TOPICS IN LABOR ECONOMICS II – EC 752
Spring 2026
Fri – 9:15am – 12:00pm, SSW 315

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Course Outline

This is the second part of a two-part sequence of courses in labor economics. It will cover a subset of advanced topics in order to expose you to some of the most recent open questions and tools used to address them in the field.

In Johannes' part, we will cover 4 main topics. 1) the basic model of job search, that underlies much of labor economics and its application to understanding unemployment; 2) the optimal design of unemployment insurance as an example how empirical estimates in labor economics can be linked to policy making; 3) wage dispersion and the role of firms in determining the wage structure; and 4) the costs of job loss and what they can tell us about the workings of the labor market.

In addition to providing an overview over these topics, the class will introduce students to the state of the art in empirical work in labor economics, emphasize different ways how theory can guide and be combined with empirics, provide hands-on experience in structural and reduced form estimation, and offer examples of recent job market papers in economics in order to help students identify topics for their own research.

Research Proposal

We require a research proposal, which serves both as a review of a specific topic of particular interest to you and as an exercise to help prepare you for the research process needed to develop and complete a PhD thesis successfully. This exercise is structured in four different sections.

- Come up with 3 ideas for research projects that you find potentially interesting. You should develop a basic understanding of the related literature (look over at least some recent papers in that area). Then describe these 3 ideas in a short document (1-2 pages in total) stating what the research question is and what the main research design would be (e.g. "I want to use a test score discontinuity in the eligibility for a Massachusetts scholarship to estimate the returns to schooling using a regression discontinuity design"). Hand this in by **February 16** (on Blackboard).

- **Letter of Intent:** Then work on developing an understanding of the current state of research in that area and clearly describe what you believe the value added of your project will be. This paper should include a thesis statement (what you want to add to the literature), 2 to 4 pages describing the literature and a bibliography. This is due no later than **March 20** (on Blackboard).

- **Full Proposal:** Describe the analysis you propose to develop and identify the data that are available to complete the analysis you propose. If this is a theoretical exercise, identify key variables or parameters that will drive the results based on the existing models as well as your original thoughts on how to improve it. This should be quite precise. If you are completing an empirical exercise, describe the statistical model and estimation technique you think is appropriate, confirm what data will be used to estimate the model, discuss potential sensitivity analyses. The final research proposal is due on **May 7**!

- Class Presentation of research proposal **April 24**. Each presentation will be approximately 25 minutes. We will allocate slots randomly.

Grading

50% of the grade of the course will be determined by your research proposal and presentation. In addition you will get a separate grade by Johannes and Linh for the respective parts counting for 25% and 25% of the final grade. For Johannes' part the grade will be based on 2 problem sets and class participation.

Problem sets: For Johannes' section there will be 2 structural problem sets as well as a small assignment regarding rating research proposals. The first one will involve programming a dynamic job search model in Python, the second one will build on PS 1 and will consist of estimating the model using a methods of moments estimator.
Finally you will be asked to give feedback on 2 of your classmates "Letters of Intent".

Course Outline

Date	Lecture #	Teacher	Lecture Topic	Due Dates
Fri, Jan 23	1	Johannes	**Unemployment / Job Search** - Basic partial equilibrium job search model - How does UI affect job search - Empirical evidcence and identification strategies"	
Fri, Jan 30	2	Johannes	**Job Search Micro Evidence:** - Empirical evidence on job search channels - Expanding job search theory using behavioral economics **Excursion:** How to find research topic?	PS1
Fri, Feb 06	3	Johannes	**Optimal Unemployment Insurance** - Baily/Chetty Model - Evidence on Liquidity Constraints and Moral Hazard - Consumption evidence: Ganong and Noel; Gerard Naritomi - Extensions - Relationship to MVPF	Reviewing LOIs
Fri, Feb 13	4	Johannes	**Wage Dispersion** - Evidence of wage dispersion - A simple monopsony model (Card et al). - AKM paper - The role of firms in wage setting - recent evidence from countries around the world. - Methodological Challenges of AKM Model (Bonhomme, Lamadon & Manresa; Kline, Solvsten and Saggio approach)	Feb 16: 3 ideas
Fri, Feb 20	5	Johannes	**Wages and Firms - Applications and Extensions of AKM model** - Domestic outsourcing - Gender Wage Gap / Racial Gaps - Rent sharing and innovation - Monopsony	PS 2
Fri, Feb 27	6	Johannes	**AKM and Amenities** **Job Loss**	
Fri, Mar 06	7	Linh		
Fri, Mar 13	Spring Break			
Fri, Mar 20	8	Linh		Submit LOI
Fri, Mar 27	9	Linh		Submit Peer
Fri, Apr 03	10	Linh		
Fri, Apr 10	11	Linh		
Fri, Apr 17	12	Linh		
Fri, Apr 24	13	Student	Student Presentations	

