
- **Kennan, John and James R. Walker**, "The Effect of Expected Income on Individual Migration Decisions," *Econometrica*, 2011, 79 (1), 211–251.
- Kerr, Sari Pekkala and William R. Kerr, "Economic Impacts of Immigration: A Survey," Finnish Economic Papers, 2011, 24 (1), 1–32.
- _ and _ , "Immigration and Employer Transitions for STEM Workers," American Economic Review: Papers and Proceedings, 2013, 103 (3), 193–197.
- _ , _ , and William F. Lincoln, "Skilled Immigration and the Employment Structures of US Firms," *Journal of Labor Economics*, 2015, 33 (S1, Part 2), S147–S186.
- Kerr, William R. and William F. Lincoln, "The Supply Side of Innovation: H-1B Visa Reforms and U.S. Ethnic Invention," *Journal of Labor Economics*, 2010, 28 (3), 473–508.
- Kleven, Henrik Jacobsen, Camille Landais, and Emmanuel Saez, "Taxation and International Migration of Superstars: Evidence from the European Football Market," *American Economic Review*, 2013, 103 (5), 1892–1924.
- _ , _ , _ , and Esben Schultz, "Migration and Wage Effects of Taxing Top Earners: Evidence from the Foreigners' Tax Scheme in Denmark," Quarterly Journal of Economics, 2014, 129 (1), 333–378.
- **Lach, Saul**, "Immigration and Prices," *Journal of Political Economy*, 2007, 115 (4), 548–587.
- LaLonde, Robert J. and Robert H. Topel, "The Assimilation of Immigrants

- in the U.S. Labor Market," in George J. Borjas and Richard B. Freeman, eds., *Immigration and the Work Force: Economic Consequences for the United States and Source Areas*, Chicago: The University of Chicago Press, 1992, chapter 3, pp. 67–92.
- Lehmann, Etienne, Laurent Simula, and Alain Trannoy, "Tax me if you can! Optimal Nonlinear Income Tax Between Competing Governments," *Quarterly Journal of Economics*, 2014, 129 (4), 1995–2030.
- **Lessem, Rebecca H.**, "Mexico-U.S. Immigration: Effects of Wages and Border Enforcement," *Review of Economic Studies*, 2018, 85 (4), 2353–2388.
- **Lewis, Ethan G.**, "Immigration, Skill Mix, and Capital-Skill Complementarity," *Quarterly Journal of Economics*, 2011, 126 (2), 1029–1069.
- **Llull, Joan**, "Understanding International Migration: Evidence from a New Dataset of Bilateral Stocks (1960-2000)," *SERIEs The Journal of the Spanish Economic Association*, 2016, 7 (2), 221–255.
- _ , "Immigration, Wages, and Education: A Labour Market Equilibrium Structural Model," *Review of Economic Studies*, 2018, 85 (3), 1852–1896.
- _ , "The Effect of Immigration on Wages: Exploiting Exogenous Variation at the National Level," *Journal of Human Resources*, 2018, 53 (3), 608–622.
- _ , "Selective Immigration Policies and the U.S. Labor Market," mimeo, Universitat Autònoma de Barcelona, 2018.
- _ and Robert A. Miller, "Internal Migration and Work Experience in Dual Labor Markets," mimeo, Universitat Autònoma de Barcelona, 2018.
- **Lubotsky, Darren**, "Chutes or Ladders? A Longitudinal Analysis of Immigrant Earnings," *Journal of Political Economy*, 2007, 115 (5), 820–867.
- Manacorda, Marco, Alan Manning, and Jonathan Wadsworth, "The Impact of Immigration on the Structure of Wages: Theory and Evidence from Britain," *Journal of the European Economic Association*, 2012, 10 (1), 120–151.
- Mayda, Anna Maria, "International Migration: A Panel Data Analysis of the Determinants of Bilateral Flows," *Journal of Population Economics*, 2010, 23 (4), 1249–1274.
- McKenzie, David and Hillel Rapoport, "Self-Selection Paterns in Mexico-U.S. Migration: the Role of Migration Networks," *Review of Economics and Statistics*, 2010, 92 (4), 811–821.
- Molloy, Raven, Christopher L. Smith, and Abigail Wozniak, "Internal

