Americans Now Live Farther from Their Employers

Mert Akan, Jose Maria Barrero, Nicholas Bloom, Tom Bowen, Shelby Buckman, Steven J. Davis, Luke Pardue and Liz Wilkie 5 March 2024

Abstract: We use matched employer-employee data (anonymized) to study the distances from worker homes to employer locations. The mean distance rose from 10 miles in 2019 to 27 miles in 2023, and the share of workers living more than 50 miles from their employer rose 7-fold from 0.8% to 5.5%. These developments mainly reflect the fact that employees hired since March 2020 live much farther away than other employees. Mean distances rise sharply with earnings, peak for employees in their 30s, and are similar for men and women. Mean distances skyrocketed after March 2020 in several industries, exceeding 70 miles in Finance & Insurance by 2023 and 100 miles in the Information sector. In short, the pandemic catalyzed a big shift to work from home and, for many workers, a big rise in how far they live from their employer.





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Data descriptions

Main Results

Conclusions and next steps

The Dataset

- We obtain anonymized payroll data from Gusto, a firm that offers payroll processing and HR services.
- The dataset runs from January 2017 to December 2023.
- For the analysis in this report, we focus on a balanced panel of firms that operated throughout the period from January 2018 to December 2023. The balanced panel contains 6,813 firms 5,793 after restricting attention to firms with an industry classification.
- We measure distance as the haversine (crow flies) distance between the zip-code centroid of the employee's residence and the zip-code centroid of the employer's location. When worker home and employer location are in the same zip code, we use the haversine distance between two randomly selected locations within the zip code.

Data Cleaning

- 1. We winsorize the individual-level distance data at 500 miles.
- 2. Even before pandemic, some employers have many employees who live far away (50+ miles) from the employer location of record. This may happen because some multi-location employers assign all employees to a single location for payroll purposes. That would cause us to overstate the true distance from the worker's home to the correct employer location i.e., the one the worker actually travels to when working at the employer's site.
- 3. To address this concern, we proceed as follows: If the measured distance from home to assigned employer location exceeds 50 miles for at least 10% of a firm's workforce in any month before March 2020, we drop that firm and its employees from the balanced panel of firms that we use in our analysis.

Weighting the individual-level employee observations

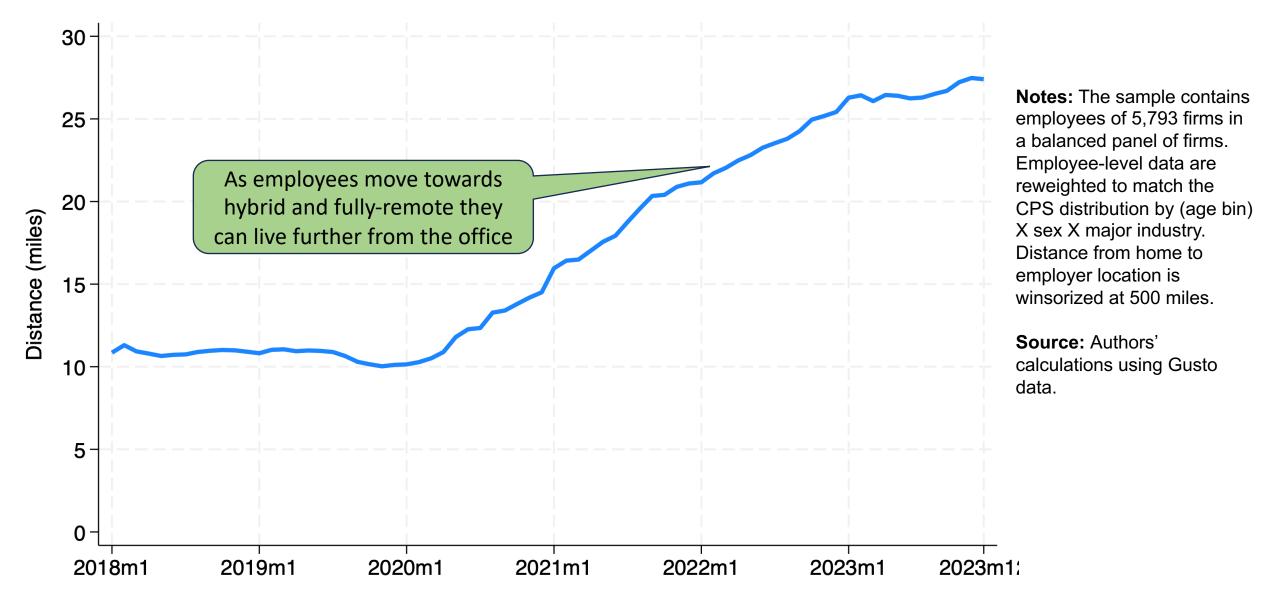
- We weight the individual-level data, so that the re-weighted distribution of employees across cells defined by the cross product of age bin, sex and major industry group in the Gusto data from 2018 to 2023 matches the corresponding distribution in the CPS from 2018 to 2023.
- We winsorize the weights to lie in the interval [.05,20].
- The age bins are 20-29, 30-39, 40-49, 50-65.
- We consider 14 major industry categories (2 digit naics).