READING LIST

The reading list is extensive. It is intended to serve as a resource.

Highly recommended papers are marked with a (**).
Papers that I will cover in class, which you should at least skim are marked with (*).
Other papers are papers that are either background or papers that I mention, but don't expect you to necessarily read or skim.

You can download all the papers through the Boston University library: http://www.bu.edu/library/ejournals, the NBER web page or the authors' web sites.

Lecture 1 – Unemployment and Job Search

Overviews

Devine, Theresa J., and Nicholas M. Kiefer. 1993. "The Empirical Status of Job Search Theory." *Labour Economics* 1 (1): 3–24. https://doi.org/10.1016/0927-5371(93)90003-Z.

Eckstein, Zvi, and Gerard J. van den Berg. 2007. "Empirical Labor Search: A Survey." *Journal of Econometrics*, The interface between econometrics and economic theory, 136 (2): 531–64. https://doi.org/10.1016/j.jeconom.2005.11.006.

Kircher, Philipp. 2022. "Job Search in the 21St Century." *Journal of the European Economic Association*, October, jvac057. https://doi.org/10.1093/jeea/jvac057.

Mortensen, Dale T. 1986. "Chapter 15 Job Search and Labor Market Analysis." In *Handbook of Labor Economics*, 2:849–919. Elsevier. https://doi.org/10.1016/S1573-4463(86)02005-9.

Rogerson, Richard, and Robert Shimer. 2011. "Chapter 7 - Search in Macroeconomic Models of the Labor Market." In *Handbook of Labor Economics*, edited by Orley Ashenfelter and David Card, 4:619–700. Elsevier. https://doi.org/10.1016/S0169-7218(11)00413-8.

Rogerson, Richard, Robert Shimer, and Randall Wright. 2005. "Search-Theoretic Models of the Labor Market: A Survey." *Journal of Economic Literature* 43 (4): 959–88. https://doi.org/10.1257/002205105775362014.

Key Papers

Meyer, Bruce D. 1995. "Lessons from the U.S. Unemployment Insurance Experiments." *Journal of Economic Literature* 33 (1): 91–131.

Schmieder, Johannes F., Till von Wachter, and Stefan Bender. 2012. "The Effects of Extended Unemployment Insurance Over the Business Cycle: Evidence from Regression Discontinuity Estimates Over 20 Years." *The Quarterly Journal of Economics* 127 (2): 701–52.

———. 2016. "The Effect of Unemployment Benefits and Nonemployment Durations on Wages." *American Economic Review* 106 (3): 739–77. https://doi.org/10.1257/aer.20141566.

General References

Boone, Jan, and Jan C. van Ours. 2012. "Why Is There a Spike in the Job Finding Rate at Benefit Exhaustion?" *De Economist* 160 (4): 413–38. https://doi.org/10.1007/s10645-012-9187-8.

Domènech-Arumí, Gerard, and Silvia Vannutelli. 2023. "Bringing Them In or Pushing Them Out? The Labor Market Effects of Pro-Cyclical Unemployment Assistance Changes." *The Review of Economics and Statistics*, March, 1–44. https://doi.org/10.1162/rest_a_01310.

