

Understanding the Labor Shortage

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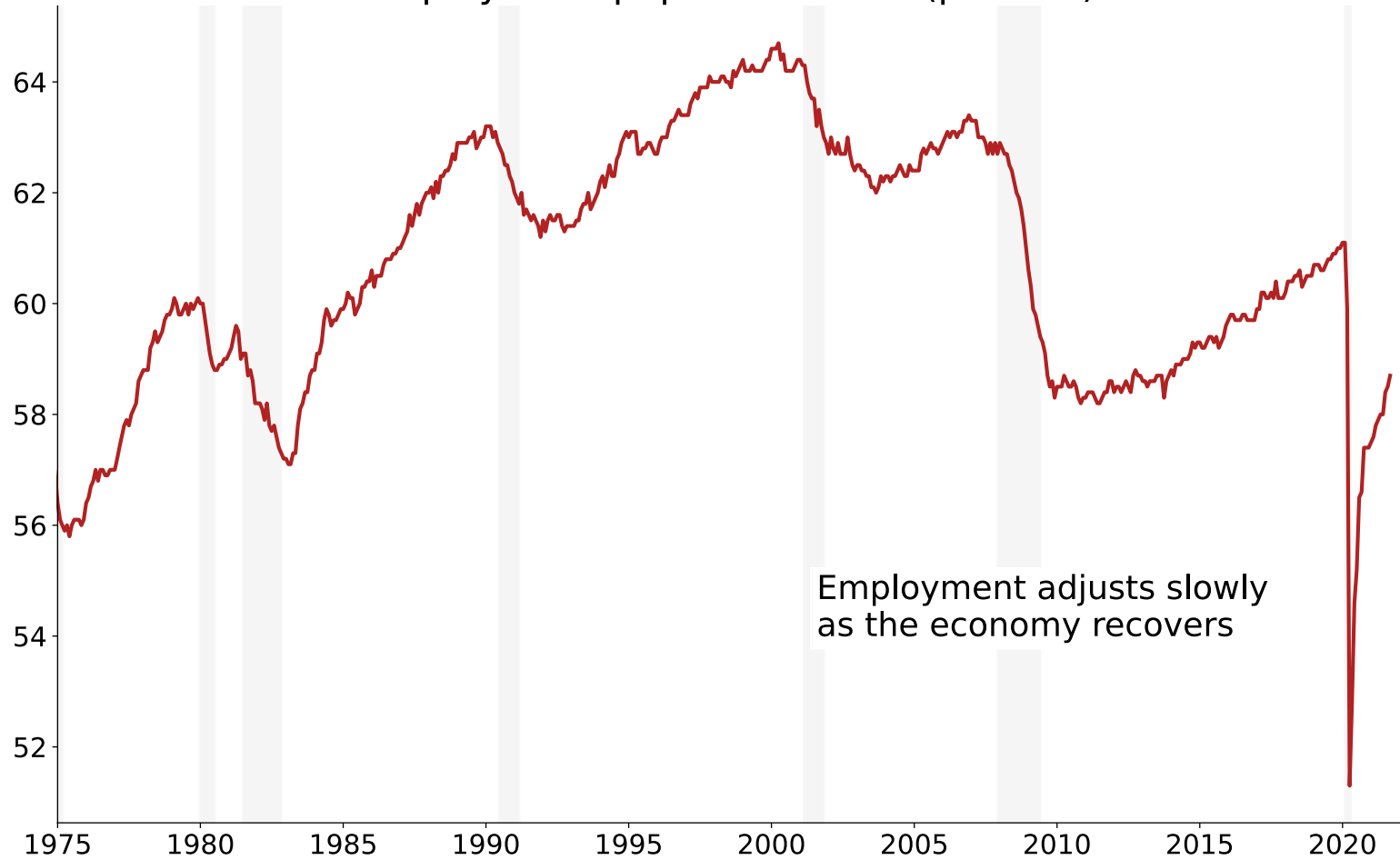
Department of Economics



Roadmap

- How labor markets work in recoveries: **Slow adjustment**
- Labor demand: **An extra 3.2 million unfilled jobs**
- Labor supply: **Are workers staying home? Why?**
- Are wages increasing?
 - **Hard to see aggregate data**
 - **Some evidence in low-skill industries for new hires**

Employment-population ratio (percent)



