

The University of British Columbia
Department of Economics

Economics 561: Topics in Industrial Relations (Labour Economics)

Professor Nicole M. Fortin

Winter 2019
Mon, Wed 8:30-10:00 Iona 633

Syllabus

Course web site on Canvas: <https://canvas.ubc.ca/courses/19191>

I. Course Description and Objectives

The first objective of the course is to acquaint students with some core topics in labour economics and with the important empirical methods for microeconomic analysis. A second goal is to inform students' understanding of some salient labour market institutions and public policies affecting labour markets, policies such as taxes and income support programs, employment standards, minimum wages, immigration policies, education policies, anti-discrimination policies, etc.. The course is divided into five broad themes: 1) labour supply; 2) labour demand, 3) wage determination, 4) wage differentials across groups and labour market discrimination, and 5) wage inequality. An outline of detailed topics is given below.

II. Evaluation

As a first graduate course in labour economics, this class is primarily directed at M.A. students. The class will serve the needs of Ph.D students through the additional work they will be required to perform.

	M.A.	Ph.D.
Empirical Assignments (3)	30% (10% each)	15% (5% each)
Essay on Economic Debate	Proposal 5% Policy Review 25%	Proposal 5% Research Review 35%
Presentation of Journal Article	Discussion 5%	Presentation 10%
Final exam	35%	35%

III. Office hours

The following consultation times at the instructors' offices in the Iona Building are provided exclusively for the students in this course:

Nicole Fortin, East Wing Office 202: Wednesdays, 1:30-3:30PM

For other arrangements, please see the instructor immediately after class.

IV. Textbook and Readings

There is no single textbook that covers the material for the entire course, rather there are various textbooks, listed in the reading list below, that focus on particular sections of the course. Students who

have no undergraduate preparation in labour economics or who desire a simple review of topics should consult:

- Dwayne Benjamin, Morley Gunderson, Thomas Lemieux and Craig Riddell, *Labour Market Economics*, McGraw-Hill-Ryerson, 8th edition, 2017.

A more advanced text that may also be consulted is

- Cahuc, Pierre, Stéphane Carcillo, André Zylberberg, and William McCuaig. *Labor Economics*. MIT press, 2th edition, 2014.

Also, the handbooks of labour economics contain comprehensive surveys of the topics covered; many are suggested readings below: <http://www.sciencedirect.com/science/handbooks/15734463/1>

Good microeconometrics references at the graduate level are:

- Angrist, Joshua D., and Jörn-Steffen Pischke. *Mostly harmless econometrics: An empiricist's companion*. Princeton university press, 2008.
- Cameron, A. Colin, and Pravin K. Trivedi. *Microeconometrics: methods and applications*. Cambridge university press, 2005.

An extensive reading list is given below. Each Ph.D. student is asked to choose one (1) paper from the useful references below designated by a ☺ for class presentation and discussion. Alternatively, students can submit an article of their own choosing to me for review and approve. Ph.D. students will be required to write a short point-form summary of the paper and submit the summary to be posted prior to the presentation in order to assist the discussion by M.A. students.

Required readings will be indicated in class. The other readings are offered as a guide to the literature for students wishing to pursue the topics in greater details. Most of the readings are available in electronic form with UBC links using [Google scholar](#) for example, others are posted on the course's web site ([cws](#)). If you are connecting from off-campus you may need to use the UBC Library EZproxy server: <https://login.ezproxy.library.ubc.ca/login> Additional formation will be posted on the course website.

IV. Expected Lecture Schedule

This tentative schedule will be modified to follow the progression of the class.

	Subject	Due Dates
1. Labour Supply		
Week 1 - Jan 2	Introduction/ Neo-Classical Labour Supply	
Week 2 - Jan 7	Issues in the Estimation of Labour Supply	
Week 2 - Jan 9	Effect of Taxes and Income Support on Labour Supply	Choice of journal article for presentation (Ph.D. students)
Week 3 - Jan 14	Self-selection: Roy Model	
Week 3 - Jan 16	Self-selection: Immigration	
2. Labour Demand		
Week 4 – Jan 21	Comparative Statics of the Demand for Labour	
Week 4 – Jan 23	Effect of Minimum Wages on Employment	Essay Proposal
Week 5 – Jan 28	Effect of Immigration on Employment and Wages	
Week 5 – Jan 30	Labor Demand at the Firm Level	
3. Wage Determination		
Week 6 – Feb 4	Human Capital: Investment in Education	