Data descriptions

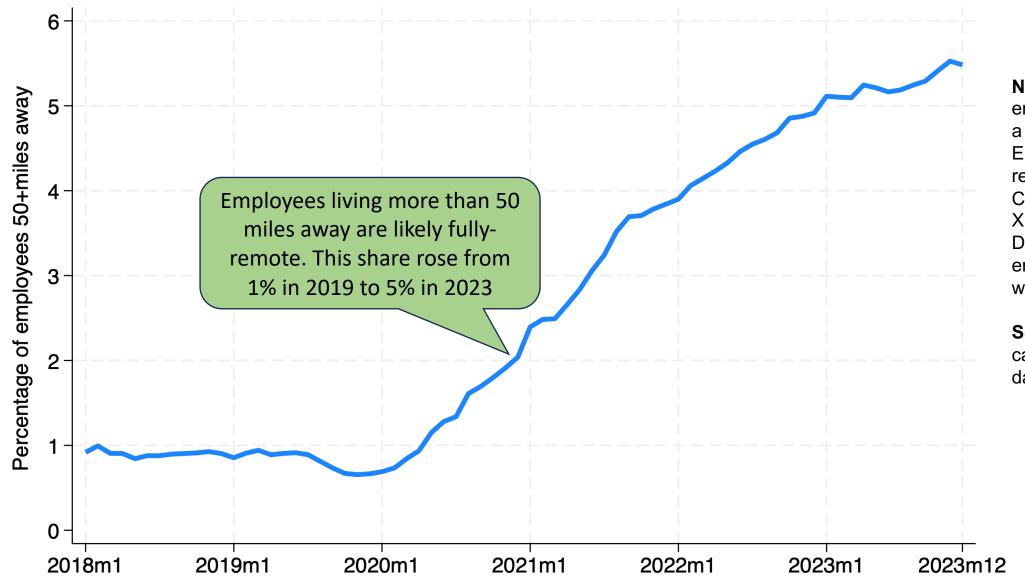
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Mean distance from the workplace rose from 10 miles to more than 25 miles



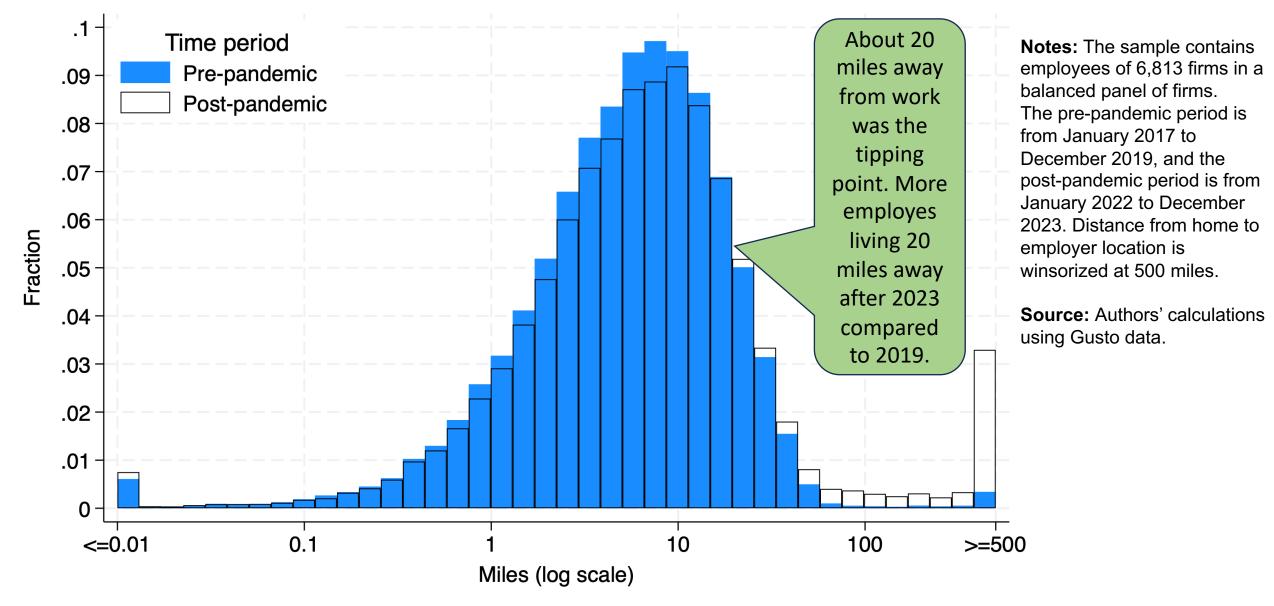
The share of employees living 50+ miles rose five-fold after the pandemic



