# Economics of Labor Markets and Key Questions for the Workshop

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# The growth of labor antitrust enforcement

- Labor antitrust enforcement exists but is muted compared to product market antitrust enforcement: litigation gap (Marinescu and Posner, 2019).
- Slow wage growth since last Recession has ignited government interest in addressing impediments to wage growth.
- Growing interest in labor antitrust from DOJ & FTC:
    - 2010 DOJ suit against Silicon Valley  “no poach” agreements
    - 2016 DOJ “Antitrust Guidance for Human Resource Professionals”
    - 2018 FTC’s chairman: ``we've told the staff that they're supposed to look at potential effects on the labor market with every merger they review''. (on mergers, see Marinescu and Hovenkamp, 2019)

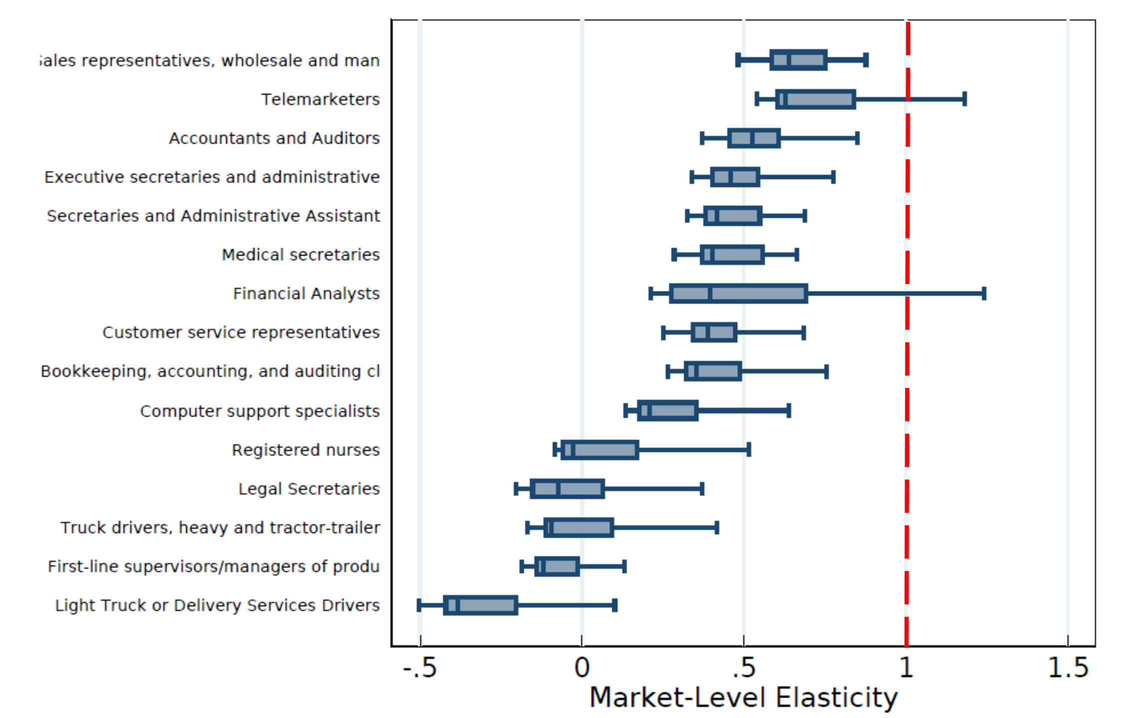
# The labor supply elasticity: a measure of labor market competition

- Elasticity:
  - Quit elasticity: how much of a wage decrease would a worker endure before they quit?
  - Application elasticity: how much of a wage decrease will dissuade a worker from applying to an additional job vacancy?
- Lower elasticity = lower competition.
- Elasticity is lower if:
  - Jobs are more *different* from each other: e.g. in distance
  - Lower job availability: e.g. no poach, non-competes & labor market concentration decrease job availability

# New elasticity estimates across labor markets: Azar, Berry, Marinescu (2019)

- State of the art model from industrial organization (IO):
    - Worker decides which market (SOC-6 occupation by commuting zone) to apply to
    - Worker decides which job to apply to within the chosen market.
- Market level elasticity of applications: how much market-level wage boost increases job applications to the whole market (e.g. accountants & auditors in DC area).
- Market-level elasticity of applications: relevant for a hypothetical monopsonist (single employer in market).

# SOC6 occupation by commuting zone is a plausible market definition (critical elasticity in red)




Azar, Berry, Marinescu (2019).
No systematic difference between high & low skill jobs.
Rural areas have lower elasticities: less competition.

