

KAT.TAL.322 Advanced Course in Labour Economics

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The course covers a range of traditional and contemporary topics in Labour Economics with an emphasis on applied microeconomic theory and empirical analysis. In particular, the course starts by introducing the traditional models of labour supply, labour demand and human capital investments. With the basics covered, we will dive deeper into topics high on public and research agenda such as technological shift, discrimination, education inequality and intergenerational mobility. The aim is to give students an up to date knowledge of labour economics and, for those who wish to undertake graduate research in the area, to encourage the development of independent research interests.

Course structure

There are eight 90 min lectures twice a week in period IV (14-16 on Wednesdays and Thursdays). Check classroom on Sisu calendar.

Course requirements

Short presentation (20-25 min) of a research proposal on a topic of own choice related to the course. The proposal should include a clear research question, contribution to the existing literature, prospective dataset and detailed discussion of research design (empirical strategy, challenges and ways of overcoming them). Students may choose to do the proposal individually or in groups of 2-3 students.

General reading

There is no single textbook required for this course. The following books contain general information about the topics covered in the course. Knowledge of econometric methods at the level of *Mostly Harmless Econometrics* will be helpful.

Borjas, G. J. *Labor Economics*, 6th edition, international edition (New York, NY: McGraw Hill, 2013).

Cahuc, P. *Labor Economics* (Cambridge (Mass.): MIT Press, 2004).

Ashenfelter, O. and Card, D. *Handbook of Labor Economics*. Vol. 4, vol. 4 (Amsterdam Heidelberg: North-Holland, 2011).

Ashenfelter, O. and Card, D. *Handbook of Labor Economics*. Vol. 3, vol. 3 (Amsterdam Lausanne New York: North-Holland Elsevier, 1999).

Angrist, J. D. and Pischke, J.-S. *Mostly Harmless Econometrics: An Empiricist's Companion* (Princeton: Princeton University Press, 2009).

Reading list by topic

The course is primarily based on journal articles and working papers listed below. We will not cover all of them in classes.

1 Introduction to Labour Economics

Autor, D. H., Katz, L. F. and Kearney, M. S. "Trends in U.S. Wage Inequality: Revising the Revisionists," *The Review of Economics and Statistics* 90, no. 2 (2008): 300–323.

- Autor, D. H. “Why Are There Still So Many Jobs? The History and Future of Workplace Automation,” *Journal of Economic Perspectives* 29, no. 3 (September 2015): 3–30.
- Autor, D. H. “Work of the Past, Work of the Future,” *AEA Papers and Proceedings* 109 (May 2019): 1–32.
- Doepke, M. and Zilibotti, F. *Love, Money, and Parenting: How Economics Explains the Way We Raise Our Kids* (Princeton University Press, 2019).
- Dunlop, J. T. and Galenson, W. *Labor in the Twentieth Century*, Studies in Labor Economics (New York: Academic Press, 1978).
- Goldin, C. “Labor Markets in the Twentieth Century,” NBER Historical Paper (Cambridge, MA, June 1994), https://www.nber.org/system/files/working_papers/h0058/h0058.pdf.
- Goldin, C. and Katz, L. F. *The Race Between Education and Technology* (Harvard University Press, 2008).
- Hoffmann, F., Lee, D. S. and Lemieux, T. “Growing Income Inequality in the United States and Other Advanced Economies,” *Journal of Economic Perspectives* 34, no. 4 (November 2020): 52–78.
- List, J. A. *The Voltage Effect: How to Make Good Ideas Great and Great Ideas Scale*, 1st ed. (New York: Crown Currency, 2022).
- Piketty, T. and Saez, E. “Income Inequality in the United States, 1913–1998*,” *The Quarterly Journal of Economics* 118, no. 1 (February 1, 2003): 1–41.
- Roikonen, P. “Income Inequality in Finland, 1865–2019,” *Scandinavian Economic History Review* 70, no. 3 (September 2, 2022): 234–51.
- Lectures on Human Capital by Gary Becker - YouTube* (The University of Chicago, 2014).
- Vartiainen, J. “The Labour Market in Finland: Institutions and Outcomes” (Prime Minister’s Office, June 1998).