Notes: The sample contains employees of 5,793 firms in a balanced panel of firms. Employee-level data are reweighted to match the CPS distribution by (age bin) X sex X major industry. Distance from home to employer location is winsorized at 500 miles.

Source: Authors' calculations using Gusto data.

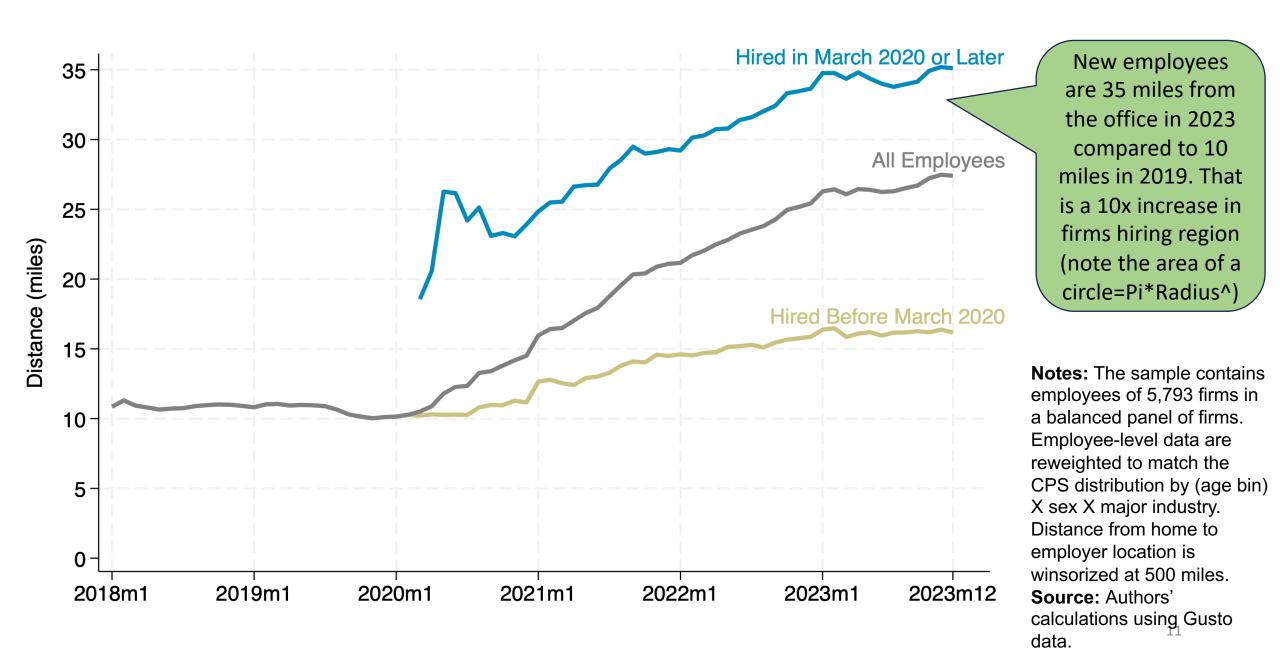
Distribution of the distance from residence to employer after the pandemic has shifted to the right