Faberman, R. Jason, Andreas I. Mueller, Ayşegül Şahin, and Giorgio Topa. 2022. "Job Search Behavior Among the Employed and Non-Employed." *Econometrica* 90 (4): 1743–79. https://doi.org/10.3982/ECTA18582.

Feldstein, Martin, and James Poterba. 1984. "Unemployment Insurance and Reservation Wages." *Journal of Public Economics* 23 (1): 141–67. https://doi.org/10.1016/0047-2727(84)90070-7.

Flinn, C., and J. Heckman. 1982. "New Methods for Analyzing Structural Models of Labor Force Dynamics." *Journal of Econometrics* 18 (1): 115–68. https://doi.org/10.1016/0304-4076(82)90097-5.

Gronau, Reuben. 1971. "Information and Frictional Unemployment." *The American Economic Review* 61 (3): 290–301.

Huang, Po-Chun, and Tzu-Ting Yang. 2021. "The Welfare Effects of Extending Unemployment Benefits: Evidence from Re-Employment and Unemployment Transfers." *Journal of Public Economics* 202 (October): 104500. https://doi.org/10.1016/j.jpubeco.2021.104500.

Hunt, Jennifer. 1995. "The Effect of Unemployment Compensation on Unemployment Duration in Germany." *Journal of Labor Economics* 13 (1): 88–120. https://doi.org/10.1086/298369.

Katz, Lawrence F., and Bruce D. Meyer. 1990. "Unemployment Insurance, Recall Expectations, and Unemployment Outcomes*." *The Quarterly Journal of Economics* 105 (4): 973–1002. https://doi.org/10.2307/2937881.

Krueger, Alan B., and Andreas I. Mueller. 2016. "A Contribution to the Empirics of Reservation Wages." *American Economic Journal: Economic Policy* 8 (1): 142–79. https://doi.org/10.1257/pol.20140211.

Lentz, Rasmus, and Torben Tranæs. 2005. "Job Search and Savings: Wealth Effects and Duration Dependence." *Journal of Labor Economics* 23 (3): 467–89. https://doi.org/10.1086/430284.

Leung, Pauline, and Christopher O'Leary. 2020. "Unemployment Insurance and Means-Tested Program Interactions: Evidence from Administrative Data." *American Economic Journal: Economic Policy* 12 (2): 159–92. https://doi.org/10.1257/pol.20170262.

Lippman, Steven A, and John J McCall. 1976a. "Job Search in a Dynamic Economy." *Journal of Economic Theory* 12 (3): 365–90. https://doi.org/10.1016/0022-0531(76)90034-X.

Lippman, Steven A., and John J. McCall. 1976b. "The Economics of Job Search: A Survey." *Economic Inquiry* 14 (2): 155–89.

McCall, J. J. 1970. "Economics of Information and Job Search." *The Quarterly Journal of Economics* 84 (1): 113–26. https://doi.org/10.2307/1879403.

Meyer, Bruce D. 1990. "Unemployment Insurance and Unemployment Spells." *Econometrica (1986-1998)* 58 (4): 757.

Moffitt, Robert. 1985. "Unemployment Insurance and the Distribution of Unemployment Spells." *Journal of Econometrics* 28 (1): 85–101. https://doi.org/10.1016/0304-4076(85)90068-5.

Mortensen, Dale T. 1970. "Job Search, the Duration of Unemployment, and the Phillips Curve." *The American Economic Review* 60 (5): 847–62.

Stigler, George J. 1961. "The Economics of Information." *Journal of Political Economy* 69 (3): 213–25.

———. 1962. "Information in the Labor Market." *Journal of Political Economy* 70 (5): 94–105.

Van Den Berg, Gerard J. 1990. "Nonstationarity in Job Search Theory." *The Review of Economic Studies* 57 (2): 255–77. https://doi.org/10.2307/2297381.

Lecture 2 – Job Search – Micro Mechanisms

Overviews

Cooper, Michael, and Peter Kuhn. 2020. "Behavioral Job Search." In *Handbook of Labor, Human Resources and Population Economics*, edited by Klaus F. Zimmermann, 1–22. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-57365-6_116-1.