Week 6 – Feb 6	Human Capital vs. Signaling	Empirical Assignment 1
Week 7 – Feb 11	Returns to Education	
Week 7 – Feb 13	Compensating Wage Differentials	
Mid-term Break – Feb 18 to Feb 22		
4. Wage Differentials Across Groups and Labour Market Discrimination		
Week 8 – Feb 25	Labour Market Discrimination: Theories	
Week 8 – Feb 27	Labour Market Discrimination: Measurement	
Week 9 – March 4	Gender and the Labour Market	
Week 9 – March 6	Race and Ethnic Differentials	
Week 10 – March 11	Immigrant Outcomes	
5. Labour Market Institutions and Wage Inequality		Empirical Assignment 2
Week 10 – March 13	Decomposition Methodologies I	
Week 11 – March 18	Decomposition Methodologies II	
Week 11 – March 20	Impact of Minimum Wages and Unions on Wage Inequality	
Week 12 – March 25	Changes over Time, Cross-Country Comparisons, and Top-End Inequality	Essay Due
Week 12 – March 27	Supply and Demand: Education and Skills	
Week 13 – April 1	SBTC and friends: Tasks, Polarization	
Week 13 – April 3	Outsourcing, Offshoring, and Imports	Empirical Assignment 3

V. Reading List

I. Labour Supply

1. Neo-classical Labour Supply

Main papers:

cws Killingsworth, M. and J. Heckman. (1986) "Female Labor Supply: A Survey," Chap. 2 in Ashenfelter, O.C. and R. Layard, editors, *Handbook of Labor Economics*, Vo.1, North-Holland (1986), 103-204.

Abbott, M. and O. Ashenfelter. "Labor Supply, Commodity Demand, and the Allocation of Time," *Review of Economic Studies*, Vol. 43 (October 1976) 389-411.

cws Blundell, R. and T. MaCurdy, "Labor Supply: A Review of Alternative Approaches," Chap. 27 in Ashenfelter, O.C. and D. Card, editors, *Handbook of Labor Economics*, Vol. 3A, North-Holland (1999), 1559-1695.

Mroz, T. "The Sensitivity of an Empirical Model of Married Women's Hours of Work to Economic and Statistical Assumptions," *Econometrica*, Vol. 55 (Jul., 1987)765-799.

Useful references:

☺ Aguiar, Mark, and Erik Hurst. "Measuring Trends in Leisure: The Allocation of Time Over Five Decades," *Quarterly Journal of Economics*, Vol. 122, no. 3 (2007): 969-1006.

☺ Bick, Alexander, Nicola Fuchs-Schündeln, and David Lagakos. "How do hours worked vary with income? cross-country evidence and implications." *American Economic Review*, Vol. 108, no. 1 (2018): 170-99.

Blundell, Richard, Antoine Bozio, and Guy Laroque. "Labor Supply and the Extensive Margin." *American Economic Review*, Vol. 101 (May 2011) 482–86.

- ☺ Aguiar, M., Bils, M., Charles, K. K., & Hurst, E. (2017). Leisure luxuries and the labor supply of young men (No. w23552). National Bureau of Economic Research.

2. Effects of Taxes and Income Support on Labour Supply

Main papers:

Ashenfelter, O. and M. Plant, "Non-Parametric Estimates of the Labor Supply Effects of Negative Income Tax Programs," *Journal of Labor Economics*, Vol. 8 (January 1990) S396-415.

Eissa, Nada and Jeffrey B. Liebman, "Labor Supply Response to the Earned Income Tax Credit," *Quarterly Journal of Economics*, Vol. 111 (May 1996), 605-637.

Saez, Emmanuel. "Optimal Income Transfer Programs: Intensive Versus Extensive Labor Supply Responses." *Quarterly Journal of Economics*, Vol. 117 (Aug. 2002) 1039–73.

Blundell, R., and A. Shephard, "Employment, Hours of Work and the Optimal Taxation of Low-Income Families," *Review of Economic Studies*, Vol. 79(2012): 481-510.

Useful references:

Card, David, and Dean Hyslop. "Estimating the Effects of a Time-Limited Earnings Subsidy For Welfare-Leavers." *Econometrica*, Vol. 73 (Nov. 2005) 1723-1770.

