

# The Macroeconomics of Market Power

2021-2022 Academic Year  
Master of Research in Economics, Finance and Management

## 1. Description of the subject

- The Macroeconomics of Market Power      Code: 32701
- Total credits: 3 ECTS                              Workload: 75 hours
- Type of subject: Optional                        Term: 2nd
- Department of Economics and Business
- Teaching team: Jan Eeckhout

## 2. Teaching guide

### Introduction

There is a sharp rise in Market Power in the aggregate economy since 1980. First, we analyze the measurement of market power in the macroeconomy using the cost-based method, and document how the distribution of markups and profits has changed. We compare markups and profits to other measures such as concentration indices (e.g., Herfindahl–Hirschman Index, HHI). Then we evaluate the consequences of market power on the economy as a whole and the labor market in particular. We aim to explain a number of secular trends that coincide with the rise of market power: a decline in the labor share, wage stagnation, declining labor mobility, the decline of startups, and the rise of superstar firms. Next, we build a macro model of the economy where firms have market power in their local markets. We use the model to quantify the role of market power and the possible causes, between the market structure and technological change. We then measure and model monopsony power, i.e., market power in the labor market. Finally, we evaluate the impact of market power on wage inequality, and on the skill premium in particular. The objective is to estimate these models using micro data, and we will back out the distribution of firm productivities, firm markups (markdowns) as well as the market structure. We thus treat the market structure as a residual in the way we treat productivity as the residual.

The objective of this course is to provide you with a set of ideas and tools that you can use in your research, whatever you study: macroeconomics, applied micro, micro theory, industrial organization, public finance, political economy, development, family economics,... Hopefully this will be helpful in writing a chapter of your thesis. At the end of the course, you will write a short paper on a topic of your choice related to the course.

### Course Outline

Below is an outline of the topics I will cover, as well as an extensive list of references. In the lectures we will cover a selection of these papers in detail. I have also written a general audience, non-academic book on the topic (Eeckhout J., *The Profit Paradox. How Thriving Firms Threaten the Future of Work*, Princeton University Press, 2021).

1. Measuring Markups
2. The Macroeconomic Consequences of Market Power
3. Quantifying Market Power
4. Market Power and Wage Inequality
5. Optimal Taxation and Market Power

## References

- ACEMOGLU, D., AND D. AUTOR (2011): "Skills, tasks and technologies: Implications for employment and earnings," in *Handbook of labor economics*, vol. 4, pp. 1043–1171. Elsevier.
- ACKERBERG, D. A., K. CAVES, AND G. FRAZER (2015): "Identification properties of recent production function estimators," *Econometrica*, 83(6), 2411–2451.
- AMITI, M., O. ITSKHOKI, AND J. KONINGS (2019): "International shocks, variable markups, and domestic prices," *The Review of Economic Studies*, 86(6), 2356–2402.
- ATKESON, A., AND A. BURSTEIN (2008): "Pricing-to-Market, Trade Costs, and International Relative Prices," *American Economic Review*, 98(5), 1998–2031.
- AUTOR, D., D. DORN, L. F. KATZ, C. PATTERSON, AND J. VAN REENEN (2020): "The Fall of the Labor Share and the Rise of Superstar Firms," *Quarterly Journal of Economics*, 135, 645–709.
- AUTOR, D. H., L. F. KATZ, AND M. S. KEARNEY (2008): "Trends in US wage inequality: Revising the revision- ists," *The Review of economics and statistics*, 90(2), 300–323.
- AZAR, J., S. BERRY, AND I. E. MARINESCU (2019): "Estimating Labor Market Power," *Available at SSRN 3456277*.
- AZAR, J., I. MARINESCU, AND M. I. STEINBAUM (2017): "Labor market concentration," Discussion paper, National Bureau of Economic Research.
- AZAR, J., AND X. VIVES (2020): "Oligopoly, Macroeconomic Performance, and Competition Policy," mimeo.
- BAQAEI, D. R., AND E. FARHI (2017): "The Macroeconomic Impact of Microeconomic Shocks: Beyond Hulten's Theorem," Discussion paper, National Bureau of Economic Research.
- BARKAI, S. (2019): "Declining labor and capital shares," *Journal of Finance*, *Forthcoming*.
- BARTH, E., A. BRYSON, J. C. DAVIS, AND R. FREEMAN (2016): "It's where you work: Increases in the dispersion of earnings across establishments and individuals in the United States," *Journal of Labor Economics*, 34(S2), S67–S97.
- BASU, S. (2019): "Are Price-Cost Markups Rising in the United States? A Discussion of the Evidence," *Journal of Economic Perspectives*, 33(3), 3–22.
- BASU, S., AND J. G. FERNALD (1997): "Returns to scale in US production: Estimates and implications," *Journal of political economy*, 105(2), 249–283.
- BERGER, D., K. HERKENHOFF, AND S. MONGEY (2019): "Labor Market Power," Chicago mimeo.
- BERGIN, J., AND W. MCLEOD (1993): "Continuous Time Repeated Games," *International Economic Review*, 34(1), 21–37.
- BERRY, S., M. GAYNOR, AND F. SCOTT MORTON (2019): "Do Increasing Markups Matter? Lessons from Empirical Industrial Organization," *Journal of Economic Perspectives*, 33(3), 44–68.
- BERRY, S., J. LEVINSOHN, AND A. PAKES (1995): "Automobile prices in market equilibrium," *Econometrica: Journal of the Econometric Society*, pp. 841–890.
- BRESNAHAN, T. F. (1989): "Empirical studies of industries with market power," *Handbook of industrial organiza- tion*, 2, 1011–1057.
- BURSTEIN, A., V. CARVALHO, AND B. GRASSI (2019): "Bottom-up markup fluctuations," in *2019 Meeting Papers*. Society for Economic Dynamics.