2 Labour supply

2A Basic

- Cesarini, D. et al. “The Effect of Wealth on Individual and Household Labor Supply: Evidence from Swedish Lotteries,” *American Economic Review* 107, no. 12 (December 2017): 3917–46.
- Deaton, A. and Muellbauer, J. *Economics and Consumer Behavior* (Cambridge: Cambridge University Press, 1980).
- Imbens, G. W., Rubin, D. B. and Sacerdote, B. I. “Estimating the Effect of Unearned Income on Labor Earnings, Savings, and Consumption: Evidence from a Survey of Lottery Players,” *The American Economic Review* 91, no. 4 (2001): 778–94.
- Killingsworth, M. R. *Labor Supply*, Cambridge Surveys of Economic Literature (Cambridge: Cambridge University Press, 1983).

2B Life-cycle

- Blundell, R., Duncan, A. and Meghir, C. “Estimating Labor Supply Responses Using Tax Reforms,” *Econometrica* 66, no. 4 (1998): 827–61.
- Card, D. “Intertemporal Labor Supply: An Assessment,” NBER Working Paper (Cambridge, MA, January 1991), <https://doi.org/10.3386/w3602>.
- Chetty, R. “Bounds on Elasticities with Optimization Frictions: A Synthesis of Micro and Macro Evidence on Labor Supply,” *Econometrica* 80, no. 3 (2012): 969–1018.
- Francesconi, M. “A Joint Dynamic Model of Fertility and Work of Married Women,” *Journal of Labor Economics* 20, no. 2 (2002): 336–80.

Lucas, R. E. and Rapping, L. A. “Real Wages, Employment, and Inflation,” *Journal of Political Economy* 77, no. 5 (1969): 721–54.

MaCurdy, T. E. “An Empirical Model of Labor Supply in a Life-Cycle Setting,” *Journal of Political Economy* 89, no. 6 (1981): 1059–85.

Keane, M. P. and Wolpin, K. I. “The Role of Labor and Marriage Markets, Preference Heterogeneity, and the Welfare System in the Life Cycle Decisions of Black, Hispanic, and White Women,” *International Economic Review* 51, no. 3 (2010): 851–92.

Keane, M. P. “Labor Supply and Taxes: A Survey,” *Journal of Economic Literature* 49, no. 4 (December 2011): 961–1075.

Keane, M. and Rogerson, R. “Micro and Macro Labor Supply Elasticities: A Reassessment of Conventional Wisdom,” *Journal of Economic Literature* 50, no. 2 (June 1, 2012): 464–76.

Kleven, H. et al. “Micro Vs Macro Labor Supply Elasticities: The Role of Dynamic Returns to Effort,” NBER Working Paper 31549 (Cambridge, MA, August 2023), <https://doi.org/10.3386/w31549>.

2C Household and family models

Angrist, J. D. and Evans, W. N. “Children and Their Parents’ Labor Supply: Evidence from Exogenous Variation in Family Size,” *The American Economic Review* 88, no. 3 (1998): 450–77.

Angrist, J. “How Do Sex Ratios Affect Marriage and Labor Markets? Evidence from America’s Second Generation*,” *The Quarterly Journal of Economics* 117, no. 3 (August 1, 2002): 997–1038.

Becker, G. S. *A Treatise on the Family* (Harvard University Press, 1993).

Bloom, N., Han, R. and Liang, J. “How Hybrid Working From Home Works Out,” NBER Working Paper, Working Paper Series, July 2022, <https://www.nber.org/papers/w30292>.

Chiappori, P.-A. “Collective Labor Supply and Welfare,” *Journal of Political Economy* 100, no. 3 (1992): 437–67.

Hansen, B., Sabia, J. J. and Schaller, J. “Schools, Job Flexibility, and Married Women’s Labor Supply,” NBER Working Paper, Working Paper Series, January 2022.

3 Labour demand

3A Models of labour demand

Hamermesh, D. S. *Labor Demand* (Princeton University Press, 1996).

Hamermesh, D. S. “Chapter 8 The Demand for Labor in the Long Run,” in *Handbook of Labor Economics*, vol. 1 (Elsevier, 1986), 429–71.

Katz, L. F. and Murphy, K. M. “Changes in Relative Wages, 1963-1987: Supply and Demand Factors,” *The Quarterly Journal of Economics* 107, no. 1 (1992): 35–78.

Lochner, B. and Schulz, B. “Firm Productivity, Wages, and Sorting,” *Journal of Labor Economics* 42, no. 1 (January 2024): 85–119.