- ☺ Lemieux, Thomas, and Kevin Milligan, "Incentive Effects of Social Assistance: A Regression Discontinuity Approach", *Journal of Econometrics*, Vol. 142 (February 2008): 807-28.
- ☺ Chetty, Raj and Emmanuel Saez, "Teaching the Tax Code: Earnings Responses to an Experiment with EITC Recipients", *American Economic Journal: Applied Economics*, Vol. 5 (2013):1-31.
- ☺ Chetty, R., Guren, A., Manoli, D., & Weber, A. (2012). Does Indivisible Labor Explain the Difference between Micro and Macro Elasticities? A Meta-Analysis of Extensive Margin Elasticities. NBER Macroeconomics Annual, Vol. 27 (2012), 1-56.
- ☺ Blundell, R., Costa Dias, M., Meghir, C. and Shaw, J. (2016). "Female labor supply, human capital, and welfare reform," *Econometrica*, 84(5), pp.1705-1753.

3. Self-Selection: Roy Model, Career Choice, Immigration

Main papers:

Roy, A. "Some Thoughts on the Distribution of Earnings," *Oxford Economic Papers*, Vol 3. (June 1951) 135-146.

Neal, D. and S. Rosen. "Theories of Earnings Distribution," in A.B. Atkinson and F. Bourguignon, editors, *Handbook of Income Distribution*, Vol.1 North-Holland (2000) Vol 1, 385-391. Available as NBER working Paper No. 6378, January 1998.

Borjas, G.J. "Self-Selection and the Earnings of Immigrants," *American Economic Review*, Vol. 77 (Sep. 1987) 531-553.

Useful references:

- ☉ Mulligan, Casey B. and Yona Rubinstein, "Selection, Investment, and Women's Relative Wages over Time", *Quarterly Journal of Economics*, Vol. 123 (August 2008) 1061-1110.
- ☉ 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*, Vol. 113(April 2005) 239-281.

II. Labour Demand

4. Comparative Statics of the Demand for Labour

Main papers:

Hamermesh, D.S. *Labor Demand*, Princeton University Press, 1993, chap. 2, 3.

nber Hamermesh, D.S. "The Demand for Labor in the Long Run," Chap. 8. in Ashenfelter, O.C. and R. Layard, editors, *Handbook of Labor Economics*, Vol. 1, North-Holland, (1986) 429-471. Available as NBER Working Paper No. 1287, April 1987.

Clark, K. and R. Freeman. "How Elastic is the Demand for Labor?" *Review of Economics and Statistics*, Vol. 62 (Nov. 1980) 509-20.

Useful references:

- ☉ Hamermesh, D.S. and S.J. Trejo, "The Demand for Hours of Labor: Direct Evidence from California," *Review of Economics & Statistics*, Vol.82 (Feb. 2000) 38-47.
- ☉ Hijzen, Alexander, Holger Görg, and Robert C. Hine. "International Outsourcing and the Skill Structure of Labour Demand in the United Kingdom." *Economic Journal*, Vol. 115, no. 506 (2005): 860-878.

5. Labour Demand and Market Equilibrium: Effect of Minimum Wages

Main papers:

Card, D., "Using Regional Variation to Estimate the Effects of the Federal Minimum Wage," *Industrial and Labor Relations Review*, Vol. 46 (October 1992) 22-37.

Card, David and A. B. Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," *American Economic Review*, Vol. 84 (September 1994) 772-793. (See also follow-up in *American Economic Review*, Dec. 2000)

nber Card, David and Alan B. Krueger, "A Reanalysis of the New Jersey Minimum Wage Increase on the Fast-Food Industry with Representative Payroll Data", NBER Working Paper no. 6386, January 1998.

Useful references:

- ☉ Dube, Arindrajit, T. William Lester, and Michael Reich, "Minimum Wage Effects across State Borders: Estimates using Contiguous Counties," *Review of Economics and Statistics*, Vol. 92(2010): 945-64.
- ☉ Neumark, David, JM Ian Salas, and William Wascher. "Revisiting the Minimum Wage—Employment Debate: Throwing Out the Baby with the Bathwater?" *Industrial & Labor Relations Review* 67, no. 3 suppl (2014): 608-648.