CARVALHO, V. M., AND B. GRASSI (2019): “Large firm dynamics and the business cycle,” *American Economic Review*, 109(4), 1375–1425.

CHADE, H., AND J. EECKHOUT (2017): “Competing Teams,” University College London Working Paper.

E LOECKER, J., AND J. EECKHOUT (2017): “The rise of market power and the macroeconomic implications,” Discussion paper, National Bureau of Economic Research. (2020): “Global Market Power,” Working Paper.

DE LOECKER, J., J. EECKHOUT, AND S. MONGEY (2019): “Quantifying Market Power,” Discussion paper, Working Paper.

DE LOECKER, J., J. EECKHOUT, AND G. UNGER (2020): “The Rise of Market Power and the Macroeconomic Implications,” *Quarterly Journal of Economics*, 135(2), 561–644.

DE LOECKER, J., AND P. K. GOLDBERG (2014): “Firm performance in a global market,” *Annu. Rev. Econ.*, 6(1), 201–227.

DE LOECKER, J., P. K. GOLDBERG, A. K. KHANDELWAL, AND N. PAVCNIK (2016): “Prices, Markups and Trade Reform,” *Econometrica*, 84(2).

DE LOECKER, J., AND F. M. P. WARZYNSKI (2012): “Markups and Firm-level Export Status,” *American Economic Review*, 102(6), 2437–2471.

DEB, S., J. EECKHOUT, A. PATEL, AND L. WARREN (2020): “The Contribution of Market Power to Wage Inequality,” Discussion paper, UPF mimeo.

DEB, S., J. EECKHOUT, AND L. WARREN (2020): “Market Power and Monopsony in Macroeconomic Equilibrium,” Discussion paper, UPF mimeo.

DECKER, R., J. HALTIWANGER, R. JARMIN, AND J. MIRANDA (2014): “The secular decline in business dynamism in the US,” University of Maryland mimeo.

EDMOND, C., V. MIDRIGAN, AND D. Y. XU (2015): “Competition, markups, and the gains from international trade,” *American Economic Review*, 105(10), 3183–3221.

(2019): “How costly are markups?,” Discussion paper, National Bureau of Economic Research.

EECKHOUT, J. (2020): “Comment on: Diverging Trends in National and Local Concentration,” in *NBER Macroeconomics Annual 2020, Volume 35*. NBER.

(2021, in press): *Work in Modern Times*. Princeton University Press.

FURMAN, J., AND P. ORSZAG (2015): “A Firm-Level Perspective on the Role of Rents in the Rise in Inequality,” Speech.

GOLDIN, C. D., AND L. F. KATZ (2009): *The race between education and technology*. harvard university press.

GOOLSBEE, A., AND C. SYVERSON (2019): “Monopsony Power in Higher Education: A Tale of Two Tracks,” Discussion paper, National Bureau of Economic Research.

GRASSI, B. (2017): “IO in IO: Competition and volatility in input-output networks,” *Unpublished Manuscript, Bocconi University*.