Nickell, S. J. “Chapter 9 Dynamic Models of Labour Demand,” in *Handbook of Labor Economics*, vol. 1 (Elsevier, 1986), 473–522.

3B Minimum wages

Bossler, M. and Schank, T. “Wage Inequality in Germany After the Minimum Wage Introduction,” *Journal of Labor Economics* 41, no. 3 (July 2023): 813–57.

Brown, C. “Chapter 32 Minimum Wages, Employment, and the Distribution of Income,” in *Handbook of Labor Economics*, vol. 3 (Elsevier, 1999), 2101–63.

Card, D. and Krueger, A. B. “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania,” *The American Economic Review* 84, no. 4 (1994): 772–93.

Card, D. and Krueger, A. B. *Myth and Measurement* (Princeton University Press, 2015).

Cengiz, D. et al. “The Effect of Minimum Wages on Low-Wage Jobs*,” *The Quarterly Journal of Economics* 134, no. 3 (August 1, 2019): 1405–54.

Derenoncourt, E. et al. “Spillover Effects from Voluntary Employer Minimum Wages,” NBER Working Paper, Working Paper Series, October 2021 (revised June 2022), <https://www.nber.org/papers/w29425>.

Dickens, R., Machin, S. and Manning, A. “The Effects of Minimum Wages on Employment: Theory and Evidence from Britain,” *Journal of Labor Economics* 17, no. 1 (1999): 1–22.

Draca, M., Machin, S. and Van Reenen, J. “Minimum Wages and Firm Profitability,” *American Economic Journal: Applied Economics* 3, no. 1 (January 2011): 129–51.

Engbom, N. and Moser, C. “Earnings Inequality and the Minimum Wage: Evidence from Brazil,” *American Economic Review* 112, no. 12 (December 2022): 3803–47.

Jardim, E. et al. “Minimum-Wage Increases and Low-Wage Employment: Evidence from Seattle,” *American Economic Journal: Economic Policy* 14, no. 2 (May 2022): 263–314.

Propper, C. and Van Reenen, J. “Can Pay Regulation Kill? Panel Data Evidence on the Effect of Labor Markets on Hospital Performance,” *Journal of Political Economy* 118, no. 2 (April 2010): 222–73.

4 Human capital

4A Theories of human capital investments

Becker, G. S. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 2nd ed. (New York: National Bureau of Economic Research, 1975).

Ben-Porath, Y. “The Production of Human Capital and the Life Cycle of Earnings,” *Journal of Political Economy* 75, no. 4 (1967): 352–65.

Cunha, F. and Heckman, J. “The Technology of Skill Formation,” *American Economic Review* 97, no. 2 (May 2007): 31–47.

Fort, M., Ichino, A. and Zanella, G. “Cognitive and Noncognitive Costs of Day Care at Age 0–2 for Children in Advantaged Families,” *Journal of Political Economy* 128, no. 1 (January 2020): 158–205.

Houmark, M. A., Ronda, V. and Rosholm, M. “The Nurture of Nature and the Nature of Nurture: How Genes and Investments Interact in the Formation of Skills,” *American Economic Review*, forthcoming.

Spence, M. “Job Market Signaling,” *The Quarterly Journal of Economics* 87, no. 3 (1973): 355–74.

Thomas, J. “What Do Course Offerings Imply about University Preferences?” *Journal of Labor Economics* 42, no. 1 (January 2024): 53–83.

4B Rate of return to schooling

Angrist, J. D. and Krueger, A. B. “Does Compulsory School Attendance Affect Schooling and Earnings?*,” *The Quarterly Journal of Economics* 106, no. 4 (November 1, 1991): 979–1014.

Angrist, J. D. and Chen, S. H. “Schooling and the Vietnam-Era GI Bill: Evidence from the Draft Lottery,” *American Economic Journal: Applied Economics* 3, no. 2 (April 2011): 96–118.

Aryal, G., Bhuller, M. and Lange, F. “Signaling and Employer Learning with Instruments,” *American Economic Review* 112, no. 5 (May 2022): 1669–1702.

Card, D. “Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems,” *Econometrica* 69, no. 5 (2001): 1127–60.

Clark, D. and Martorell, P. “The Signaling Value of a High School Diploma,” *Journal of Political Economy* 122, no. 2 (April 2014): 282–318.

Griliches, Z. “Estimating the Returns to Schooling: Some Econometric Problems,” *Econometrica* 45, no. 1 (1977): 1–22.