- ☺ Dube, Arindrajit, Sylvia Allegretto, Michael Reich and Ben Zipperer, "Credible Research Designs for Minimum Wage Studies: A Response to Neumark, Salas and Wascher" *ILR Review* 70, no. 3 (2017): 559-592.
- ☺ Azar, José, Ioana Marinescu, and Marshall I. Steinbaum. Labor Market Concentration. No.w24147. National Bureau of Economic Research, 2017.

6. Labour Demand and Market Equilibrium: Effect of Immigration

Main papers:

Card, D., "The Impact of the Mariel Boatlift on the Miami Labor Market", *Industrial and Labor Relations Review*, Vol. 43 (January 1990) 245-257.

Card, D. "Immigrant Inflows, Native Outflows, and the Local Labor Market Impacts of Higher Immigration," *Journal of Labor Economics*, Vol. 19 (January 2001), 22-64.

Borjas, G.J. "The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market," *Quarterly Journal of Economics*, Vol. 118 (November 2003) 1335-7.

Useful references:

- ☺ Friedberg, R. "The Impact of Mass Migration on the Israeli Labor Market," *Quarterly Journal of Economics*, (November 2001) 1373-1408.
- ☺ Ottaviano, Gianmarco IP, and Giovanni Peri. "Rethinking the effect of immigration on wages." *Journal of the European economic association* 10.1 (2012): 152-197.
- Dustmann, Christian, Uta Schönberg, and Jan Stuhler. "The impact of immigration: Why do studies reach such different results?" *Journal of Economic Perspectives* 30, no. 4 (2016): 31-56.
- ☺ Jaeger, David A., Joakim Ruist, and Jan Stuhler. *Shift-share instruments and the impact of immigration*. No. w24285. National Bureau of Economic Research, 2018.

7. Labour Demand at the Firm Level

Main papers:

Hamermesh, Daniel S. "Labor Demand and the Structure of Adjustment Costs." *American Economic Review* (1989): 674-689.

Abowd, John M., Francis Kramarz, and David N. Margolis. "High wage workers and high wage firms." *Econometrica* 67(2) (1999): 251-333.

Card, David, Ana Rute Cardoso, Jörg Heining, and Patrick Kline (2018). "Firms and labor market inequality: Evidence and some theory." *Journal of Labor Economics*, 36(S1), S13-S70.

Useful references:

- ☺ Card, David, Francesco Devicienti, and Agata Maida. "Rent-sharing, holdup, and wages: Evidence from matched panel data." *Review of Economic Studies* 81.1 (2013): 84-111.

Kline, Patrick, Neviana Petkova, Heidi Williams, and Owen Zidar. Who profits from patents? rent-sharing at innovative firms. No. w25245. National Bureau of Economic Research, 2018. (will be presented on April 16 by Neviana Petkova)

III. Wage Determination

8. Human Capital: Investment in Education

Main papers:

Becker, Gary. *Human Capital, 2nd edition* (University of Chicago Press-NBER), 1980.

Mincer, Jacob. *Schooling, Experience and Earnings*, Columbia University Press for NBER, 1974.

Willis, R. and S. Rosen, "Education and Self-Selection," *Journal of Political Economy*, Vol. 87 (October 1979) S7-S36 .

Willis, Robert J. "Wage Determinants: A Survey and Reinterpretation of Human Capital Earnings Functions " Chapter 10 in Ashenfelter, O.C. and R. Layard, *Handbook of Labor Economics*. Vol. 1. North-Holland, (1986) 525-602.

Useful references:

Card, David, and Thomas Lemieux, "Draft Avoidance and College Attendance: The Unintended Legacy of the Vietnam War" *American Economic Review*, Vol. 91 (May 2001) 97-102.

☺ Field, Erica. "Educational Debt Burden and Career Choice: Evidence from a Financial Aid Experiment at NYU Law School" *American Economic Journal: Applied Economics*, Vol.1 (2009): 1-21.

☺ Rothstein, Jesse, and Cecilia Elena Rouse. "Constrained after college: Student loans and early-career occupational choices." *Journal of Public Economics*, Vol. 95 (2011): 149-163.

☺ Bettinger, Eric P., Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu. "The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment." *Quarterly Journal of Economics* 127, no. 3 (2012): 1205-1242.

9. Human Capital vs. Signaling

Main papers:

Spence, A.M., "Job Market Signaling," *Quarterly Journal of Economics*, Vol. 87 (August 1973) 355-374.