Mueller, Andreas I., and Johannes Spinnewijn. 2023. "Expectations Data, Labor Market, and Job Search☆." In *Handbook of Economic Expectations*, edited by Rüdiger Bachmann, Giorgio Topa, and Wilbert van der Klaauw, 677–713. Academic Press. https://doi.org/10.1016/B978-0-12-822927-9.00030-6.

Key Papers

DellaVigna, Stefano, Jörg Heining, Johannes F Schmieder, and Simon Trenkle. 2022. "Evidence on Job Search Models from a Survey of Unemployed Workers in Germany*." *The Quarterly Journal of Economics* 137 (2): 1181–1232. https://doi.org/10.1093/qje/qjab039.

DellaVigna, Stefano, Attila Lindner, Balázs Reizer, and Johannes F. Schmieder. 2017. "Reference-Dependent Job Search: Evidence from Hungary*." *The Quarterly Journal of Economics* 132 (4): 1969–2018. https://doi.org/10.1093/qje/qjx015.

Ganong, Peter, and Pascal Noel. 2019. "Consumer Spending during Unemployment: Positive and Normative Implications." *American Economic Review* 109 (7): 2383–2424. https://doi.org/10.1257/aer.20170537.

Krueger, Alan B., and Andreas Mueller. 2010. "Job Search and Unemployment Insurance: New Evidence from Time Use Data." *Journal of Public Economics* 94 (3): 298–307. https://doi.org/10.1016/j.jpubeco.2009.12.001.

Marinescu, Ioana, and Daphné Skandalis. 2021. "Unemployment Insurance and Job Search Behavior*." *The Quarterly Journal of Economics* 136 (2): 887–931. https://doi.org/10.1093/qje/qjaa037.

General References

Ahammer, Alexander, and Analisa Packham. 2023. "Effects of Unemployment Insurance Duration on Mental and Physical Health." *Journal of Public Economics* 226 (October): 104996. https://doi.org/10.1016/j.jpubeco.2023.104996.

Blau, David M., and Philip K. Robins. 1990. "Job Search Outcomes for the Employed and Unemployed." *Journal of Political Economy* 98 (3): 637–55.

DellaVigna, Stefano, and M. Daniele Paserman. 2005. "Job Search and Impatience." *Journal of Labor Economics* 23 (3): 527–88. https://doi.org/10.1086/430286.

Deschacht, Nick, and Sarah Vansteenkiste. 2021. "The Effect of Unemployment Duration on Reservation Wages: Evidence from Belgium." *Labour Economics* 71 (August): 102010. https://doi.org/10.1016/j.labeco.2021.102010.

Faberman, R. Jason, and Marianna Kudlyak. 2019. "The Intensity of Job Search and Search Duration." *American Economic Journal: Macroeconomics* 11 (3): 327–57. https://doi.org/10.1257/mac.20170315.

Gerard, François, and Joana Naritomi. 2021. "Job Displacement Insurance and (the Lack of) Consumption-Smoothing." *American Economic Review* 111 (3): 899–942. https://doi.org/10.1257/aer.20190388.

Hall, Robert E., and Andreas I. Mueller. 2018. "Wage Dispersion and Search Behavior: The Importance of Nonwage Job Values." *Journal of Political Economy* 126 (4): 1594–1637. https://doi.org/10.1086/697739.

Holzer, Harry J. 1988. "Search Method Use by Unemployed Youth." *Journal of Labor Economics* 6 (1): 1–20. https://doi.org/10.1086/298172.

Hunt, Jennifer. 1995. "The Effect of Unemployment Compensation on Unemployment Duration in Germany." *Journal of Labor Economics* 13 (1): 88–120. https://doi.org/10.1086/298369.

Le Barbanchon, Thomas, Roland Rathelot, and Alexandra Roulet. 2021. "Gender Differences in Job Search: Trading off Commute against Wage*." *The Quarterly Journal of Economics* 136 (1): 381–426. https://doi.org/10.1093/qje/qjaa033.

