Towards a More Competitive Labor Market

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ECB-CEPR 2022 Labour Market Workshop

The Economist

Free exchange

Economists think antitrust policy should pay more attention to workers

There is mounting evidence that some labour markets are not competitive

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- Growing research interest in labor market competition and monopsony power.
- Growing evidence that workers are paid less than their marginal product in both the US & Europe.
- US competition policy has already taken action to address competition in labor markets & is developing a robust agenda to protect competition for workers' labor.

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- US and French labor markets are often highly concentrated.
- Higher labor market concentration is associated with lower wages both in France and in the US: a 10% increase in labor market concentration lowers wages by about 1%.
- In the US, workers are about 20% more productive than their wage level.
- In the US, the labor supply elasticity is fairly small: workers are not very sensitive to wages, so a monopsonist can suppress wages significantly below the marginal revenue product of labor.

Outline

1. **Measuring Labor Market Concentration in the US (Azar, Marinescu, Steinbaum and Taska, 2020**

2. Labor Market Concentration and Wages in the US and in France (Azar, Marinescu, Steinbaum, 2022; Marinescu, Ouss and Pape, 2021)

3. Labor market competition and wage suppression: the labor supply elasticity (Azar, Berry, Marinescu, 2022)

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Labor market concentration

- Product market is concentrated when a few companies realize most of the sales, e.g. mobile telecom in the US (3 big firms: Verizon Wireless, AT&T, and T-Mobile).

The Herfindahl-Hirschman Index (HHI) in market m and year-quarter t is

$$\mathrm{HHI}_{m,t} = 10,000 \sum_{j=1}^{J} s_{j,m,t}^2$$

where $s_{j,m}$ is the market share of firm j's jobs in market m.
0 is perfect competition, 10,000 is monopsony (one single employer).

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- Economic theory predicts that product market concentration (monopoly) increases prices, and labor market concentration (monopsony) *decreases* wages below workers' marginal productivity.

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- The same HHI threshold applies to seller and **buyer** power, hence relevant for the labor market.

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- The share of jobs online as captured by BGT is roughly 85% of the jobs in the Job Openings and Labor Turnover Survey in 2016
- BGT data similar in industry & occupational composition to overall economy (Hershbein and Kahn, 2016).

The Herfindahl-Hirschman Index (HHI): labor market definition

- Labor market: 6-digit SOC occupation, by commuting zone, by quarter.

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- HHI calculated at the quarterly level, because this is the average duration of unemployment in the US in 2016.
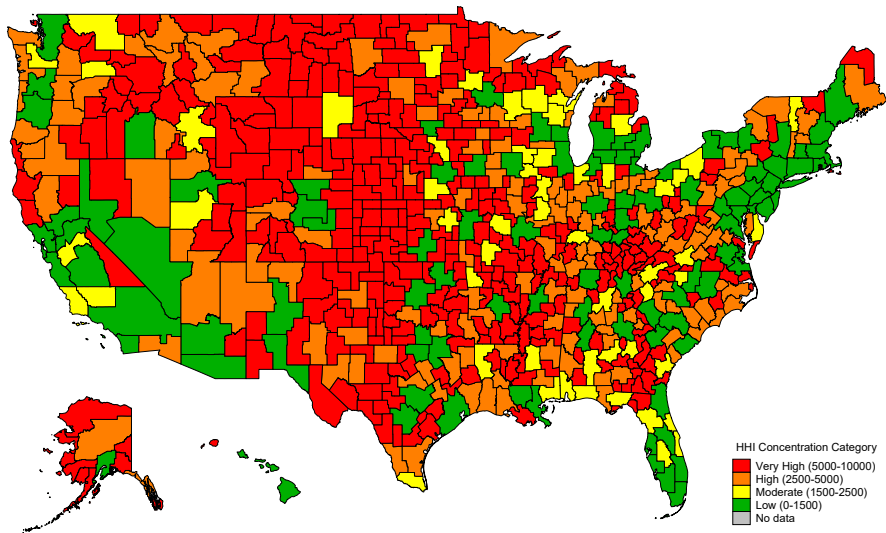
Figure: HHI by CZ, average over SOC

HHI Concentration Category
- Very High (5000-10000)
- High (2500-5000)
- Moderate (1500-2500)
- Low (0-1500)
- No data

Table: **Summary statistics for labor market concentration: baseline & weighted by BLS employment**