Lang, Kevin and David Kropp, "Human Capital versus Sorting: The Effects of Compulsory Attendance Laws" *Quarterly Journal of Economics*, Vol. 101 (August 1986) 609-24.

Bedard, Kelly, "Human Capital versus Signaling Models: University Access and High School Dropouts", *Journal of Political Economy*, Vol. 109 (August 2001) 749-75.

Useful references:

Tyler, John H., Richard J. Murnane and John B. Willett. "Estimating the Labor Market Signaling Value of the GED" *Quarterly Journal of Economics*, Vol. 115 (May 2000) 431- 468.

Murnane, Richard J., John B. Willett, and John H. Tyler. "Who benefits from obtaining a GED? Evidence from high school and beyond." *Review of Economics and Statistics* 82 (February 2000): 23-37.

Arcidiacono, Peter, Patrick Bayer and Aurel Hizmo. "Beyond Signaling and Human Capital: Education and the Revelation of Ability" *American Economic Journal: Applied Economics* Vol. 2, No. 4 (October 2010), pp. 76-104

☺ Waldinger, Fabian. "Quality matters: The expulsion of professors and the consequences for PhD student outcomes in Nazi Germany." *Journal of Political Economy* 118.4 (2010): 787-831.

☺ Graetz, Georg, Human Capital, Signaling, and Employer Learning. What Insights Do We Gain from Regression Discontinuity Designs (December 2017). CESifo Working Paper Series No. 6757.

10. Returns to Education (including social returns)

Main papers:

cws Card, David, "The Causal Effect of Education on Earnings," Chap. 30 in Ashenfelter, O.C. and D. Card, editors, *Handbook of Labor Economics*, Vol. 3A North-Holland (1999) 1801-1863.

Card, David, "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems," *Econometrica*, Vol. 69 (Sept. 2001) 1127–1160.

Angrist J. and Alan Krueger, "Does Compulsory School Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, Vol. 106 (Nov. 1991) 979-1014.

cws Card, D. "Using Geographic Variation in College Proximity to Estimate the Return to Schooling," in L.N. Christofides et al. *Aspects of labour market behaviour: Essays in the honour of John Vanderkamp*, University of Toronto Press, 1995, pp. 202-222. (Available as Princeton University IRS Working Paper no. 317.)

Useful references:

Staiger, Douglas O., and James H. Stock. "Instrumental variables regression with weak instruments." *Econometrica*, Vol. 65 (1997): 557-586.

Imbens, Guido W., and Joshua D. Angrist. "Identification and Estimation of Local Average Treatment Effects." *Econometrica*, Vol. 62 (1994): 467-475.

☺ Stephens, Melvin, and Dou-Yan Yang "Compulsory Education and the Benefits of Schooling" *American Economic Review*, Vol. 104 (June 2014):1777-1792

Oreopoulos, Phil. "Estimating Average and Local Average Treatment Effects of Education when Compulsory School Laws Really Matter", *American Economic Review*, Vol. 96 (Mar., 2006) 152-175.

☺ Heckman, James J., John Eric Humphries, and Gregory Veramendi. "Returns to education: The causal effects of education on earnings, health, and smoking." *Journal of Political Economy* 126, no. S1 (2018): S197-S246.

Moretti, Enrico. "Estimating the social return to higher education: evidence from longitudinal and repeated cross-sectional data." *Journal of Econometrics*, Vol. 121 (2004): 175-212.

Acemoglu, Daron and Joshua Angrist. "How Large are Human Capital Externalities? Evidence from Compulsory Schooling Laws" *NBER Macroeconomics Annual 2000*, 2001, 9-59.

- ☺ Lleras-Muney, Adriana "The Relationship Between Education and Adult Mortality in the United States" *Review of Economic Studies*, Vol. 72 (Jan. 2005) 189-221.
- ☺ Case, Anne, and Angus Deaton. "Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century." *Proceedings of the National Academy of Sciences* 112.49 (2015): 15078-15083.
- McCrary, Justin, and Heather Royer. "The Effect of Female Education on Fertility and Infant Health: Evidence from School Entry Policies Using Exact Date of Birth." *American Economic Review*, Vol. 101 (2011): 158-95.
- ☺ Milligan, Kevin, Enrico Moretti and Philip Oreopoulos. "Does Education Improve Citizenship? Evidence from the U.S. and the U.K." *Journal of Public Economics*, Vol. 88 (August 2004) 1667-1695.
- ☺ Lochner, Lance and Enrico Moretti. "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests and Self-Reports" *American Economic Review*, Vol. 94 (March 2004) 155-89.