Mueller, Andreas I., Johannes Spinnewijn, and Giorgio Topa. 2021. "Job Seekers' Perceptions and Employment Prospects: Heterogeneity, Duration Dependence, and Bias." *American Economic Review* 111 (1): 324–63. https://doi.org/10.1257/aer.20190808.

Nekoei, Arash, and Andrea Weber. 2017. "Does Extending Unemployment Benefits Improve Job Quality?" *American Economic Review* 107 (2): 527–61. https://doi.org/10.1257/aer.20150528.

Paserman, M. Daniele. 2008. "Job Search and Hyperbolic Discounting: Structural Estimation and Policy Evaluation." *The Economic Journal* 118 (531): 1418–52. https://doi.org/10.1111/j.1468-0297.2008.02175.x.

Potter, Tristan. 2021. "Learning and Job Search Dynamics during the Great Recession." *Journal of Monetary Economics* 117 (January): 706–22. https://doi.org/10.1016/j.jmoneco.2020.04.006.

Lecture 3 – Unemployment Insurance Design

Overviews

Finkelstein, Amy, and Nathaniel Hendren. 2020. "Welfare Analysis Meets Causal Inference." *Journal of Economic Perspectives* 34 (4): 146–67. https://doi.org/10.1257/jep.34.4.146.

Hendren, Nathaniel, and Ben Sprung-Keyser. 2020. "A Unified Welfare Analysis of Government Policies*." *The Quarterly Journal of Economics* 135 (3): 1209–1318. https://doi.org/10.1093/qje/qjaa006.

Schmieder, Johannes F., and Till von Wachter. 2016. "The Effects of Unemployment Insurance Benefits: New Evidence and Interpretation." *Annual Review of Economics* 8 (1): 547–81. https://doi.org/10.1146/annurev-economics-080614-115758.

Key Papers

Baily, Martin Neil. 1978. "Some Aspects of Optimal Unemployment Insurance." *Journal of Public Economics* 10 (3): 379–402. https://doi.org/10.1016/0047-2727(78)90053-1.

Chetty, Raj. 2008. "Moral Hazard versus Liquidity and Optimal Unemployment Insurance." *Journal of Political Economy* 116 (2): 173–234. https://doi.org/10.1086/588585.

Kroft, Kory, and Matthew J. Notowidigdo. 2016. "Should Unemployment Insurance Vary with the Unemployment Rate? Theory and Evidence." *The Review of Economic Studies* 83 (3): 1092–1124. https://doi.org/10.1093/restud/rdw009.

General References

Landais, Camille, and Johannes Spinnewijn. "The Value of Unemployment Insurance." *The Review of Economic Studies* 88, no. 6 (November 1, 2021): 3041–85. https://doi.org/10.1093/restud/rdaa086.

Schmieder, Johannes F., and Till von Wachter. "A Context-Robust Measure of the Disincentive Cost of Unemployment Insurance." *American Economic Review* 107, no. 5 (May 2017): 343–48. https://doi.org/10.1257/aer.p20171026.

Schmieder, Johannes F., Till von Wachter, and Stefan Bender. "The Effects of Extended Unemployment Insurance Over the Business Cycle: Evidence from Regression

Discontinuity Estimates Over 20 Years." *The Quarterly Journal of Economics* 127, no. 2 (2012): 701–52.

Lecture 4 – Optimal UI - Extensions

Key Papers

Chodorow-Reich, Gabriel, John Coglianese, and Loukas Karabarbounis. "The Macro Effects of Unemployment Benefit Extensions: A Measurement Error Approach*." *The Quarterly Journal of Economics* 134, no. 1 (February 1, 2019): 227–79. https://doi.org/10.1093/qje/qjy018.

Lalive, Rafael, Camille Landais, and Josef Zweimüller. "Market Externalities of Large Unemployment Insurance Extension Programs." *The American Economic Review* 105, no. 12 (2015): 3564–96.

Spinnewijn, Johannes. "Unemployed but Optimistic: Optimal Insurance Design with Biased Beliefs." *Journal of the European Economic Association* 13, no. 1 (February 1, 2015): 130–67. https://doi.org/10.1111/jeea.12099.