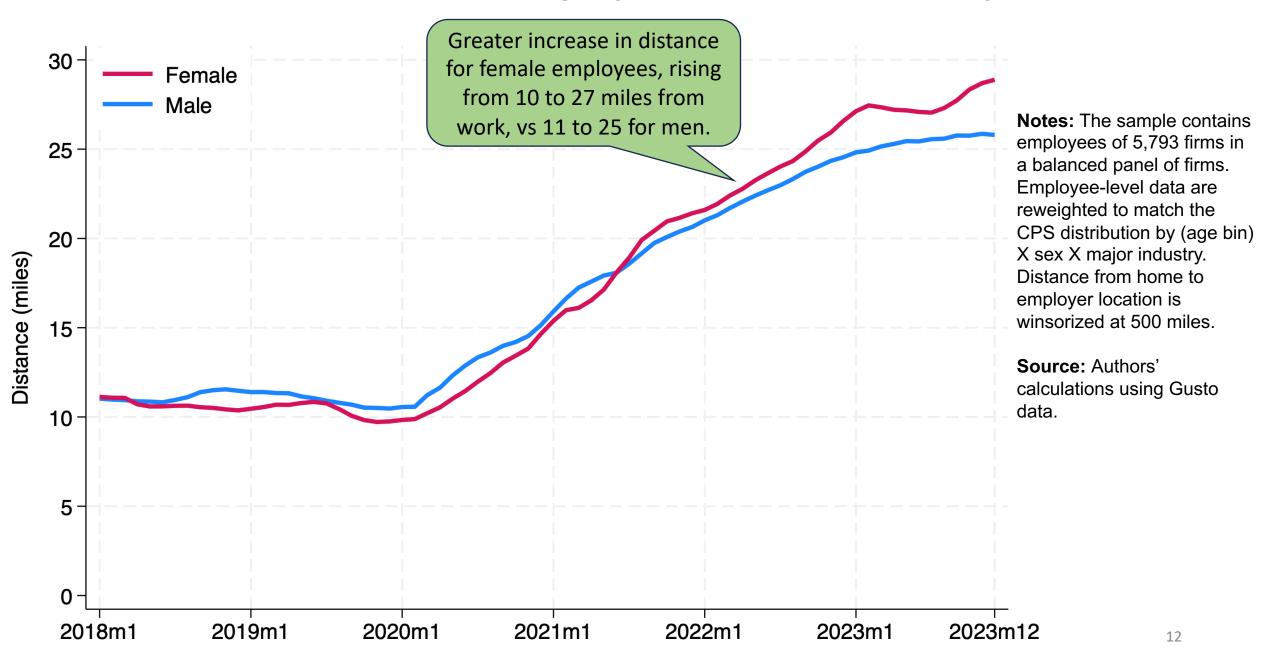
Employees in their 30s live farthest away from their employers after the pandemic 30s and 40 are the ages with the 35 biggest rise in distance, presumably 2022-2023 driven by children at home. 2018-2019 30 -**Notes:** The sample contains employees of 5,793 firms in a balanced 25 panel of firms. Employeelevel data are reweighted Distance (miles) to match the CPS distribution by (age bin) X 20 · sex X major industry. Distance from home to employer location is 15 winsorized at 500 miles. Source: Authors' 10calculations using Gusto data. 5 0 -35-39 25-29 30-34 40-44 45-49 60-64 20-24 50-54 55-59 Age bins