# The majority (60%) of US labor markets are highly concentrated

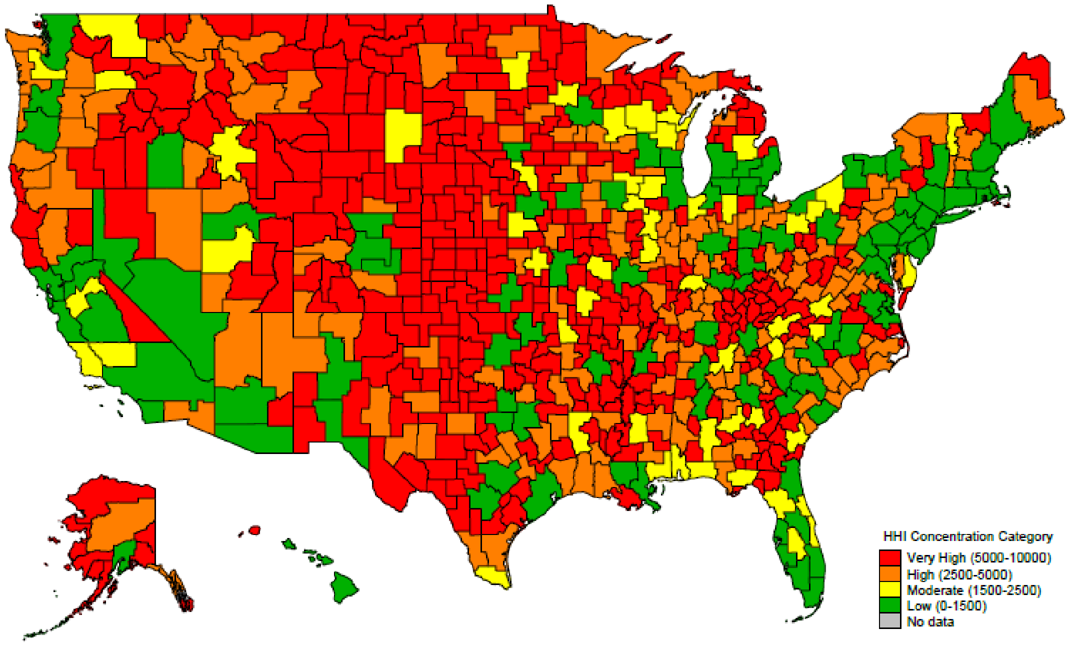



**Figure 1. Average HHI by commuting zone, based on vacancy shares.** This figure shows the average of the Herfindahl-Hirschman Index by commuting zone code for the top 200 SOC-6 occupations (ranked based on the number of vacancies) over the period 2016Q1–2016Q4 in the Burning Glass Technologies dataset. The categories

Azar, Marinescu, Steinbaum & Taska, 2018.

# Higher labor market concentration is associated with lower wages

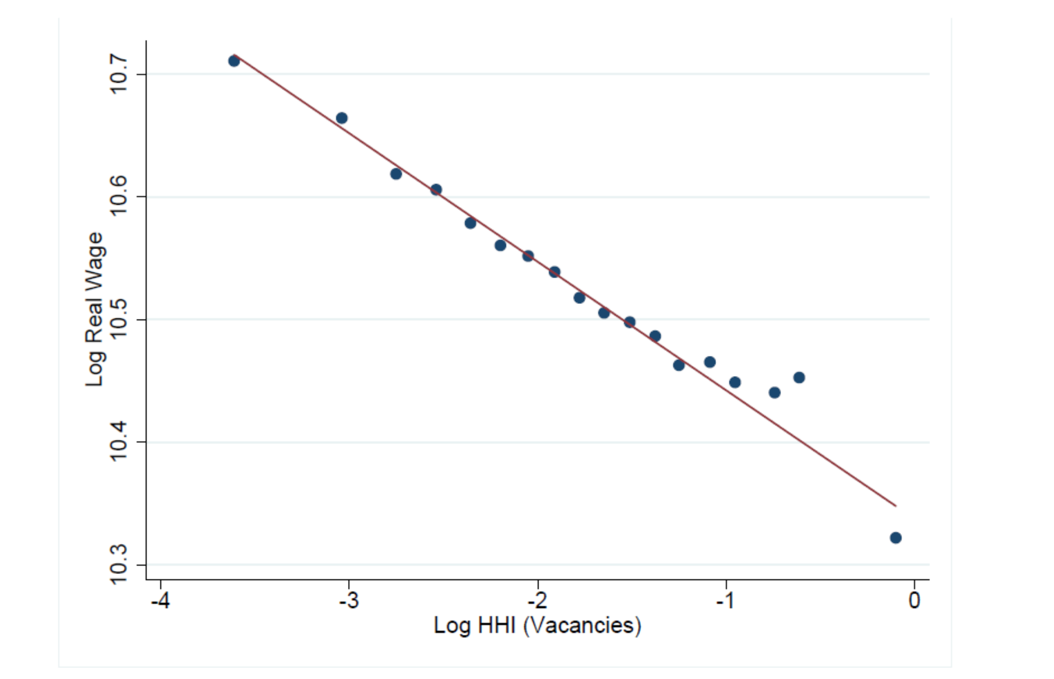
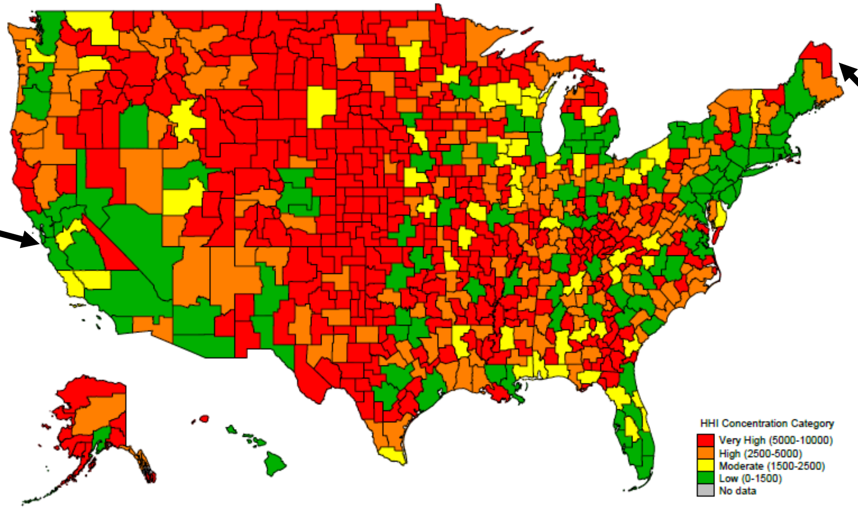