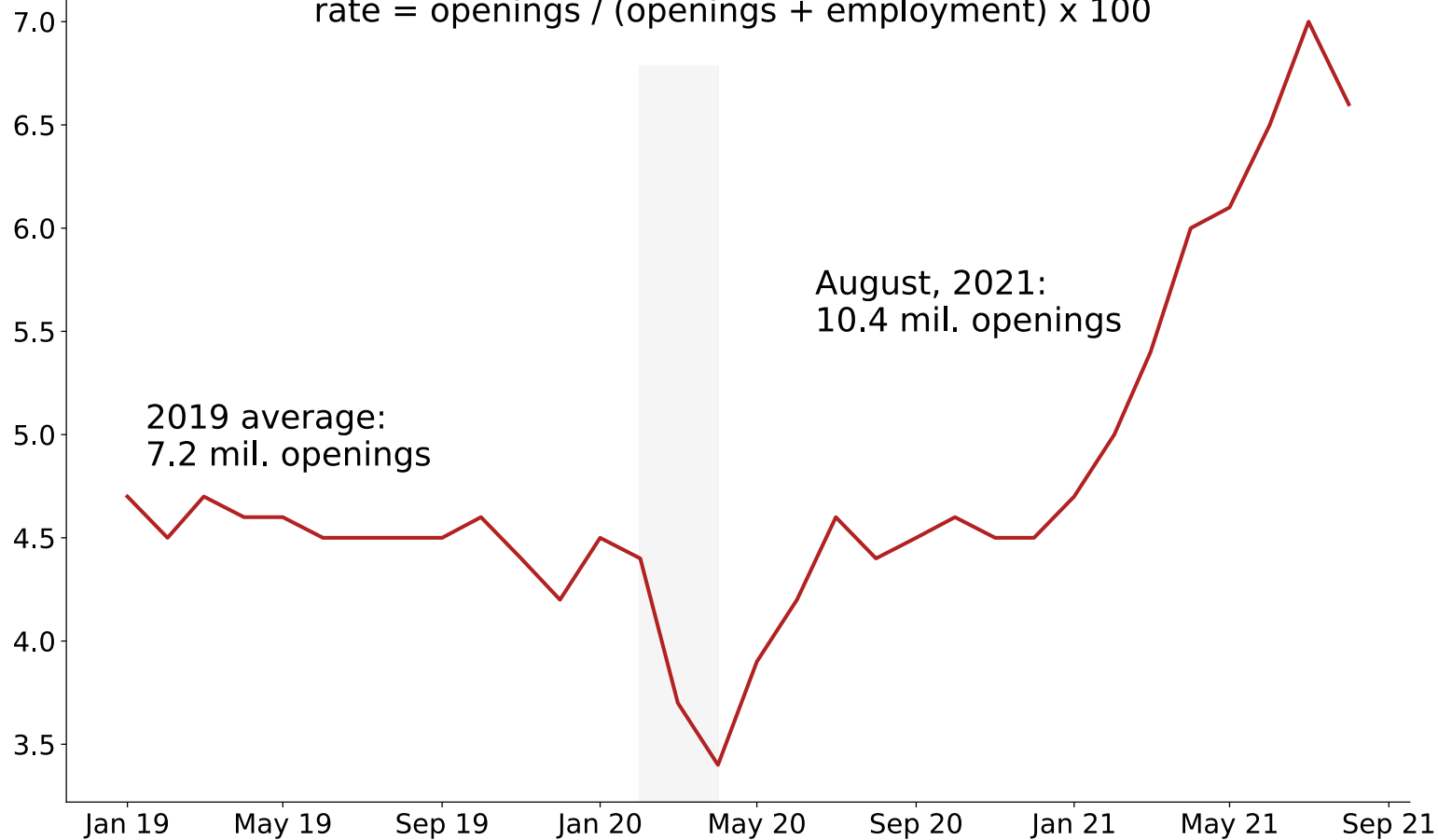
Employment adjusts slowly
as the economy recovers