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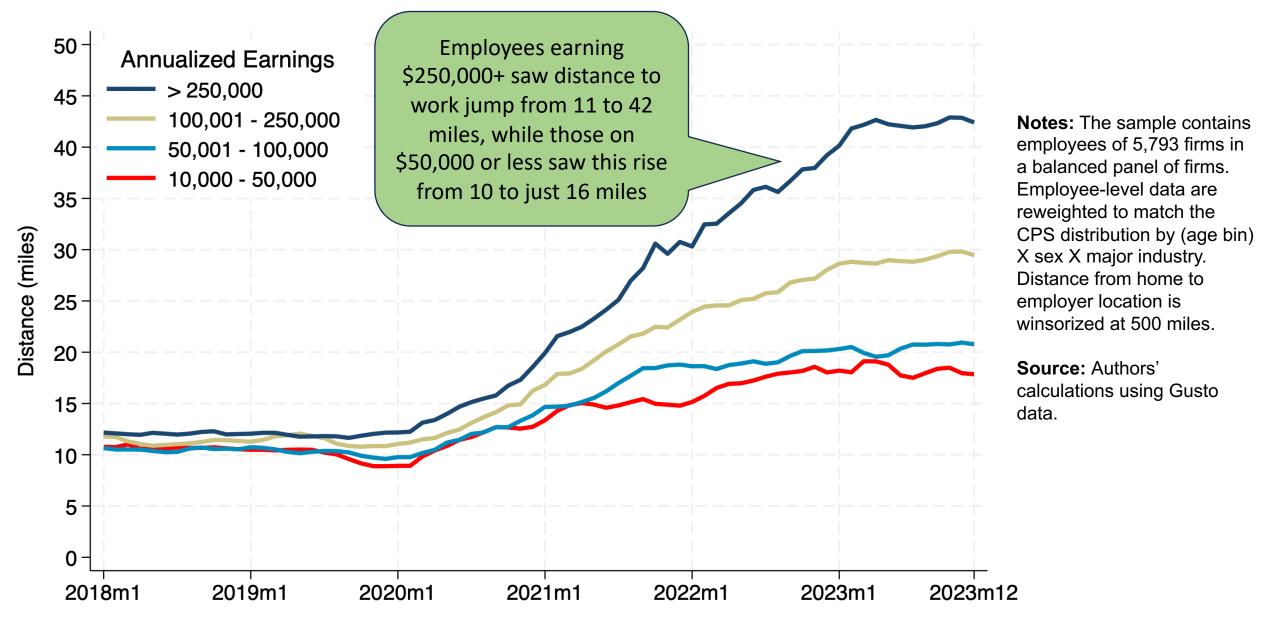
The Rise in Mean Distance Mainly Reflects Persons Hired Since March 2020



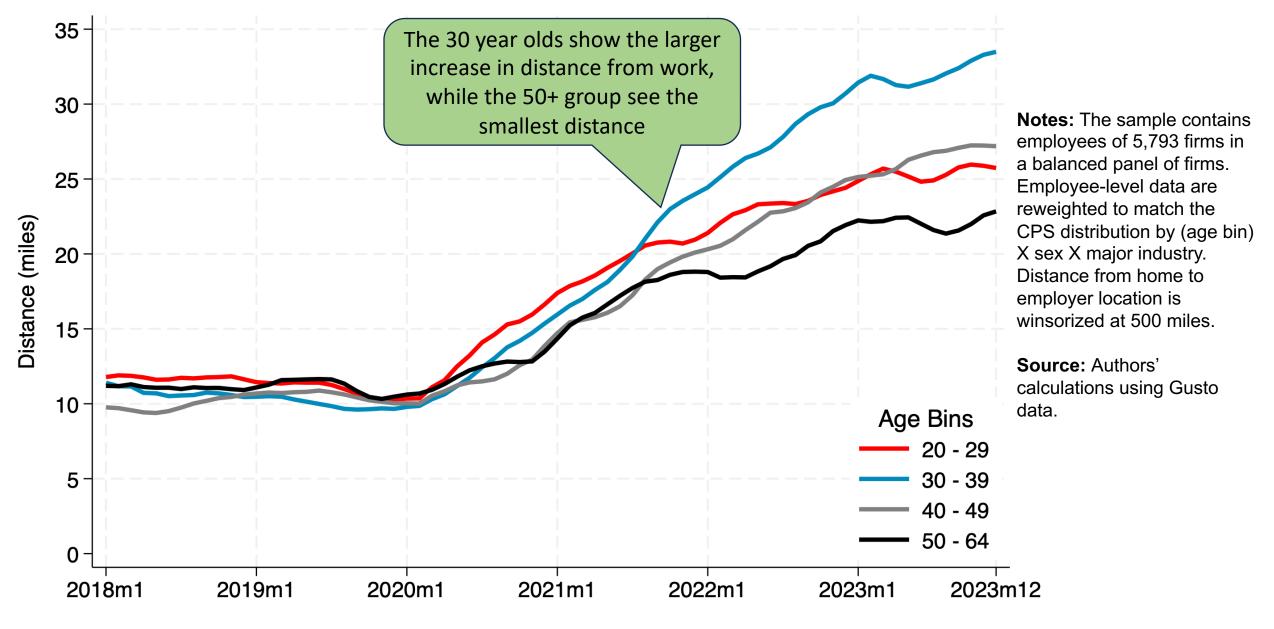
Mean distance to work increased slightly more for female employees



