Demand and supply in labor markets

2024

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1 Overview

The main aim of this course is to develop a knowledge on the theory and econometric methods that are useful to empirically analyze demand and supply in labor markets

2 Organization, teaching and assessment

There will be lectures each day.
There will also be TA sessions.

There will be problem sets and a take-home exam.
You can work on the problem sets individually or in groups. I urge you to take the problem sets seriously, as they are essential to understand the material covered. The problem sets will include analytical problems and empirical problems that will require the use of statistical software (preferably R or STATA).
I will also give you a take-home exam. The exam will be marked. You can work on the problem sets individually or in groups.

3 Preliminary outline

Here is a preliminary course outline.
First and foremost, you need to carefully study the lecture notes. On top of this, I list a number of papers below. I do not expect you to study all these papers (but you might find the list of papers useful later for you own research).
* indicates that I expect you to read the paper. Please note that the inclusion of a paper on the syllabus should not be considered an "endorsement" of that paper's methods or conclusions - read critically!

Topic 1: Labor supply of an individual

- Measurement of wages and hours of work

Farber. 2015. Why you can't find a taxi in the rain and other labor supply lessons from cab drivers The Quarterly Journal of Economics 130 (4): 1975-2026.

Borjas. 1980. "The relationship between wages and weekly hours of work: The role of division bias." The Journal of Human Resources 15 (3): 409-423.

- Negative income tax experiment

* Ashenfelter and Plant. 1990. Nonparametric Estimates of the Labor-Supply Effects of Negative Income Tax Programs. Journal of Labor Economics, 8(1), S396S415.

Riddell and Riddell. 2023. Welfare versus Work under a Negative Income Tax: Evidence from the Gary, Seattle, Denver and Manitoba Income Maintenance Experiments. Journal of Labor Economics. (A nice and updated overview of the extensive literature on NIT)

- Job's First experiment

* Bitler, Gelbach, and Hoynes. 2006. "What Mean Impacts Miss: Distributional Effects of Welfare Reform Experiments." American Economic Review, 96(4): 988-1012.

Kline and Tartari. 2016. "Bounding the Labor Supply Responses to a Randomized Welfare Experiment: A Revealed Preference Approach." American Economic Review. 106(4): 972-1014.

- Income and wealth effects for lottery winners

* Golosov et al. 2023. "How Americans respond to idiosyncratic and exogenous changes in household wealth and unearned income." Quarterly Journal of Economics.

Imbens, Rubin, and Sacerdote. 2001. "Estimating the effect of unearned income on labor earnings, savings, and consumption: Evidence from a survey of lottery players." American Economic Review. 91(4):778-794.

Cesarini et al. 2017. "The Effect of Wealth on Individual and Household Labor Supply: Evidence from Swedish Lotteries." American Economic Review. 107 (12): 3917-46.

- Taxable Income Elasticity

* Saez, Slemrod and Giertz. 2012. "The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review." Journal of Economic Literature, 50 (1): 3-50.

Jakobsen and Søgaard. 2022. "Identifying behavioral responses to tax reforms: New insights and a new approach." Journal of Public Economics. 212(1): 104691.

Neisser. 2021. "The Elasticity of Taxable Income: A Meta-Regression Analysis." The Economic Journal. 131(640): 3365–3391.

Feldstein. 1995. "The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act." Journal of Political Economy, 103(3): 551–72.

Feldstein. 1999. "Tax Avoidance and the Deadweight Loss of the Income Tax." Review of Economics and Statistics, 81(4): 674–80.

Chetty. 2009. "Is the Taxable Income Elasticity Sufficient to Calculate Deadweight Loss? The Implications of Evasion and Avoidance." American Economic Journal: Economic Policy, 1 (2): 31-52.

Gruber and Saez. 2002. "The elasticity of taxable income: evidence and implications" Journal of Public Economics. 84(1): 1-32.

- Labor supply model we focus on

* Lecture notes (available at course page.)

* Eissa, Kleven, and Kreiner. 2008. "Evaluation of four tax reforms in the United States: Labor supply and welfare effects for single mothers." Journal of Public Economics. 92(3–4): 795-816.

