THE WILLINGNESS TO PAY FOR WORKPLACE AMENITIES Massimo Anelli Bocconi University Carnegie Mellon University

Link to Paper

Motivation

- Jobs offer more than wages—they also provide safety, flexibility, dignity, etc.
- These "non-wage amenities" matter to workers but are hard to measure.
- This paper introduces a **new method to estimate the value of amenities**, using a bunching-based approach.
- Application: During COVID-19, workers had to weigh health risks against income.

Intuition Behind the Bunching Approach

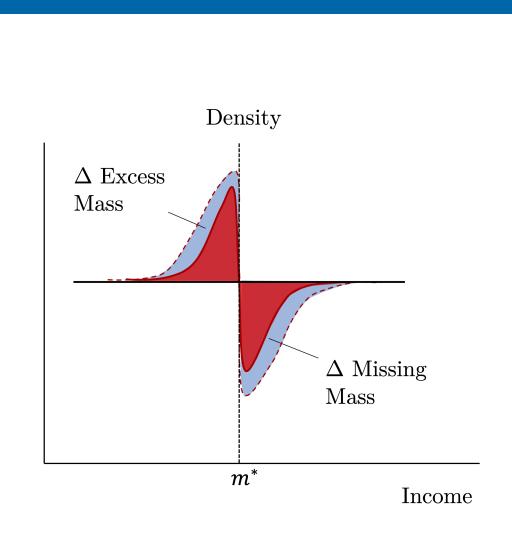
Bunching

- Eligibility thresholds (e.g. for benefits) create incentives to stay just below.
- Some workers reduce earnings or hours to qualify this creates "bunching."

Amenities

- Innovation of this paper: The extent of bunching reflects the value of workplace amenities.
- When amenities are valuable (e.g. safer jobs), fewer workers reduce hours less bunching.
- Comparing bunching before and after amenity changes reveals willingness to pay.
- **–** Example: increase in COVID-19 risk \rightarrow more bunching \rightarrow reveals value placed on safety.

Estimating Amenity Value from Bunching



Core idea: Compare bunching before and after an amenity change.

WTP Formula:

 $WTP_r = \frac{(\tilde{m}' - \tilde{m})}{(\tilde{m}' - \tilde{m}) + (\tilde{m} - m^*)} \tag{1}$

 WTP is the share of income workers are willing to pay for an amenity.

Data and Estimation Approach

Data:

- Earnings: Timesheet data from Homebase, hourly workers at small U.S. businesses.
- Time: Oct 2019–July 2020 (FPUC program window).
- Risk: Based on task exposure and local COVID-19 fatalities.

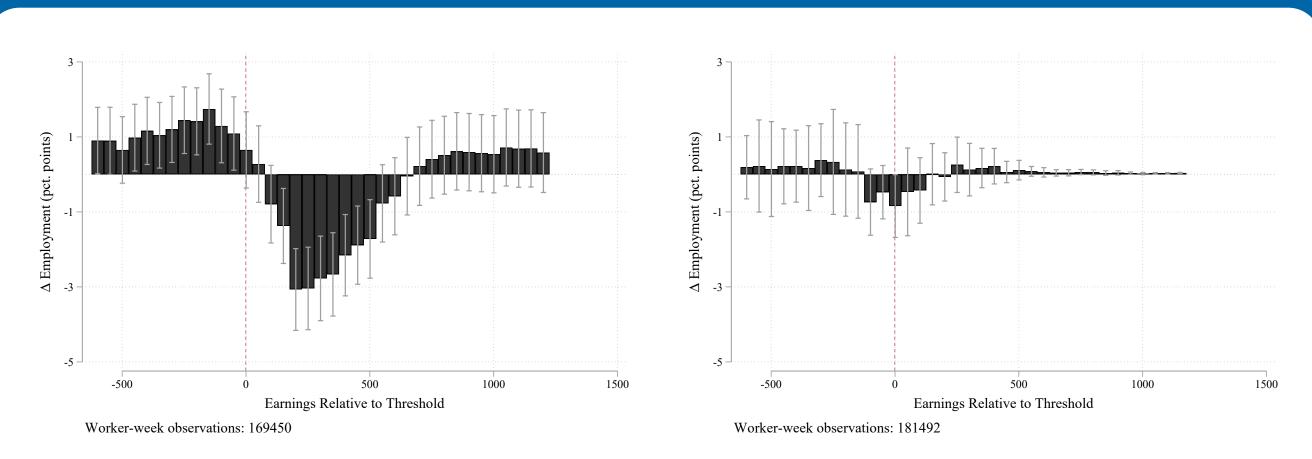
Estimation Strategy:

• Use DiD to estimate **bunching** at 21 state-specific unemployment insurance eligibility thresholds.

$$E_{wmtk} = \pi^{mt} + \sum_{k=-650}^{1300} \beta^k \cdot I_k + \sum_{k=-650}^{1300} \eta^k \cdot I_k \cdot C_t + \varepsilon_{wmtk}$$
 (2)

- E_{wmtk} : count of worker-week (w,t) observations in earnings bin m and k Dollars from threshold.
- C_t : post-policy indicator.
- η^k : excess/missing mass due to policy.