	Mean	Min	Max	25th Pct.	75th Pct.	Fraction Moderately Concentrated	Fraction Highly Concentrated
Baseline market definition:							
HHI (Unweighted)	4378	4	10000	1232	7279	0.11	0.60
HHI (Weighted by BLS Employment)	1638	4	10000	187	1774	0.08	0.20

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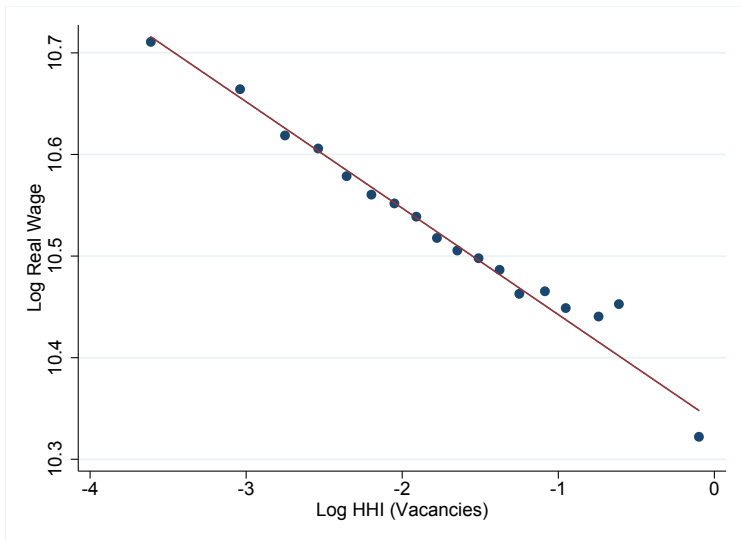
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- Occupations were selected based on counts of jobs posted between 2009 and 2012 on CareerBuilder: 16 of the most frequent SOC-6 occupations.

Figure: Binned scatter of log HHI based on vacancies and log real wage

Econometric specification: OLS panel regression

Our baseline specification is:

$$\log(w_{m,t}) = \beta \cdot \text{HHI}_{m,t} + \gamma \cdot X_{m,t} + \alpha_t + \nu_m + \varepsilon_{m,t}, \qquad (1)$$

where $\log(w)$ is the log real wage in market m in year-quarter t, $\text{HHI}_{m,t}$ is the corresponding log HHI, $X_{m,t}$ is a set of controls, and α_t and δ_m are year-quarter and market (commuting zone-occupation) fixed effects, and $\varepsilon_{m,t}$ is an error term.

- Key threat to identification: market-specific changes in labor demand or labor supply could influence both posted wages and HHI. A decrease in labor demand can lower wages and the number of firms hiring in the market, leading to higher concentration; a decrease in labor supply can increase wages, and lower the number of firms hiring, also leading to higher concentration

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- Can control for labor market tightness, which is a time-varying measure of labor supply & demand at the market level

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- Main threat to identification: labor demand or supply shocks could be correlated across areas. Instrument protects us against a spurious correlation between concentration and outcomes due to market-specific changes, but not against national-level changes that influence both local concentration and other outcomes.

Market level regressions

	Dependent Variable: Log(Real Wage)			
		OLS		IV
	(1)	(2)	(3)	(4)
Log HHI (Vacancies)	-0.0347***	-0.0399***	-0.0378***	-0.127***
	(0.00377)	(0.00392)	(0.00406)	(0.0176)
Log Tightness		0.0113***	0.0132***	0.0305***
		(0.00320)	(0.00357)	(0.00479)
CZ × SOC FE	✓	✓	✓	✓
Year-q FE	✓	✓		
Year-q FE × CZ FE			✓	✓
Observations	59,485	58,642	56,679	56,679
R-squared	0.674	0.672	0.715	0.711
Kleibergen-Paap F				996.7

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- NB: Prager and Schmitt (2021) and Arnold (2021) show that US mergers that greatly increased labor market concentration reduced wages.

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- Market-level elasticity well below 2 for most SOC6 by CZ market: hypothetical monopsonist could significantly lower wages.

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- Marinescu and Posner (2019) proposed new legislation that clarifies how antitrust law applies to employers' abuse of power.

US antitrust policy: the White House

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  - Commissioned a report: "The State of Labor Market Competition," Department of Treasury, which came out in March 2022.