Labor markets as matching markets

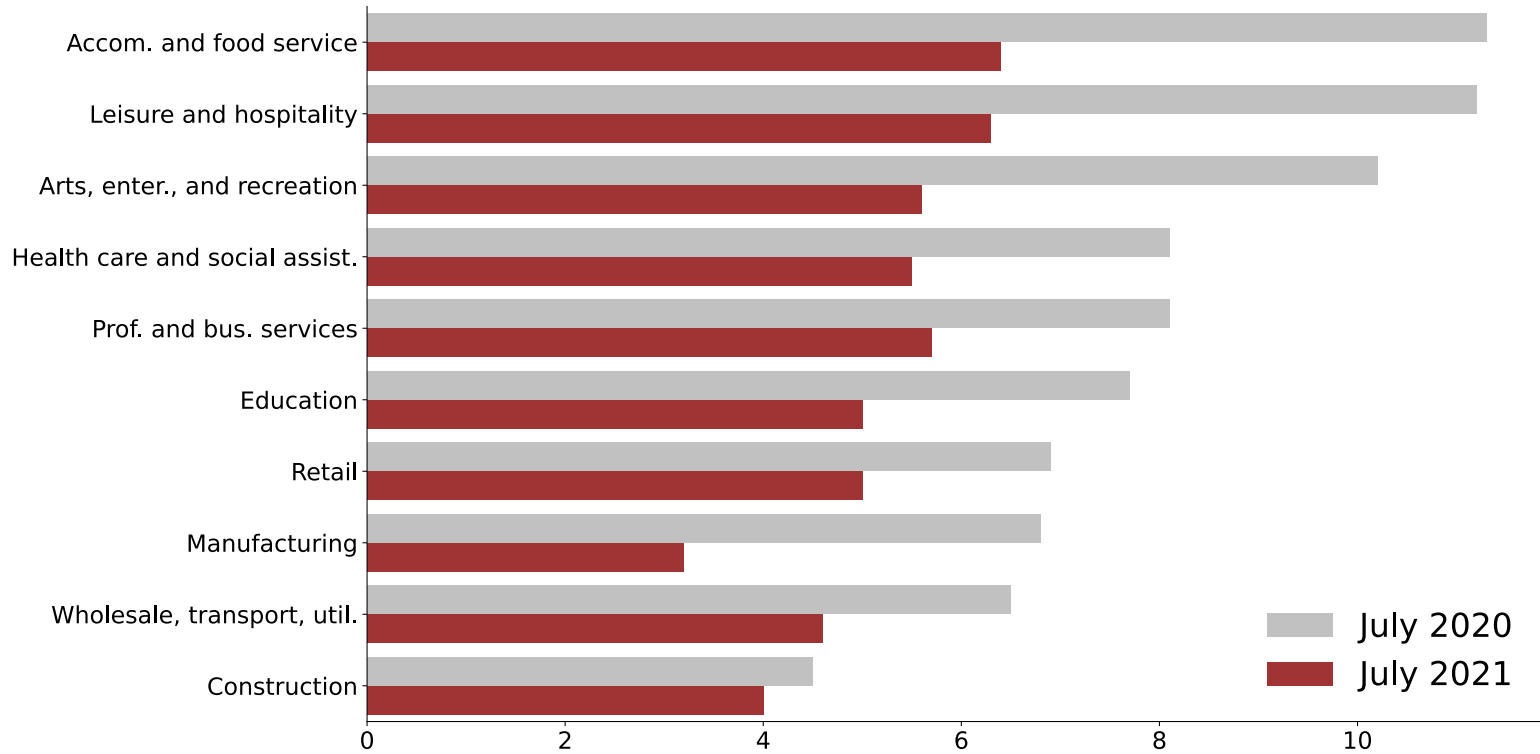
- Heterogeneous jobs + heterogeneous workers
 - Similar to housing markets, dating, ...
- Employers and workers want a good “match”
 - It takes time and effort to find the right worker/firm
- Labor adjustment is always slow — and this is a large adjustment

Labor demand: Job openings rate (total nonfarm, percent)

rate = openings / (openings + employment) x 100



Labor demand: Job openings rate (percent)



Labor supply forces

- Extra unemployment benefits and savings (short term issue)
 - Encourages more job searching and slower matching
- Laid-off workers changing industries
- Concerns about COVID
- Childcare (school and childcare closures)