- Migration in the United States," Journal of Economic Perspectives, 2011, 25 (3), 173–196.
- _ , _ , and _ , "Job Changing and the Decline in Long-Distance Migration in the United States," *Demography*, 2017, 54 (2), 631–653.
- Monte, Ferdinando, Stephen J. Redding, and Esteban Rossi-Hansberg, "Commuting, Migration, and Local Employment Elasticities," *American Economic Review*, 2018, 108 (12), 3855–3890.
- Moretti, Enrico, "Local Labor Markets," in Orley C. Ashenfelter and David E. Card, eds., *Handbook of Labor Economics*, Vol. 4B, Amsterdam: North-Holland Publishing Company, 2011, chapter 14, pp. 1237–1313.
- _ , The New Geography of Jobs, New York: Houghton Mifflin Hartcourt, 2012.
- _ , "Real Wage Inequality," American Economic Journal: Applied Economics, 2013, 5 (1), 65–103.
- _ and Daniel J. Wilson, "The Effect of State Taxes on the Geographical Location of Top Earners: Evidence from Star Scientists," American Economic Review, 2017, 107 (7), 1858–1903.
- Moser, Petra, Alessandra Voena, and Fabian Waldinger, "German Jewish Émigrés and US Invention," American Economic Review, 2014, 104 (10), 3222–3255.
- Munshi, Kaivan, "Networks in the Modern Economy: Mexican Migrants in the U.S. Labor Market," *Quarterly Journal of Economics*, 2003, 118 (2), 549–597.
- **OECD**, A Profile of Immigrant Populations in the 21st Century: Data from OECD Countries, Paris: OECD Publishing, 2008.
- Orrenius, Pia M. and Madeline Zavodny, "Self-Selection among Undocumented Immigrants from Mexico," *Journal of Development Economics*, 2005, 78 (1), 215–240.
- _ and _ , "Does Immigration Affect Whether US Natives Major in Science and Engineering?," Journal of Labor Economics, 2015, 33 (S1, Part 2), S79–S108.
- Ortega, Francesc and Giovanni Peri, "Openness and Income: The Roles of Trade and Migration," *Journal of International Economics*, 2014, 92 (2), 231–251.
- Oswald, Florian, "Regional Shocks, Migration and Homeownership," mimeo, Sciences Po, 2018.
- Ottaviano, Gianmarco I. P. and Giovanni Peri, "Rethinking the Effect of

- Immigration on Wages," Journal of the European Economic Association, 2012, 10 (1), 152–197.
- _ , _ , and Greg C. Wright, "Immigration, Offshoring, and American Jobs," American Economic Review, 2013, 103 (5), 1925–1959.
- Özden, Çağlar, Christoper R. Parsons, Maurice Schiff, and Terrie L. Walmsey, "Where on Earth is Everybody? The Evolution of Global Bilateral Migration 1960-2000," World Bank Economic Review, 2011, 25 (1), 12–56.
- Parey, Matthias, Jens Ruhose, Fabian Waldinger, and Nicolai Netz, "The Selection of High-Skilled Emigrants," Review of Economics and Statistics, 2017, 99 (5), 776–792.
- Parsons, Christopher R., Ronald Skeldon, Terrie L. Walmsley, and L. Alan Winters, "Quantifying International Migration: A Database of Bilateral Migrant Stocks," in Çağlar Özden and Maurice Schiff, eds., *International Migration, Economic Development, and Policy*, New York: Palgrave McMillan, 2007, chapter 1, pp. 17–58.
- Patt, Alexander, Jens Ruhose, Simon Wiederhold, and Miguel Flores, "International Emigrant Selection on Occupational Skills," *Journal of the European Economic Association*, 2021, 19 (2), 1249–1298.
- **Peri, Giovanni**, "Determinants of Knowledge Flows and their Effect on Innovation," *Review of Economics and Statistics*, 2005, 87 (2), 308–322.
- _ , "Immigrants, Productivity, and Labor Markets," Journal of Economic Perspectives, 2016, 30 (4), 3–30.
- _ and Chad Sparber, "Task Specialization, Immigration, and Wages," American Economic Journal: Applied Economics, 2009, 1 (3), 135–169.
- _ , **Kevin Shih, and Chad Sparber**, "STEM Workers, H1B Visas, and Productivity in US Cities," *Journal of Labor Economics*, 2015, 33 (S1, Part 2), S225–S255.
- Roback, Jennifer, "Wages, Rents, and the Qality of Life," Journal of Political Economy, 1982, 90 (6), 1257–1278.
- Rosen, Sherwin, "Wage-Based Indexes of Urban Quality of Life," in Peter M Mieszkowski and Mahlon R. Straszheim, eds., *Current Issues in Urban Economics*, Baltimore: Johns Hopkins University Press, 1979, chapter 3, pp. 74–104.
- Roy, Arthur D., "Some Thoughts on the Distribution of Earnings," Oxford Economic Papers, 1951, 3 (2), 135–146.

- Saiz, Albert, "The Geographic Determinants of Housing Supply," Quarterly Journal of Economics, 2010, 125 (3), 1253–1296.
- Serrato, Juan Carlos Suárez and Owen Zidar, "Who Benefits from State Corporate Tax Cuts? A Local Labor Markets Approach with Heterogeneous Firms," *American Economic Review*, 2016, 106 (9), 2582–2624.
- Smith, Christopher L., "The Impact of Low-Skilled Immigration on the Youth Labor Market," *Journal of Labor Economics*, 2012, 30 (1), 55–89.
- Spitzer, Yannay and Ariell Zimran, "Migrant Self-Selection: Anthropometric Evidence from the Mass Migration of Italians to the United States, 1907-1925," *Journal of Development Economics*, 2018, 134, 226–247.
- **Theoharides, Caroline**, "Manila to Malaysia, Quezon to Qatar: International Migration and Its Effects on Origin-Country Human Capital," *Journal of Human Resources*, 2018, 53 (4), 1022–1049.
- _ , "The Unintended Consequences of Migration Policy on Origin-Country Labor Market Decisions," Journal of Development Economics, 2018, forthcoming.
- Woodruff, Christopher and Rene Zenteno, "Migration Networks and Microenterprises in Mexico," *Journal of Development Economics*, 2007, 82 (2), 509–528.
- Wozniak, Abigail, "Are College Graduates More Responsive to Distant Labor Market Opportunities?," *Journal of Human Resources*, 2010, 45 (4), 944–970.