- Kinked budget and bunching

* Saez. 2010. "Do Taxpayers Bunch at Kink Points?" American Economic Journal: Economic Policy, 2 (3): 180-212.

Blomquist et al. 2021. "On Bunching and Identification of the Taxable Income Elasticity." Journal of Political Economy. 129(8): 2320-2343.

- Using elasticities to derive optimal income tax and transfer programs

* Saez. 2001. "Using Elasticities to Derive Optimal Income Tax Rates." The Review of Economic Studies. 68(1): 205-229.

Saez. 2002. "Optimal Income Transfer Programs: Intensive versus Extensive Labor Supply Responses." The Quarterly Journal of Economics. 117(3): 1039–1073.

Jacquet, Lehmann, and der Linden. 2013. "Optimal redistributive taxation with both extensive and intensive responses." Journal of Economic Theory. 148(5): 1770-1805.

- Labor Supply and Corrections for Non-Participation

* Heckman. 1974. "Shadow Prices, Market Wages, and Labor Supply." Econometrica. 42(4): 679-694.

Mroz. 1987. "The Sensitivity of an Empirical Model of Married Women's Hours of Work to Economic and Statistical Assumptions." Econometrica. 55(4): 765-799.

- Discrete choice labor supply

* Aaberge, Colombino, and Wennemo. 2009. "Evaluating Alternative Representations of the Choice Sets in Models of Labor Supply." Journal of Economic Surveys. 23: 586-612.

- Review articles of models and empirics of labor supply

Pencavel. 1986. “Labor supply of men: A survey.” Handbook of Labor Economics. 1: 3-102.

Blundell and MaCurdy. 1999. “Labor Supply: A Review of Alternative Approaches.” Handbook of Labor Economics. 3a: 1559-1695.

Blundell, MaCurdy, and Meghir. 2007. “Labor Supply Models: Unobserved Heterogeneity, Nonparticipation and Dynamics.” Handbook of Labor Economics. 6a: 4667-4775.

Keane. 2011. “Labor Supply and Taxes: A Survey.” Journal of Economic Literature. 49 (4): 961-1075.

Topic 2: Labor demand of an individual firm

- Static demand of the individual firm

* Lecture notes (available on course page).

Hamermesh, Daniel S. 1996. “Chapter Two: The Static Theory of Labor Demand.” In book, *Labor Demand.* Princeton University Press.

Cahuc, Carcillo, and Zylberberg. 2014. *Labor Economics.* MIT Press.

McFadden. "Part I: Duality of Production, Cost, and Profit Functions." (see link)

- First order condition approach

* Lecture notes

McElroy. 1987. "Additive general error models for production, cost, and derived demand or share systems." Journal of Political Economy. 95(4): 737-757.

Hall. 1988. "The relation between price and marginal cost in U.S. industry." Journal of Political Economy. 96(5): 921-947.

Hseih and Klenow. 2009. "Misallocation and manufacturing TFP in China and India." The Quarterly Journal of Economics. 124(4): 1403-1448.

- Fixed effect approach

* Lecture notes

Blundell and Bond. 2000. "GMM estimation with persistent panel data: an application to production functions." Econometric Reviews. 19(3): 321-340.

Arellano and Honore. 2001. "Panel data models: Some recent developments." Handbook of Econometrics. 5: 3229-3296.

- Proxy variable approaches

* Lecture notes

* Olley and Pakes. 1996. "The dynamics of productivity in the telecommunications equipment industry." Econometrica. 64(6): 1263-1297.

Levinsohn and Petrin. 2003. "Estimating production functions using inputs to control for unobservables." The Review of Economic Studies. 70(2): 317-341.

Bond and Soderbom. 2005. "Adjustment costs and the identification of Cobb Douglas production functions." IFS Working Papers No. 05/04.

* Ackerberg, Caves, and Frazer. 2006. "Structural identification of production functions." MPRA working paper. (Note: you should carefully read the 2006 working paper version, and also the 2015 ECMA version.) (working paper link) (ECMA link)

Gandhi, Navarro, and Rivers. 2020. "On the identification of gross output production functions." Journal of Political Economy. 128(8): 2973-3016.