General References

Anderson, Patricia M., and Bruce D. Meyer. "Unemployment Insurance Takeup Rates and the After-Tax Value of Benefits*." *The Quarterly Journal of Economics* 112, no. 3 (August 1, 1997): 913–37. https://doi.org/10.1162/003355397555389.

Boone, Christopher, Arindrajit Dube, Lucas Goodman, and Ethan Kaplan. "Unemployment Insurance Generosity and Aggregate Employment." *American Economic Journal: Economic Policy* 13, no. 2 (May 2021): 58–99. https://doi.org/10.1257/pol.20160613.

Hendren, Nathaniel. "Knowledge of Future Job Loss and Implications for Unemployment Insurance." *American Economic Review* 107, no. 7 (July 2017): 1778–1823. https://doi.org/10.1257/aer.20151655.

Huang, Po-Chun, and Tzu-Ting Yang. "The Welfare Effects of Extending Unemployment Benefits: Evidence from Re-Employment and Unemployment Transfers." *Journal of Public Economics* 202 (October 1, 2021): 104500. https://doi.org/10.1016/j.jpubeco.2021.104500.

Kolsrud, Jonas, Camille Landais, Peter Nilsson, and Johannes Spinnewijn. "The Optimal Timing of Unemployment Benefits: Theory and Evidence from Sweden." *American Economic Review* 108, no. 4–5 (April 2018): 985–1033. https://doi.org/10.1257/aer.20160816.

Landais, Camille, and Johannes Spinnewijn. "The Value of Unemployment Insurance." *The Review of Economic Studies* 88, no. 6 (November 1, 2021): 3041–85. https://doi.org/10.1093/restud/rdaa086.

Lindner, Attila, and Balázs Reizer. "Front-Loading the Unemployment Benefit: An Empirical Assessment." *American Economic Journal: Applied Economics* 12, no. 3 (July 1, 2020): 140–74. https://doi.org/10.1257/app.20180138.

Lusher, Lester, Geoffrey C. Schnorr, and Rebecca L. C. Taylor. "Unemployment Insurance as a Worker Indiscipline Device? Evidence from Scanner Data."

American Economic Journal: Applied Economics 14, no. 2 (April 2022): 285–319. https://doi.org/10.1257/app.20190007.

Lecture 5 – Wage Dispersion

Overviews

Card, David. "Who Set Your Wage?" *American Economic Review* 112, no. 4 (2022): 1075–90.

Card, David, Ana Rute Cardoso, Joerg Heining, and Patrick Kline. "Firms and Labor Market Inequality: Evidence and Some Theory." *Journal of Labor Economics* 36, no. S1 (2018): S13–70.

Mortensen, Dale. *Wage Dispersion: Why Are Similar Workers Paid Differently?* MIT Press, 2003.

Key Papers

Abowd, John M., Francis Kramarz, and David N. Margolis. "High Wage Workers and High Wage Firms." *Econometrica* 67, no. 2 (1999): 251–333.

Bilal, Adrien. "The Geography of Unemployment*." *The Quarterly Journal of Economics* 138, no. 3 (August 1, 2023): 1507–76. https://doi.org/10.1093/qje/qjad010.

Card, David, Jörg Heining, and Patrick Kline. "Workplace Heterogeneity and the Rise of West German Wage Inequality." *The Quarterly Journal of Economics* 128, no. 3 (2013): 967–1015.

General References

Bonhomme, Stéphane, Kerstin Holzheu, Thibaut Lamadon, Elena Manresa, Magne Mogstad, and Bradley Setzler. "How Much Should We Trust Estimates of Firm Effects and Worker Sorting?" *Journal of Labor Economics* 41, no. 2 (April 2023): 291–322. https://doi.org/10.1086/720009.

Bonhomme, Stéphane, Thibaut Lamadon, and Elena Manresa. "A Distributional Framework for Matched Employer Employee Data." *Econometrica* 87, no. 3 (2019): 699–739. https://doi.org/10.3982/ECTA15722.