US antitrust policy: the Department of Justice Antitrust Division criminal cases

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- Criminal indictment for anticompetitive conduct in the labor market (US vs. Manahe): healthcare companies conspired to eliminate competition for the services of Personal Support Specialist (home health care aides) workers by agreeing to fix the rates paid to these workers and by agreeing not to hire each other's workers (survived motion to dismiss in August 2022).

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- Statements of interest & amicus briefs to oppose non-compete agreements restricting truckers, anesthesiologists, and other workers from switching jobs, and to oppose misclassification of workers as independent contractors that deprives them of organizing rights (on worker power more generally, see lit review Marinescu & Rosenfeld, 2022).

US antitrust policy: the Department of Justice Antitrust Division policy initiatives

- Merger guidelines update.

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- Merger guidelines update.
- Collaboration with Department of Labor & the National Labor Relations Board. Memorandum of understanding allows for closer collaboration and data sharing. Also see: Hafiz & Marinescu (2022), on a whole of government approach to labor market competition.

Labor market competition & policy in Europe

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Labor market competition & policy in Europe

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- Relative to the US, European institutions are more protective of workers. Yet, a lack of labor market competition still negatively affects workers.
- European competition authorities can consider beefing up labor antitrust enforcement: e.g. Polish competition authority fined Poland's basketball league for agreeing to lay off players, reduce wages, and prevent transfers.

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- EU member states are also taking action on labor market competition.
- Policy actions are likely to raise worker mobility and wages, and to improve working conditions.

Thank you!
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Appendix

CareerBuilder Data: selected occupations

The full list of SOC-6 occupations is as follows:

- 11-3011 Administrative services managers
- 13-2011 Accountants and Auditors
- 13-2051 Financial Analysts
- 13-2052 Personal financial advisers
- 13-2053 Insurance Underwriters
- 13-2061 Financial Examiners
- 15-1041 Computer support specialists
- 17-2111 Health and Safety Engineers, Except Mining Safety Engineers and Inspectors
- 17-2112 Industrial engineers
- 29-1111 Registered nurses
- 41-4011 Sales representatives, wholesale & manufacturing, technical & scientific products
- 41-9041 Telemarketers
- 43-3031 Bookkeeping, accounting, and auditing clerks
- 43-4051 Customer service representatives
- 43-6011 Executive secretaries and administrative assistants
- 43-6012 Legal Secretaries
- 43-6013 Medical secretaries
- 43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
- 47-1011 First-Line Supervisors of Construction Trades and Extraction Workers
- 49-3041 Farm equipment mechanics
- 49-3042 Mobile Heavy Equipment Mechanics, Except Engines
- 49-3043 Rail Car Repairers
- 51-1011 First-line supervisors/managers of production and operating workers
- 53-3031 Driver/sales workers
- 53-3032 Truck drivers, heavy and tractor-trailer
- 53-3033 Light Truck or Delivery Services Drivers
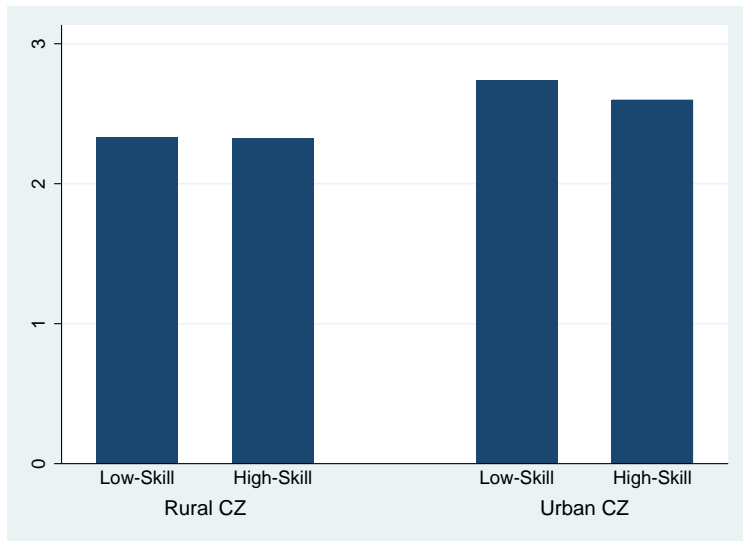
Figure: Median firm-level wage elasticity of applications

Figure: Median market-level wage elasticity of applications