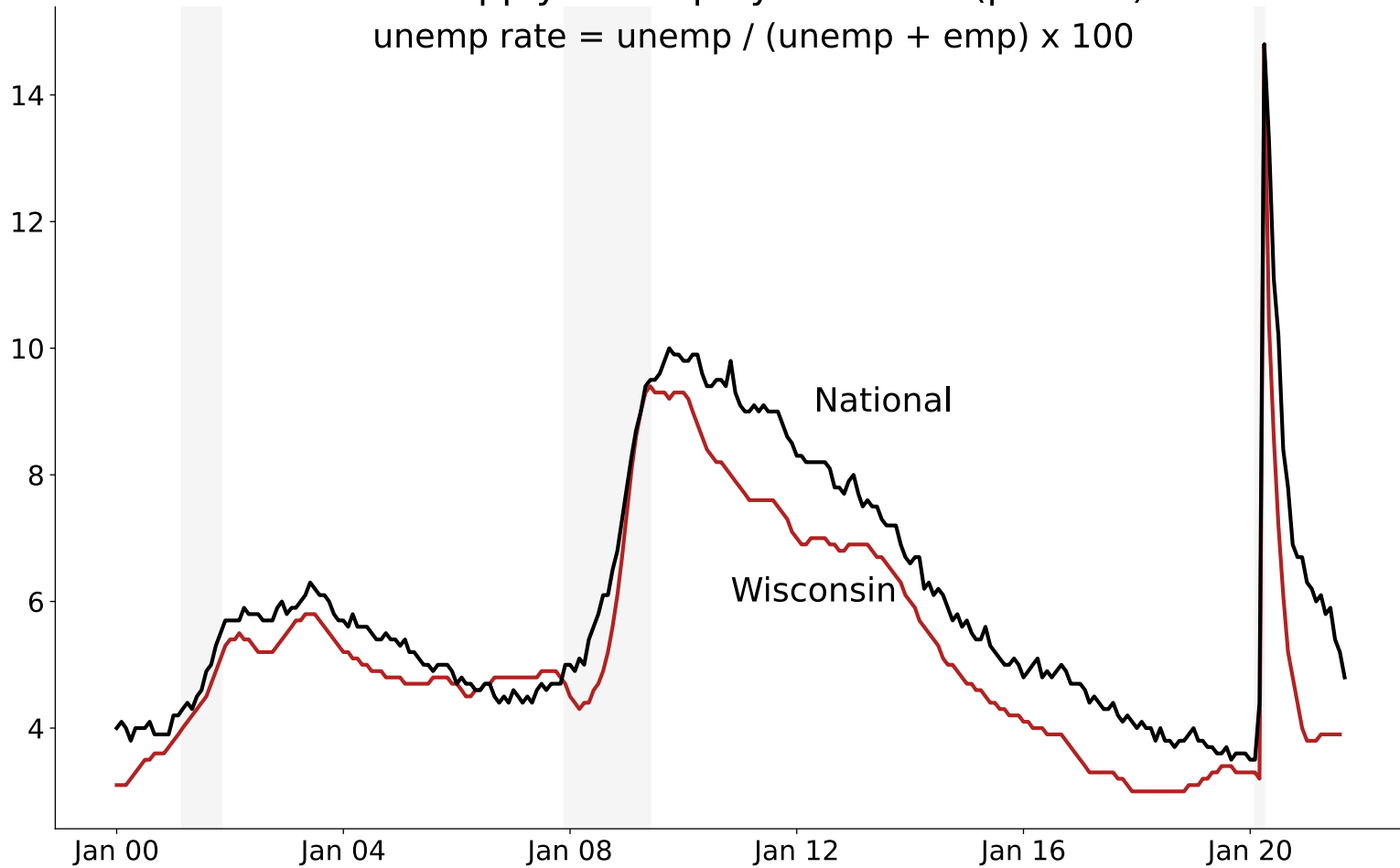
Personal savings rate (percent)

saving rate = savings / disposable personal income x 100



Labor supply: Unemployment rate (percent)