Figure 3: Excess and Missing Mass at Threshold

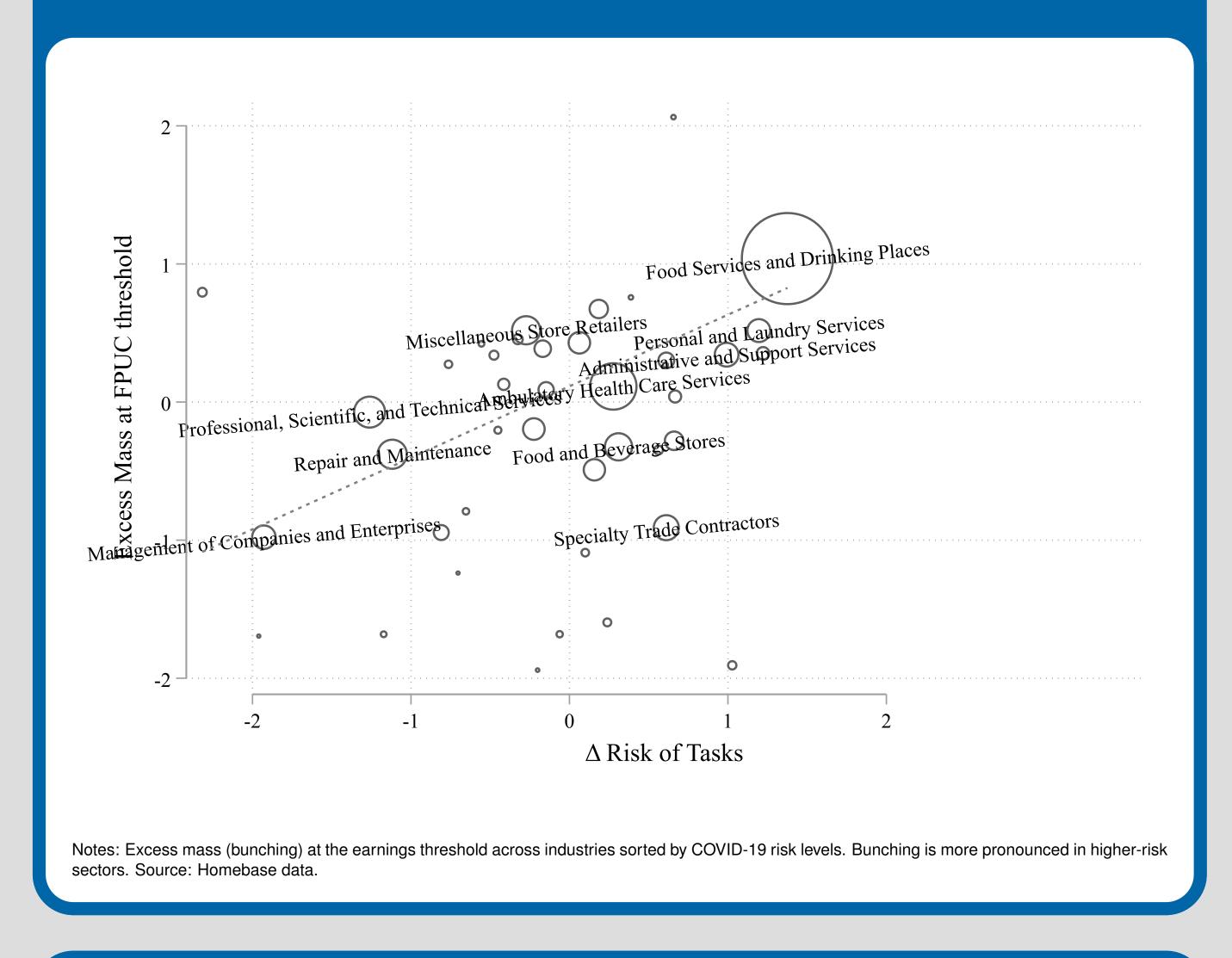


Panel A: Eligible workers

Panel B: Ineligible workers (placebo)

Notes: Coefficients η_k estimate mass shifts at the threshold. Panel A: workers eligible for MWB. Panel B: placebo group with no eligibility cutoff. 95% confidence intervals shown. Source: Homebase.

Figure 5: Bunching by Industry Risk Level



Robustness Checks: What Could Drive Differences in Bunching Besides Risk?

- Changes in labor demand? No effect in (inelligible) placebo group, robust to controls for industry-week FE, local business revenues, business closures, local employment
- Worker selection? Robust to controls for worker FE and labor supply elasticity
- School closures or child care constraints? Robust to controls for in-person instruction and week-by-state fixed effects.

Key Results

- Workers bunch below the threshold to claim benefits.
- Bunching increases with workplace COVID-19 risk.
- Workers are willing to forgo 9% of income to avoid a 1-in-100,000 fatality risk.
- Implied Value of Statistical Life (VSL):
- -\$5.6 million (standard)
- -\$8 million (adjusted for risk misperceptions)