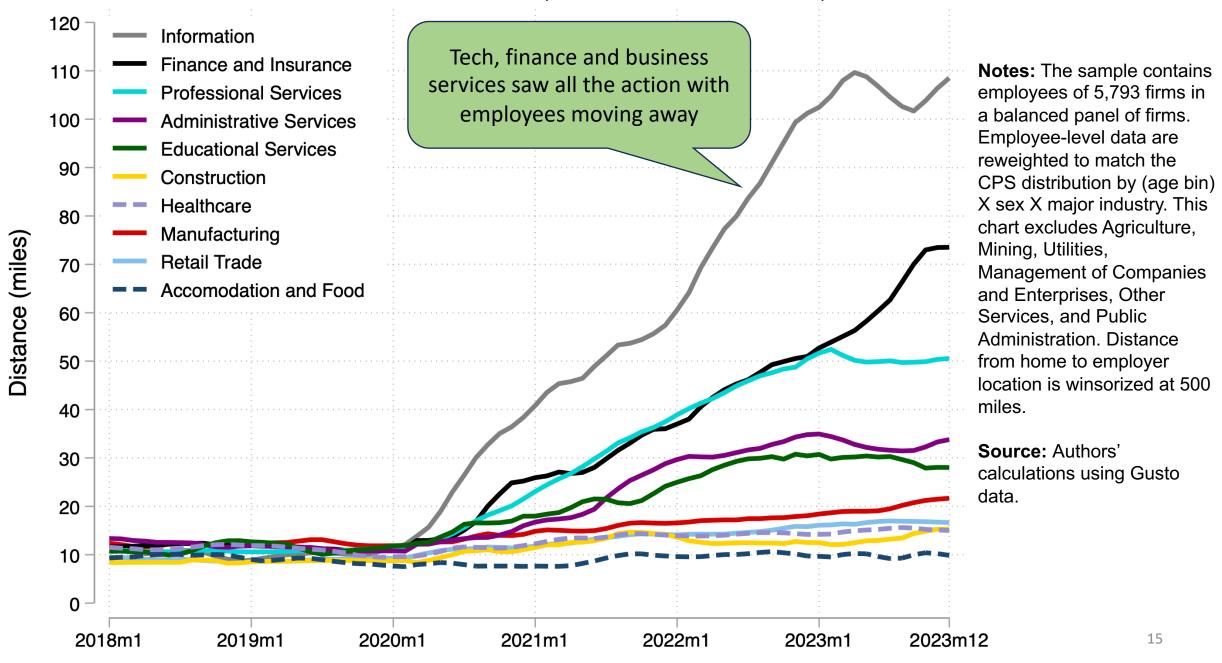
Mean distance rises more for workers with greater annual earnings