Card, David. "Who Set Your Wage?" *American Economic Review* 112, no. 4 (2022): 1075–90.

Card, David, Jesse Rothstein, and Moises Yi. "Industry Wage Differentials: A Firm-Based Approach." *Unpublished Draft, University of California, Berkeley*, 2022.

———. "Location Location Location." *Working Paper*, 2023. https://eml.berkeley.edu/~jrothst/workingpapers/Location_2022March.pdf.

Kline, Patrick, Raffaele Saggio, and Mikkel Solvsten. "Leave-Out Estimation of Variance Components." *Econometrica* 88, no. 5 (2020): 1859–98. https://doi.org/10.3982/ECTA16410.

Lopes de Melo, Rafael. "Firm Wage Differentials and Labor Market Sorting: Reconciling Theory and Evidence." *Journal of Political Economy* 126, no. 1 (2018): 313–46.

Song, Jae, David J. Price, Fatih Guvenen, Nicholas Bloom, and Till Von Wachter. "Firming up Inequality." *The Quarterly Journal of Economics* 134, no. 1 (2018): 1–50.

Lecture 6 – Wages and Firms

Key Papers

Card, David, Ana Rute Cardoso, and Patrick Kline. "Bargaining, Sorting, and the Gender Wage Gap: Quantifying the Impact of Firms on the Relative Pay of Women *." *The Quarterly Journal of Economics* 131, no. 2 (May 1, 2016): 633–86. https://doi.org/10.1093/qje/qjv038.

Gerard, François, Lorenzo Lagos, Edson Severnini, and David Card. "Assortative Matching or Exclusionary Hiring? The Impact of Employment and Pay Policies on Racial Wage Differences in Brazil." *American Economic Review* 111, no. 10 (October 2021): 3418–57. https://doi.org/10.1257/aer.20181596.

Goldschmidt, Deborah, and Johannes F. Schmieder. "The Rise of Domestic Outsourcing and the Evolution of the German Wage Structure*." *The Quarterly Journal of Economics* 132, no. 3 (August 1, 2017): 1165–1217. https://doi.org/10.1093/qje/qjx008.

Schmieder, Johannes F., Till von Wachter, and Jörg Heining. "The Costs of Job Displacement over the Business Cycle and Its Sources: Evidence from Germany." *American Economic Review* 113, no. 5 (May 2023): 1208–54. https://doi.org/10.1257/aer.20200252.

General References

Aslund, Olof, Cristina Bratu, Stefano Lombardi, and Anna Thoresson. "Firm Productivity and Immigrant-Native Earnings Disparity." SSRN Scholarly Paper. Rochester, NY, May 19, 2022. https://doi.org/10.2139/ssrn.4114485.

Barth, Erling, Sari Pekkala Kerr, and Claudia Olivetti. "The Dynamics of Gender Earnings Differentials: Evidence from Establishment Data." *European Economic Review* 134 (May 1, 2021): 103713. https://doi.org/10.1016/j.euroecorev.2021.103713.

Bilal, Adrien, and Hugo Lhuillier. "Outsourcing, Inequality and Aggregate Output." Working Paper. Working Paper Series. National Bureau of Economic Research, October 2021. https://doi.org/10.3386/w29348.

Citino, Luca, Kilian Russ, and Vincenzo Scrutinio. "Manipulation, Selection and the Design of Targeted Social Insurance." *SSRN Electronic Journal*, 2022. https://doi.org/10.2139/ssrn.4192494.

Di Addario, Sabrina, Patrick Kline, Raffaele Saggio, and Mikkel Solvsten. "It Ain't Where You're from, It's Where You're at: Hiring Origins, Firm Heterogeneity, and Wages." *Journal of Econometrics* 233, no. 2 (April 1, 2023): 340–74. https://doi.org/10.1016/j.jeconom.2021.12.017.

Dorn, David, Johannes F. Schmieder, James Spletzer, and Lee Tucker. "Domestic Outsourcingin the United States." *Working Paper*, 2023.