Mincer, J. A. *Schooling, Experience, and Earnings*, Book (National Bureau of Economic Research, 1974).

Oreopoulos, P. “Estimating Average and Local Average Treatment Effects of Education When Compulsory Schooling Laws Really Matter,” *American Economic Review* 96, no. 1 (March 2006): 152–75.

4C Education quality and inequality

Abdulkadiroğlu, A., Angrist, J. and Pathak, P. “The Elite Illusion: Achievement Effects at Boston and New York Exam Schools,” *Econometrica* 82, no. 1 (2014): 137–96.

Angrist, J. D. and Lavy, V. “Using Maimonides’ Rule to Estimate the Effect of Class Size on Scholastic Achievement,” *The Quarterly Journal of Economics* 114, no. 2 (1999): 533–75.

Angrist, J. D. et al. “Maimonides’ Rule Redux,” *American Economic Review: Insights* 1, no. 3 (December 2019): 309–24.

Angrist, J., Autor, D. and Pallais, A. “Marginal Effects of Merit Aid for Low-Income Students*,” *The Quarterly Journal of Economics* 137, no. 2 (May 1, 2022): 1039–90.

Arold, B. W., Hufe, P. and Stoeckli, M. “Genetic Endowments, Educational Outcomes and the Mediating Influence of School Investments,” CESifo Working Paper (Munich, July 2022), <https://www.cesifo.org/en/publications/2022/working-paper/genetic-endowments-educational-outcomes-and-mediating-influence>.

Cadena, B. C. and Keys, B. J. “Human Capital and the Lifetime Costs of Impatience,” *American Economic Journal: Economic Policy* 7, no. 3 (August 2015): 126–53.

Card, D. and Krueger, A. B. “Does School Quality Matter? Returns to Education and the Characteristics of Public Schools in the United States,” *Journal of Political Economy* 100, no. 1 (February 1992): 1–40.

Carlana, M. “Implicit Stereotypes: Evidence from Teachers’ Gender Bias*,” *The Quarterly Journal of Economics* 134, no. 3 (August 1, 2019): 1163–1224.

Cohodes, S. R. and Goodman, J. S. “Merit Aid, College Quality, and College Completion: Massachusetts’ Adams Scholarship as an In-Kind Subsidy,” *American Economic Journal: Applied Economics* 6, no. 4 (October 2014): 251–85.

Dale, S. B. and Krueger, A. B. “Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables,” *The Quarterly Journal of Economics* 117, no. 4 (2002): 1491–1527.

Dynarski, S. et al. “Closing the Gap: The Effect of Reducing Complexity and Uncertainty in College Pricing on the Choices of Low-Income Students,” *American Economic Review* 111, no. 6 (June 2021): 1721–56.

Joensen, J. S. and Mattana, E. “Student Aid Design, Academic Achievement, and Labor Market Behavior: Grants or Loans?” June 23, 2021 (revise and resubmit at the *Journal of Political Economy*), <https://drive.google.com/file/d/159u9EeRDw6eGzNvtJugKEpRq5ujRrCnO/view>.

Kanninen, O., Kortelainen, M. and Tervonen, L. “Long-Run Effects of Selective Schools on Educational and Labor Market Outcomes,” VATT Working Papers (Helsinki, December 2023), <https://www.doria.fi/bitstream/handle/10024/188274/vatt-working-papers-161-long-run-effects-of-selective-schools-on-educational-and-labor-market-outcomes.pdf?sequence=1&isAllowed=y>.

Krueger, A. B. “Experimental Estimates of Education Production Functions,” *The Quarterly Journal of Economics* 114, no. 2 (1999): 497–532.

Lovenheim, M. and Smith, J. “Chapter 4 - Returns to Different Postsecondary Investments: Institution Type, Academic Programs, and Credentials,” in *Handbook of the Economics of Education*, ed. Eric A. Hanushek, Stephen Machin, and Ludger Woessmann, vol. 6 (Elsevier, 2023), 187–318.

Mountjoy, J. “Community Colleges and Upward Mobility,” *American Economic Review* 112, no. 8 (August 1, 2022): 2580–630.

Todd, P. E. and Wolpin, K. I. “On the Specification and Estimation of the Production Function for Cognitive Achievement,” *The Economic Journal* 113, no. 485 (2003): F3–33.