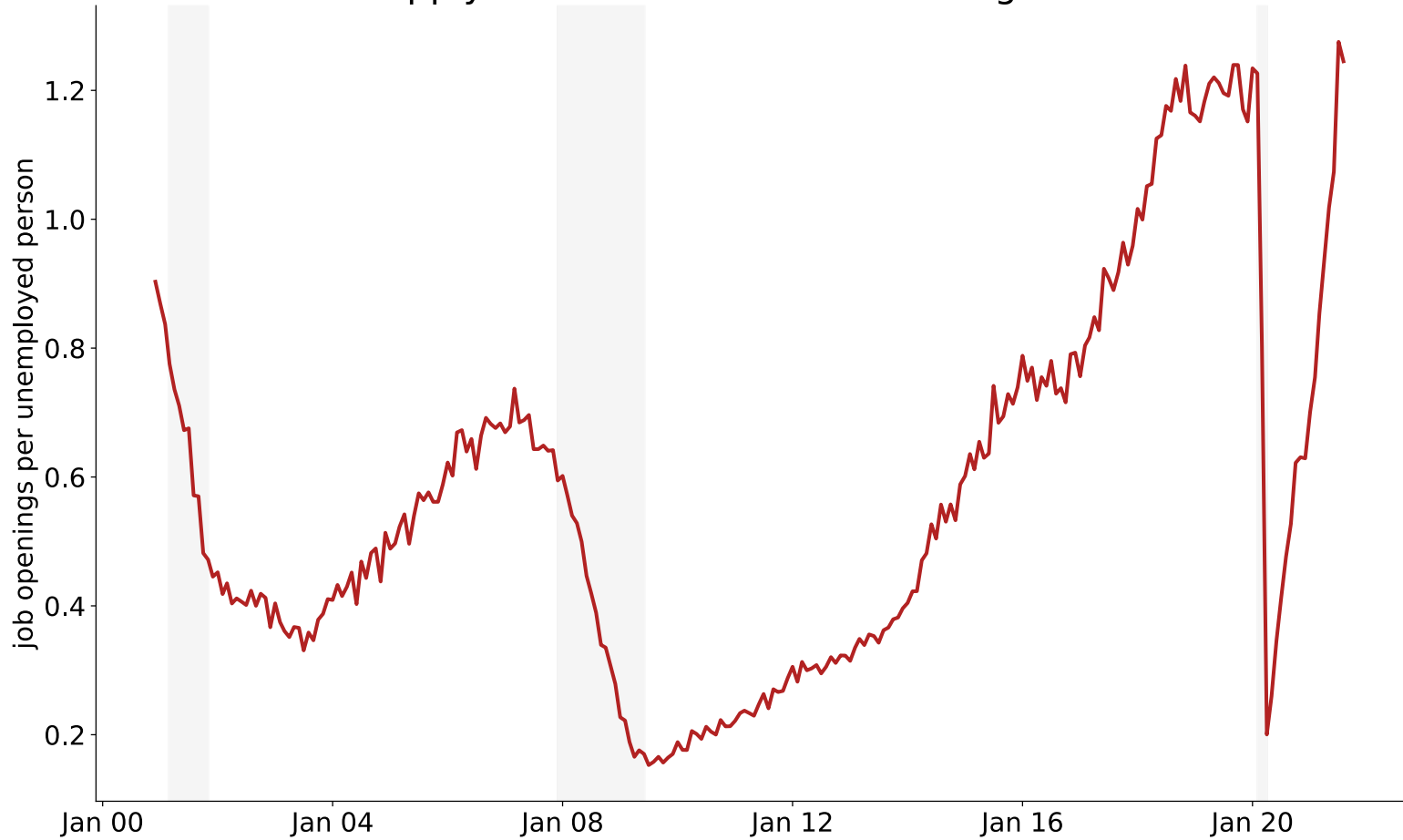
$$\text{unemp rate} = \text{unemp} / (\text{unemp} + \text{emp}) \times 100$$



Supply + Demand

- Labor market *tightness*
 - Unmet demand for workers
 - Lower supply of unemployed workers