11. Compensating Wage Differentials

Main papers:

Rosen, Sherwin "The Theory of Equalizing Differences," Chap. 12. in Ashenfelter, O.C. and R. Layard, editors, *Handbook of Labor Economics*, Vol. 1, North-Holland, (1986), 641-692.

Rosen, Sherwin, "Hedonic prices and implicit markets: product differentiation in pure competition," *Journal of Political Economy*, Vol.82 (Jan.-Feb. 1974) 34-55.

Brown, Charles "Equalizing Differences in Labor Market," *Quarterly Journal of Economics*, Vol. 94 (Feb. 1980): 113-134.

Useful references:

- ☺ Ashenfelter, Orley, and Michael Greenstone "Using Mandated Speed Limits to Measure the Value of a Statistical Life" *Journal of Political Economy*, Vol.112 (Feb. 2004)
- Viscusi, W. K., and J. E. Aldy (2003): "The value of a statistical life: A critical review of market estimates throughout the world," *Journal of Risk and Uncertainty*, 27(1), 5–76.
- Rosen, Sherwin, "The Economics of Superstars", *American Economic Review*, Vol. 71 (Dec. 1981) 545-858.
- Roback, J. "Wages, Rent and the Quality of Life," *Journal of Political Economy*, Vol. 90 (Dec. 1982) 1257-78.
- ☺ Sorkin, Isaac (2018) "Ranking firms using revealed preference." *Quarterly Journal of Economics*, 133(3): 1331-1393.

IV. Wage Differentials across Groups and Labour Market Discrimination

12. Labour Market Discrimination: Theory and Evidence

Main papers:

Becker, G. *The Economics of Discrimination*, University of Chicago Press (1957).

cws Arrow, K. "The Theory of Discrimination," in O. Ashenfelter and A. Rees, ed., *Discrimination in Labor Markets*, Princeton University Press (1973) 3-33.

Cain, Glen. "The Economic Analysis of Labor Market Discrimination: a Survey," chap. in Ashenfelter, O.C. and R. Layard, editors, *Handbook of Labor Economics*, Vol. 1, North-Holland (1986).709-730.

Aigner, D. and G. Cain, "Statistical Theories of Discrimination," *Industrial and Labor Relations Review*, Vol. 30 (January 1977) 175-87.

Riach, P.A. and J. Rich, "Field Experiments of Discrimination in the Market Place," *Economic Journal*, Vol. 112 (November 2002) F480-F518.

Useful references:

Charles, Kerwin Kofi and Jonathan Guryan, "Prejudice and Wages: An Empirical Assessment of Becker's The Economics of Discrimination," *Journal of Political Economy* Vol. 116 (October 2008):

Altonji, J. and C. Pierret, "Employer Learning and Statistical Discrimination," *Quarterly Journal of Economics*, Vol. 116 (February 2001) 313-50.

Holzer, H. and K. Ihlantfeldt, "Customer Discrimination and Employment Outcomes for Minority Workers," *Quarterly Journal of Economics*, Vol. 113 (August 1998) 835-67.

☉ Goldin, C. and C. Rouse, "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians," *American Economic Review* Vol. 90 (September 2000) 715-41

☉ Doleac, Jennifer L., and Luke CD Stein. "The visible hand: Race and online market outcomes." *Economic Journal* 123, no. 572 (2013): F469-F492.

☉ Zussman, Asaf. "Ethnic discrimination: Lessons from the Israeli online market for used cars." *Economic Journal* 123, no. 572 (2013): F433-F468.

☉ Glover, Dylan, Amanda Pallais, and William Pariente (2017) "Discrimination as a self-fulfilling prophecy: Evidence from French grocery stores." *Quarterly Journal of Economics*, 132(3): 1219-1260.

13. Gender and Race in the Labour Market

Main papers:

Altonji, J. and R. Blank "Race and Gender in the Labor Market" Chapter 48 in Ashenfelter and Card *Handbook of Labor Economics*, Vol. 3C, North Holland (1999) 3143-3259.