5 Technological shift and labour markets

Acemoglu, D. and Autor, D. “Chapter 12 - Skills, Tasks and Technologies: Implications for Employment and Earnings,” in *Handbook of Labor Economics*, ed. David Card and Orley Ashenfelter, vol. 4 (Elsevier, 2011), 1043–1171.

Acemoglu, D. and Restrepo, P. “The Race Between Man and Machine: Implications of Technology for Growth, Factor Shares, and Employment,” *American Economic Review* 108, no. 6 (June 2018): 1488–1542.

Acemoglu, D. and Restrepo, P. “Automation and New Tasks: How Technology Displaces and Reinstates Labor,” *Journal of Economic Perspectives* 33, no. 2 (May 2019): 3–30.

Atalay, E. et al. “The Evolution of Work in the United States,” *American Economic Journal: Applied Economics* 12, no. 2 (April 2020): 1–34.

Autor, D. H., Levy, F. and Murnane, R. J. “The Skill Content of Recent Technological Change: An Empirical Exploration*,” *The Quarterly Journal of Economics* 118, no. 4 (November 1, 2003): 1279–1333.

Berman, E., Bound, J. and Machin, S. “Implications of Skill-Biased Technological Change: International Evidence*,” *The Quarterly Journal of Economics* 113, no. 4 (November 1, 1998): 1245–79.

Card, D. and DiNardo, J. E. “Skill-Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles,” *Journal of Labor Economics* 20, no. 4 (2002): 733–83.

Machin, S. and Van Reenen, J. “Technology and Changes in Skill Structure: Evidence from Seven OECD Countries*,” *The Quarterly Journal of Economics* 113, no. 4 (November 1, 1998): 1215–44.

6 Labour market discrimination

Altonji, J. G. and Blank, R. M. “Chapter 48 Race and Gender in the Labor Market,” in *Handbook of Labor Economics*, vol. 3 (Elsevier, 1999), 3143–3259.

Bertrand, M. and Mullainathan, S. “Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination,” *The American Economic Review* 94, no. 4 (2004): 991–1013.

Blau, F. D. and Kahn, L. M. “Swimming Upstream: Trends in the Gender Wage Differential in the 1980s,” *Journal of Labor Economics* 15, no. 1 (1997): 1–42.

Doleac, J. L. and Hansen, B. “The Unintended Consequences of ‘Ban the Box’: Statistical Discrimination and Employment Outcomes When Criminal Histories Are Hidden,” *Journal of Labor Economics* 38, no. 2 (April 2020): 321–74.

Goldin, C. and Rouse, C. “Orchestrating Impartiality: The Impact of “Blind” Auditions on Female Musicians,” *The American Economic Review* 90, no. 4 (2000): 715–41.

Killingsworth, M. R. and Heckman, J. J. “Chapter 2 - Female Labor Supply: A Survey,” in *Handbook of Labor Economics*, vol. 1 (Elsevier, 1986), 103–204.

Kleven, H., Landais, C. and Sogaard, J. E. “Children and Gender Inequality: Evidence from Denmark,” *American Economic Journal: Applied Economics* 11, no. 4 (October 2019): 181–209.

Lang, K. and Kahn-Lang Spitzer, A. “Race Discrimination: An Economic Perspective,” *Journal of Economic Perspectives* 34, no. 2 (May 2020): 68–89.

Nardinelli, C. and Simon, C. “Customer Racial Discrimination in the Market for Memorabilia: The Case of Baseball,” *The Quarterly Journal of Economics* 105, no. 3 (1990): 575–95.

7 Intergenerational mobility

Chetty, R., Hendren, N. and Katz, L. F. “The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment,” *American Economic Review* 106, no. 4 (April 2016): 855–902.

Jääntti, M. et al. “American Exceptionalism in a New Light: A Comparison of Intergenerational Earnings Mobility in the Nordic Countries, the United Kingdom and the United States,” IZA Discussion Paper (Bonn, Germany, January 2006).

Rustichini, A. et al. “Educational Attainment and Intergenerational Mobility: A Polygenic Score Analysis,” *Journal of Political Economy* 131, no. 10 (October 1, 2023): 2724–79.

Solon, G. “Intergenerational Income Mobility in the United States,” *The American Economic Review* 82, no. 3 (1992): 393–408.

Zimmerman, D. J. “Regression Toward Mediocrity in Economic Stature,” *The American Economic Review* 82, no. 3 (1992): 409–29.