GRULLON, G., Y. LARKIN, AND R. MICHAELY (2016): “Are US Industries Becoming More Concentrated?,” *Unpublished Working Paper*.

GUTIE´RREZ, G., AND T. PHILIPPON (2017): “Declining Competition and Investment in the US,” Discussion paper, National Bureau of Economic Research.

(2018): “How EU Markets Became More Competitive Than US Markets: A Study of Institutional Drift,” Working Paper 24700, National Bureau of Economic Research.

- HALL, R. (1988): “The Relation between Price and Marginal Cost in U.S. Industry,” *Journal of Political Economy*, 96(5), 921–947.
- HALL, R. E. (2018): “New Evidence on the Markup of Prices over Marginal Costs and the Role of Mega-Firms in the US Economy,” Discussion paper, National Bureau of Economic Research.
- HARTMAN-GLASER, B., H. LUSTIG, AND M. X. ZHANG (2016): “Capital Share Dynamics When Firms Insure Workers,” Discussion paper, National Bureau of Economic Research.
- HERSHBEIN, B., C. MACALUSO, AND C. YEH (2020): “Concentration in US local labor markets: evidence from vacancy and employment data,” Discussion paper, Richmond Fed.
- KARABARBOUNIS, L., AND B. NEIMAN (2014): “The Global Decline of the Labor Share\*,” *Quarterly Journal of Economics*, 129(1).
- KATZ, L. F., AND K. M. MURPHY (1992): “Changes in relative wages, 1963–1987: supply and demand factors,” *The Quarterly Journal of Economics*, 107(1), 35–78.
- KEHRIG, M., AND N. VINCENT (2017): “Growing productivity without growing wages: The micro-level anatomy of the aggregate labor share decline,” Duke mimeo.
- Koh, D., R. SANTAELALIA-LLOPIS, AND Y. ZHENG (2017): “Labor Share Decline and Intellectual Property Products Capital,” Discussion paper, Washington University mimeo.
- KRUSELL, P., L. E. OHANIAN, J.-V. RÍOS-RULL, AND G. L. VIOLANTE (2000): “Capital-skill complementarity and inequality: A macroeconomic analysis,” *Econometrica*, 68(5), 1029–1053.
- MANNING, A. (2003): *Monopsony in motion: Imperfect competition in labor markets*. Princeton University Press.
- (2011): “Imperfect competition in the labor market,” in *Handbook of labor economics*, vol. 4, pp. 973–1041. Elsevier.
- MELITZ, M. J., AND G. I. OTTAVIANO (2008): “Market size, trade, and productivity,” *The review of economic studies*, 75(1), 295–316.
- MERTENS, M. (2019): “Micro-Mechanisms behind Declining Labor Shares: Market Power, Production Processes, and Global Competition,” Halle Institute for Economic Research mimeo.
- MORLACCO, M. (2017): “Market Power in Input Markets: Theory and Evidence from French Manufacturing,” Discussion paper, Yale.
- OLLEY, G. S., AND A. PAKES (1996): “The Dynamics of Productivity in the Telecommunications Equipment Industry,” *Econometrica: Journal of the Econometric Society*, pp. 1263–1297.
- PATEL, A. (2020): “Firms, Job Polarization and Biased Technological Change,” mimeo.
- ROSSI-HANSBERG, E., P.-D. SARTE, AND N. TRACHTER (2018): “Diverging trends in national and local concentration,” Discussion paper, National Bureau of Economic Research.
- RUBENS, M. (2019): “Monopsony power and factor-biased technology adoption,” University of Leuven mimeo.
- SONG, J., D. J. PRICE, F. GUVENEN, N. BLOOM, AND T. VON WACHTER (2015): “Firming up inequality,” Discussion paper, National Bureau of Economic Research.
- SYVERSON, C. (2019): “Macroeconomics and Market Power: Context, Implications, and Open Questions,” *Journal of Economic Perspectives*, 33(3), 23–43.
- TRAINA, J. (2018): “Is Aggregate Market Power Increasing? Production Trends using Financial Statements,” Chicago Booth mimeo.
- VLACHOS, J., E. LINDQVIST, AND C. HAKANSON (2015): “Firms and skills: the evolution of worker

sorting!” Discussion paper, Stockholm.

• **Teaching methodology**

Lecture format with small group discussion

• **Assessment**

Short Paper

• **Grading system**

0-10:

0-4.5	Fail
5-6	C
6.5-7.5	B
8-9	A
9.5-10	A+