Figure from Azar, Marinescu & Steinbaum (2018).
Negative relationship between labor market concentration and wages in the US: Benmelech, Bergman and Kim (2018), Hershbein, Macaluso and Yeh (2018), Qiu & Sojourner (2019), Rinz (2018), Lipsius (2018), Berger, Herkenhoff, Mongey (2019).

# High concentration = lower pay?

- May be due to underlying market characteristics *not* caused by concentration, e.g. cost of living

**San Francisco, CA**
Nurse/pharmacist wage = $53/hr
1BR apt. rent = $1298/mo

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**Caribou, Maine**
Nurse/pharmacist wage = $35/hr
1BR apt. rent = $530/mo

# High concentration = lower pay?

- May be due to underlying market characteristics *not* caused by concentration, e.g. cost of living

- May be *caused* by high concentration due to **employer market power**

# Mechanisms behind employer power

- Classical monopsony:
  - A large employer can reduce employment levels (workers/hours/FTEs) in order to drive down wage paid to all remaining employees
- Bargaining leverage:
  - A large employer means workers have fewer other job options, and will accept lower pay or worse working conditions than in a more competitive labor market (see Jarosch, Sorkin and Nimczik 2019)
  - This mechanism can drive down pay even without reducing employment, and even when each worker negotiates his/her pay separately

# Parallels to monopoly

- Antitrust is typically concerned with **monopoly power** by seller of a good
- In labor markets, concerned with **monopsony power** by employer

| | **Monopoly** | **Labor Monopsony** |
|---|---|---|
| Firm's role | Sells goods to consumers | Buys labor from workers |
| Effect of market power | Higher prices | Lower pay |
| May harm | Consumers | Workers |
| Tests and tools | Hypothetical monopolist<br>Upward pricing pressure<br>Diversion ratio | Hypothetical monopsonist (?)<br>Downward pay pressure (?)<br>Elasticity of substitution (?) |

# Is employer power actionable?

- As with monopoly power, high *levels* of concentration are not subject to enforcement action
- Anticompetitive conduct restraining worker mobility is actionable
    - E.g. no-poaching agreements and non-compete clauses reduce worker bargaining leverage
- But mergers that *increase* concentration and put downward pressure on worker pay could be subject to scrutiny
    - Expect larger effects when workers are: geographically constrained (e.g. family ties, cost of living); have highly employer- or industry-specific skills; cannot easily transition to different job (e.g. takes years to become a different type of doctor)
    - Expect larger effects when employers are: geographically dominant (e.g. Amazon/Microsoft for tech workers in Seattle); differentiated in types of employment (e.g. boutique law firms)

# Industry study: hospital mergers

- Early evidence that employer mergers can put downward pressure on pay: Prager and Schmitt (2019) study of hospital mergers
- Separate effects by size of concentration increase due to merger
  - Categorize mergers by increase in employment HHI
- Separately examine worker types with different degrees of hospital industry specialization (large concentration increases):
  - Low-skilled generalists
  - Skilled non-medical professionals
  - Nurse administrators and pharmacists

# Industry study: hospital mergers