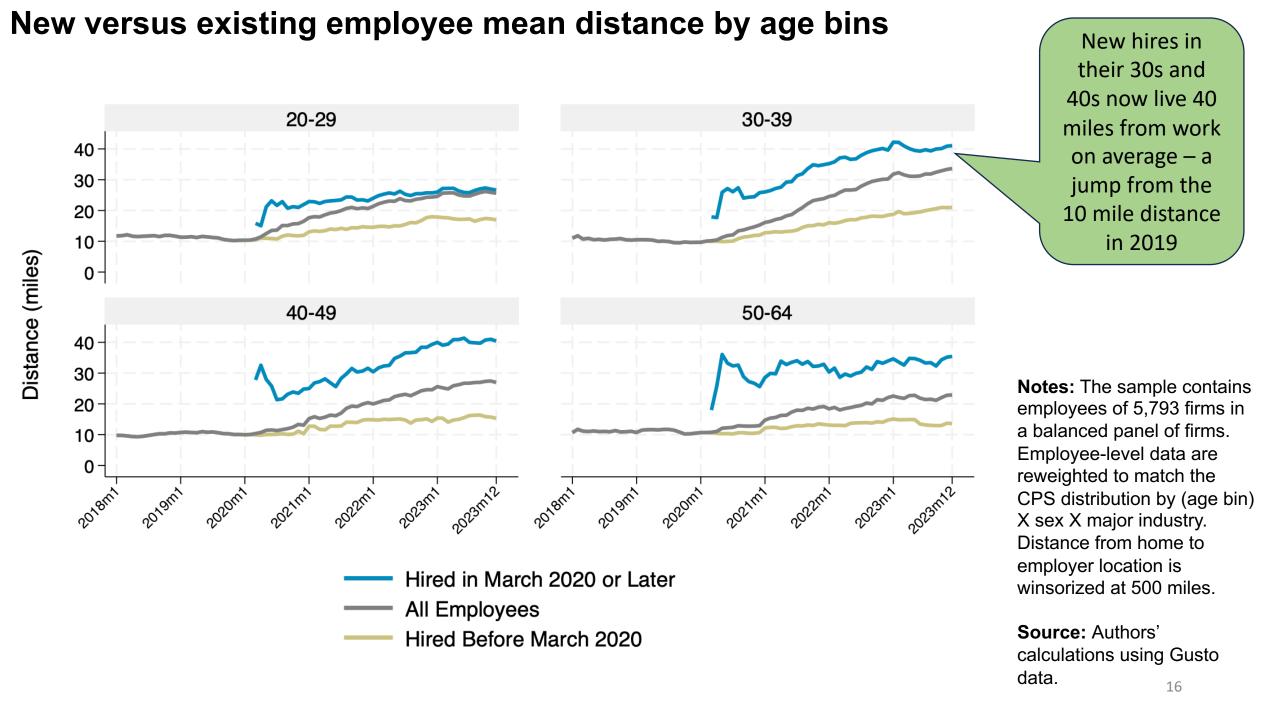


Mean distance rises more for workers in their 30s

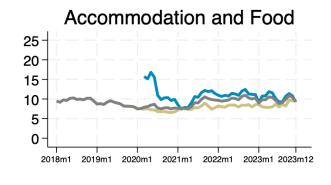


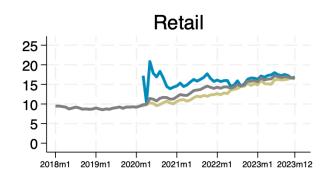
Mean Distance Rises More for Information, Finance & Insurance, and Professional Services

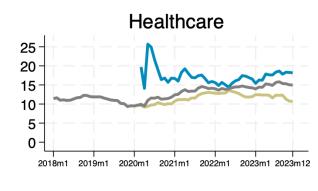


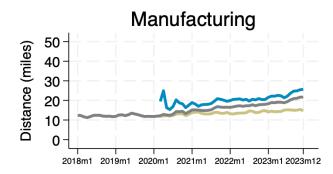


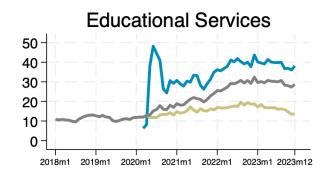
New versus existing employee mean distance by industry

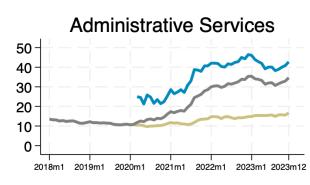




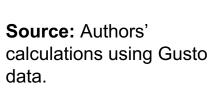


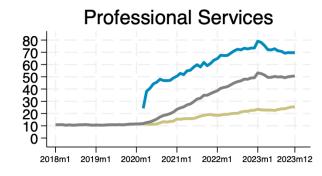


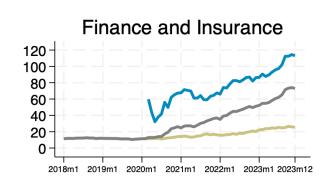


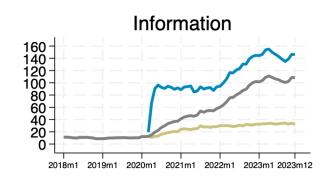


Notes: The sample contains employees of 5,793 firms in a balanced panel of firms. Employee-level data are reweighted to match the CPS distribution by (age bin) X sex X major industry. Distance from home to employer location is winsorized at 500 miles.









Percent of employees by year and distance cutoffs

	Percent >= 50 miles		Percent >= 100 miles		Percent >= 500 miles	
	2019	2023	2019	2023	2019	2023
Annualized earnings > 250 K	0.86	8.82	0.68	7.66	0.42	5.20
Annualized earnings in (100K, 250K)	0.85	5.64	0.61	4.64	0.24	3.20
Information	0.70	23.46	0.47	21.58	0.18	16.08
Finance and Insurance	0.87	13.75	0.63	11.84	0.41	9.20
Professional Services	0.72	11.10	0.50	9.80	0.27	6.50
Employees hired before March 2020	0.82	2.28	0.58	1.90	0.26	1.21
Employees hired in March 2020 or later		7.20		5.81		3.80

Notes: The table shows the percent of employees by distance cutoffs and year for select subsamples. The sample contains employees of 5,793 firms in a balanced panel of firms. Employee-level data are reweighted to match the CPS distribution by (age bin) X sex X major industry. Distance from home to employer location is winsorized at 500 miles.