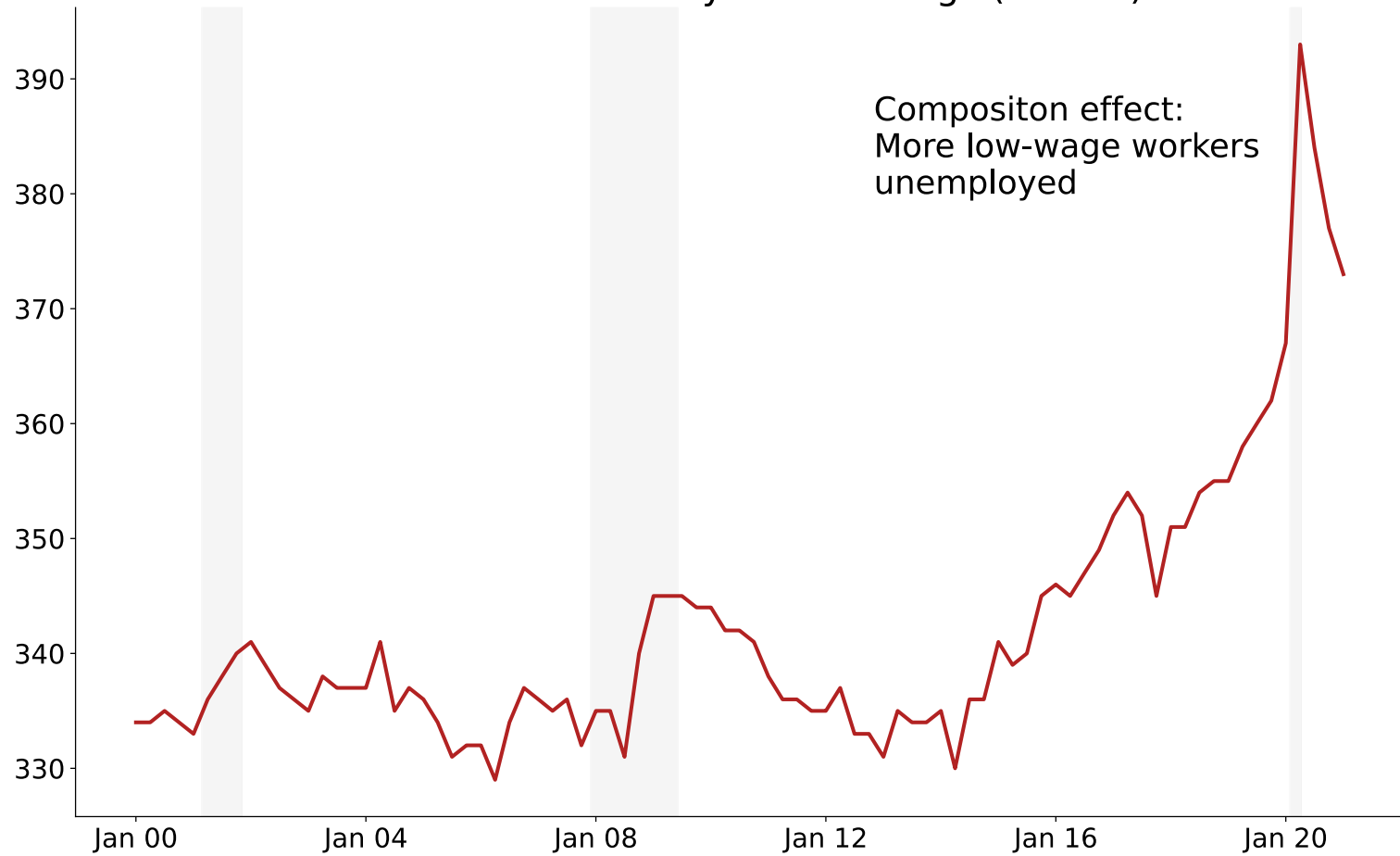
Supply + demand: Labor market tightness



Supply + Demand

- Labor market *tightness*
 - Unmet demand for workers
 - Lower supply of workers
- Tight labor markets should create upward wage pressure
- Do we see upward wage pressure?

Median usual weekly real earnings (dollars)



Compositon effect:
More low-wage workers
unemployed

Supply + Demand

- Labor market *tightness*
 - Unmet demand for workers
 - Lower supply of workers
- Tight labor markets should create upward wage pressure
- Do we see upward wage pressure?
 - Hard to see in the aggregate data
 - Some evidence of pressure in low-skill services (Hotchkiss, 2021)

Anecdotal observations

- indeed.com, “entry level”; “within 25 miles”

| Company | Position | Hourly wage | Incentives |
|----------------|--------------------|-----------------|---------------------------------|
| UPS | Package handler | up to \$22 | No interview required |
| Sub-zero | Manufacturing pos. | \$20.59-\$25.75 | \$1,500 sign-on bonus |
| Hy-Vee | Flex worker | from \$16 | |
| UW-Madison | Catering leader | from \$18.75 | \$2000-\$4000 hiring incentives |
| Divine package | Delivery associate | \$18-\$21 | No marijuana test |
| Chipotle | Crew member | \$13.50-\$15 | |