Hu, Huang, and Sasaki. 2020. "Estimating production functions with robustness against errors in the proxy variables." Journal of Econometrics. 215The Pareto Distribution and the Cobb-Douglas Production Function in Activity Analysis.(2): 375-398.

- Output revenue vs. quantity

Klette and Griliches. 1996. "The inconsistency of common scale estimators when output prices are unobserved and endogenous." Journal of Applied Econometrics. 11(4): 343-361.

Foster, Haltiwanger, and Syverson. 2008. "Reallocation, firm turnover, and efficiency: Selection on productivity or profitability?" American Economic Review. 98(1): 394-425.

Kroft, Luo, Mogstad, and Setzler. 2020. "Imperfect competition and rents in labor and product markets: The case of the construction industry." NBER Working Paper No. 27325.

Bond, Hashemi, Kaplan, and Zoch. 2021. "Some unpleasant markup arithmetic: Production function elasticities and their estimation from production data." Journal of Monetary Economics. 121: 1-14.

Topic 3: Analysis of demand and supply in labor markets with applications

- Aggregation

* Lecture notes

Blundell, and Stoker. 2015. Heterogeneity and Aggregation. Journal of Economic Literature 43.2, 347–391.

Gorman. 1953. Community Preference Fields. Econometrica 21.1, 63–80.

Gorman. 1961. On A Class of Preference Fields. Metroeconomica 13.2, 53– 56.

Houthakker. 1955. On A Class of Preference Fields. The Review of Economic Studies 23.1, 27–31.

Stern. 1986. On the Specification of Labour Supply Functions. Unemployment Search and Labour Supply. Ed. by Richard Blundell and Ian Walker. Cambridge: Cambridge University Press.

- Identification

* Lecture notes

Leamer. 1981. Is it a Demand Curve, Or Is It A Supply Curve? Partial Identification through Inequality Constraints. The Review of Economics and Statistics 63.3, 319–327.

*Zoutman, Gavrilova, and Hopland. 2018. Estimating Both Supply and Demand Elasticities Using Variation In A Single Tax Rate. Econometrica 86.2, 763–771.

- Immigration

* Lecture notes

Aubry, Burzyński, Docquier. 2016. The welfare impact of global migration in OECD countries. Journal of International Economics 101, 1–21.

*Borjas. 2003. The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market. The Quarterly Journal of Economics 118.4, 1335–1374.

*Card. 1990. The Impact of the Mariel Boatlift on the Miami Labor Market. Industrial and Labor Relations Review 43.2, 245–257.

*Dustmann, Schönberg, and Stuhle. 2016. The Impact of Immigration: Why Do Studies Reach Such Different Results? Journal of Economic Perspectives 30.4, 31–56.

- Minimum wages

* Lecture notes

*Card and Krueger. 1994. Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania. American Economic Review 84.4, 772–793.

*Cengiz. 2019. The Effect of Minimum Wages on Low-Wage Jobs. The Quarterly Journal of Economics 134.3, 1405–1454.

Dube. 2019. Minimum Wages and the Distribution of Family Incomes. American Economic Journal: Applied Economics 11.4, 268–304.

*Neumark and Shirley. 2022. Myth or measurement: What does the new minimum wage research say about minimum wages and job loss in the United States? Industrial Relations: A Journal of Economy and Society 61.4, 384– 417.

*Neumark and Wascher. 1992. Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws. Industrial and Labor Relations Review 46.1, 55–8.

- Weak Instrument Robust Confidence Intervals

* Lecture notes

Anderson and Rubin. 1949. Estimation of the Parameters of a Single Equation in a Complete System of Stochastic Equations. The Annals of Mathematical Statistics 20.1, 46–63.

Andrews, Stock, and Sun. 2019. Weak Instruments in IV Regression: Theory and Practice. Annual Review of Eco- nomics 11.1, 727–753.

- Extensions of Model

* Lecture notes

*Card. 2009. Immigration and Inequality. American Economic Review 99.2, 1–2.

Cengiz and Tekgüç. 2021. Is It Merely a Labor Supply Shock? Impacts of Syrian Migrants on Local Economies in Turkey. Industrial and Labor Relations Review 75.