Neal, D. and W. Johnson, "The Role of Premarket Factors in Black-White Wage Differences," *Journal of Political Economy* Vol. 104 (October 1996), 869-95.

Bertrand, M. and S. Mullainathan, "Are Emily and Greg More Employable than Latisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review*, Vol. 94 (September 2004), 991-1013.

Useful references:

- ⊙ Heywood, John S., and Daniel Parent. "Performance Pay and the White-Black Wage Gap." *Journal of Labor Economics*, Vol. 30, no. 2 (2012): 249-290.
- nber O'Neill, J. and D. O'Neill, "What Do Wage Differentials Tell Us about Labor Market Discrimination?" in *The Economics of Immigration and Social Policy*, edited by Solomon Polachek, Carmel Chiswick, and Hillel Rapoport. *Research in Labor Economics* 24(2006):293-357. Available as NBER Working Paper 11240 (April 2005).
- ⊙ Bayer, Patrick, and Kerwin Kofi Charles. *Divergent Paths: Structural Change, Economic Rank, and the Evolution of Black-White Earnings Differences, 1940-2014*. No. w22797. National Bureau of Economic Research, 2016.
- Fortin, N.M. "Gender Role Attitudes and Women's Labour Market Outcomes Across OECD countries." *Oxford Review of Economic Policy*, Vol. 21 (November 2005) 416-438.
- Goldin, G., "The Quiet Revolution that Transformed Women's Employment, Education and Family," *American Economic Review*, Vol. 96 (May 2006) 1-21.
- Goldin, Claudia. "A Grand Gender Convergence: Its Last Chapter." *American Economic Review*, Vol. 104, 4 (2014): 1091-1119.
- ⊙ Bertrand, Marianne, Claudia Goldin, and Lawrence F. Katz. "Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors." *American Economic Journal: Applied Economics* (2010): 228-255.
- ⊙ Kleven, Henrik, Camille Landais, and Jakob Egholt Søgaaard. "Children and gender inequality: Evidence from Denmark." No. w24219. National Bureau of Economic Research, 2018.
- ⊙ Lundborg, Petter, Erik Plug, and Astrid Würtz Rasmussen. 2017. "Can Women Have Children and a Career? IV Evidence from IVF Treatments." *American Economic Review* 107(6): 1611-37.

14. Immigrant and Ethnic Wage Differentials

Main papers:

- Borjas, G.J. "The Economics of Immigration." *Journal of Economic Literature*, Vol.32 (December 1994), 1667-1717.
- Aydemir, A. and M. Skuterud "Explaining the Deteriorating Entry Earnings of Canada's Immigrant Cohorts: 1966-2000" *Canadian Journal of Economics*, Vol. 38 (May 2005) 641-671.

Useful references:

- ⊙ Lubotsky, Darren H., "Chutes or Ladders? A Longitudinal Analysis of Immigrant Earnings" *Journal of Political Economy*, Vol. 115 (October 2007) 820-867.

- ☉ Oreopoulos, Philip “Why Do Skilled Immigrants Struggle in the Labor Market? A Field Experiment with Six Thousand Resumes” *American Economic Journal: Economic Policy* (2011): 148-171.
- ☉ Bleakley, H. and A. Chin, “Language Skills and Earnings: Evidence from Childhood Immigrants,” *Review of Economics and Statistics*, Vol. 86 (May 2004) 481-496.
- ☉ Abramitzky, Ran, Leah Platt Boustan, and Katherine Eriksson. "A Nation of Immigrants: Assimilation and Economic Outcomes in the Age of Mass Migration." *Journal of Political Economy* 122, no. 3 (2014): 467-506.

V. Labour Market Institutions and Wage Inequality

15. Decomposition Methodologies

Main papers:

DiNardo, J., N. Fortin, and T. Lemieux, “Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach,” *Econometrica*, Vol. 64 (Sept. 1996) 1001-44.

Fortin, N.M., T. Lemieux and S. Firpo, “Decomposition Methods,” chap. 1. in O. Ashenfelter and D. Card (eds.) *Handbook of Labor Economics*, Vol. 4A, North-Holland (2011) 1-102. Available as NBER Working Paper No. 16045 (June 2010).

Firpo, S., N.M. Fortin and T. Lemieux, "Unconditional Quantile Regressions," *Econometrica*, Vol.77 (2009): 953-973.

Useful references:

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