Dostie, Benoit, Jiang Li, David Card, and Daniel Parent. "Employer Policies and the Immigrant–Native Earnings Gap." *Journal of Econometrics* 233, no. 2 (April 1, 2023): 544–67. https://doi.org/10.1016/j.jeconom.2021.07.012.

Goldin, Claudia, Sari Pekkala Kerr, Claudia Olivetti, and Erling Barth. "The Expanding Gender Earnings Gap: Evidence from the LEHD-2000 Census." *American Economic Review* 107, no. 5 (May 2017): 110–14. https://doi.org/10.1257/aer.p20171065.

Haltiwanger, John C., Henry R. Hyatt, Lisa B. Kahn, and Erika McEntarfer. "Cyclical Job Ladders by Firm Size and Firm Wage." *American Economic Journal: Macroeconomics* 10, no. 2 (2018): 52–85.

Imbert, Clement, Marlon Seror, Yifan Zhang, and Yanos Zylberberg. "Migrants and Firms: Evidence from China." *American Economic Review* 112, no. 6 (2022): 1885–1914.

King, Joseph, Matthew Mendoza, Andrew Penner, Anthony Rainey, and Donald Tomaskovic-Devey. "Estimating Firm-, Occupation-, and Job-Level Gender Pay Gaps with U.S. Linked Employer-Employee Population Data, 2005 to 2015." *Socius: Sociological Research for a Dynamic World* 9 (January 2023): 237802312311576. https://doi.org/10.1177/23780231231157678.

Kline, Patrick, Neviana Petkova, Heidi Williams, and Owen Zidar. "Who Profits from Patents? Rent-Sharing at Innovative Firms*." *The Quarterly Journal of Economics* 134, no. 3 (August 1, 2019): 1343–1404. https://doi.org/10.1093/qje/qjz011.

Li, Jiang, Benoit Dostie, and Gaëlle Simard-Duplain. "Firm Pay Policies and the Gender Earnings Gap: The Mediating Role of Marital and Family Status." *ILR Review* 76, no. 1 (2023): 160–88.

Perez, Jorge Perez, and Jose G Nuno-Ledesma. "Workers, Workplaces, Sorting, and Wage Dispersion in Mexico," n.d.

Sorkin, Isaac. "Ranking Firms Using Revealed Preference." *The Quarterly Journal of Economics* 133, no. 3 (2018): 1331–93.

Equilibrium Models

Bilal, Adrien. "Solving Heterogeneous Agent Models with the Master Equation." Working Paper. Working Paper Series. National Bureau of Economic Research, April 2023. https://doi.org/10.3386/w31103.

Burdett, Kenneth, and Dale T. Mortensen. "Wage Differentials, Employer Size, and Unemployment." *International Economic Review* 39, no. 2 (1998): 257–73. https://doi.org/10.2307/2527292.

Cahuc, Pierre, Fabien Postel-Vinay, and Jean-Marc Robin. "Wage Bargaining with On-the-Job Search: Theory and Evidence." *Econometrica* 74, no. 2 (2006): 323–64. https://doi.org/10.1111/j.1468-0262.2006.00665.x.

Engbom, Niklas, and Christian Moser. "Earnings Inequality and the Minimum Wage: Evidence from Brazil." *American Economic Review* 112, no. 12 (December 2022): 3803–47. https://doi.org/10.1257/aer.20181506.

Jarosch, Gregor. "Searching for Job Security and the Consequences of Job Loss." *Econometrica* 91, no. 3 (2023): 903–42. https://doi.org/10.3982/ECTA14008.

Krusell, Per, and Jr. Smith Anthony A. "Income and Wealth Heterogeneity in the Macroeconomy." *Journal of Political Economy* 106, no. 5 (October 1998): 867–96. https://doi.org/10.1086/250034.

Morchio, Iacopo, and Christian Moser. "The Gender Pay Gap: Micro Sources and Macro Consequences." SSRN Scholarly Paper. Rochester, NY, August 18, 2023. https://doi.org/10.2139/ssrn.3176868.