Dube, Lester, and Reich. 2016. Minimum Wage Shocks, Employment Flows, and Labor Market Frictions. Journal of Labor Economics 34.3, 663–704.

Edo and Rapoport. 2019. Minimum wages and the labor market effects of immigration. Labour Economics 61, 101753.

Ottaviano and Peri. 2012. Rethinking the Effects of Immigration on Wages. Journal of the European Economic Association 10.1, 152– 197.

Dube, Lester, and Reich. 2016. Minimum wage shocks, employment flows, and labor market frictions. Journal of Labor Economics 34(3): 545-823.

Hong and McLaren. 2015. Are immigrants a shot in the arm for the local economy? NBER Working Paper 21123.

Clemens and Lewis. 2022. The effect of low-skill immigration restrictions on US firms and workers: Evidence from a randomized lottery. NBER Working Paper 30589.

Peri and Sparber. 2009. Task specialization, immigration, and wages. American Economic Journal: Applied Economics, 1(3): 135-69.

Peri. 2011. Rethinking the area approach: Immigrants and the labor market in California. Journal of INternational Economics, 84(1): 1-14.

Ottaviano, Peri, and Wright. 2013. Immigration, offshoring, and American jobs. American Economic Review, 103(5): 1925-59.

- Monopsony

* Lecture notes

Card et al. 2018. Firms and Labor Market Inequality: Evidence and Some Theory. Journal of Labor Economics 36.S1, S13–S70.

*Lamadon, Mogstad, and Setzler. 2022. Imperfect Competition, Compensating Differentials, and Rent Sharing in the US Labor Market. American Economic Review 112.1, 169–212.

Card, Cardoso, Heining, and Kline. 2018. Firms and labor market inequality: Evidence and some theory. Journal of Labor Economics, 36(S1): S1-S409.

Kroft, Luo, Mogstad, and Setzler. 2023. Imperfect competition and rents in labor and product markets: The case of the construction industry. NBER Working Paper 27325.

- Changes in wage distribution and college wage premium: Market forces vs. institutional changes

Goldin and Katz. 2008. The race between education and technology. United Kingdom: Harvard University Press.

*Katz and Murphy. 1992. Changes in relative wages, 1963-1987: Supply and demand factors. The Quarterly Journal of Economics, 107(1): 35-78.

Card and Lemieux. 2001. Can falling supply explain the rising return to college for younger men? A cohort-based analysis. The Quarterly Journal of Economics, 116(2): 705-746.

*Acemoglu and Autor. 2010. Skills, tasks and technologies: Implications for employment and earnings. In Handbook of Labor Economics, Volume 4B, 1043-1171.

Lee. 1999. Wage inequality in the United States during the 1980s: Rising dispersion or falling minimum wage? The Quarterly Journal of Economics, 114(3): 977-1023.

*Card and DiNardo. 2002. Skill-biased technical change and rising wage inequality: Some problems and puzzles. Journal of Labor Economics, 20(4): 709-978.

DiNardo, Fortin, and Lemieux. 1996. Labor market institutions and the distribution of wages, 1973-1992: A semiparametric approach. Econometrica, 64(5): 1001-1044.

Autor, Katz, and Kearney. 2008. Trends in U.S. wage inequality: revising the revisionists. Review of Economics and Statistics. 90 (2): 300-323.

DiNardo and Pischke. 1997. The returns to computer use revisited: Have pencils changed the wage structure too? The Quarterly Journal of Economics, 112(1): 291–303.

Akerman, Gaarder, and Mogstad, 2015. The skill complementarity of broadband internet. The Quarterly Journal of Economics, 130 (4): 1781–1824.

Farber, Herbst, Kuziemko, and Naidu. 2021. Unions and inequality over the twentieth century: new evidence from survey data. The Quarterly Journal of Economics, 136 (3): 1325–1385.

Autor, Manning, and Smith. 2016. The contribution of the minimum wage to US wage inequality over three decades: A reassessment. American Economic Journal: Applied Economics, 8 (1): 58-99.

Bhuller, Moene, Mogstad, and Vestad. 2022. Facts and fantasies about wage setting and collective bargaining. Journal of Economic Perspectives, 36 (4): 29-52.