Source: Authors' calculations using Gusto data.

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Main Results

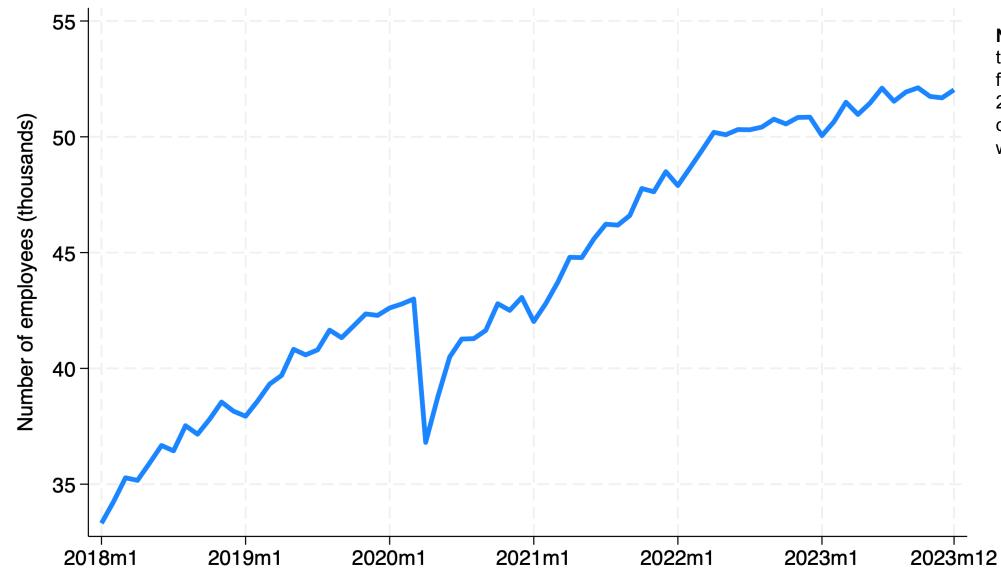
Conclusions and next steps

Some Next Steps

- How does the propensity to hire distant employees since March 2020 vary with employer characteristics – size, growth rate, local population density (near the employer), pay level, and more?
- What percentage of distant employees live in the same state as the employer's location, an adjacent state, another state?
- Do we see a concentration of distant employees who live in states with no income tax or a very low tax rate?
- Can we identify particular localities that have become havens for employees who live far from their employers?
- How does turnover differ between more and less distant employees?
- How do pay levels and growth rates vary by distance to employer?

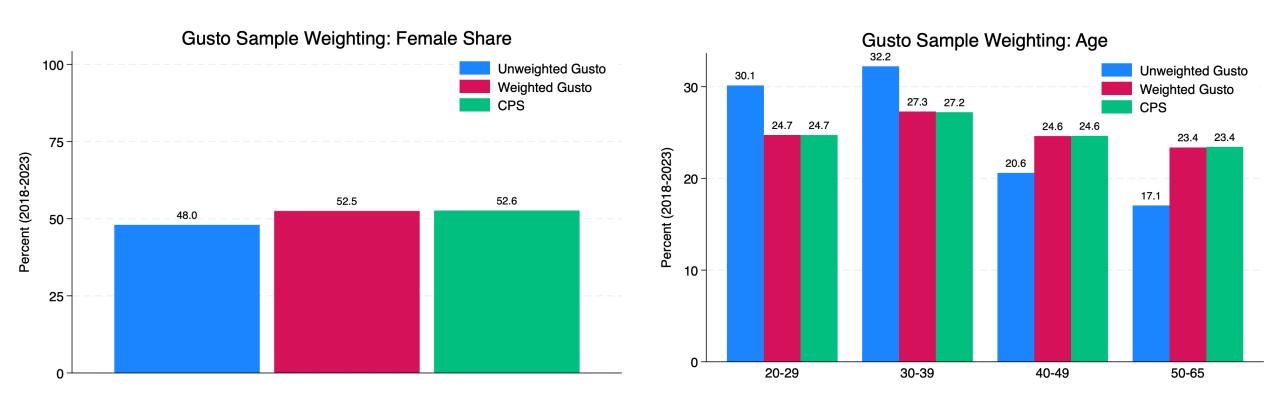
Appendix

Number of employees



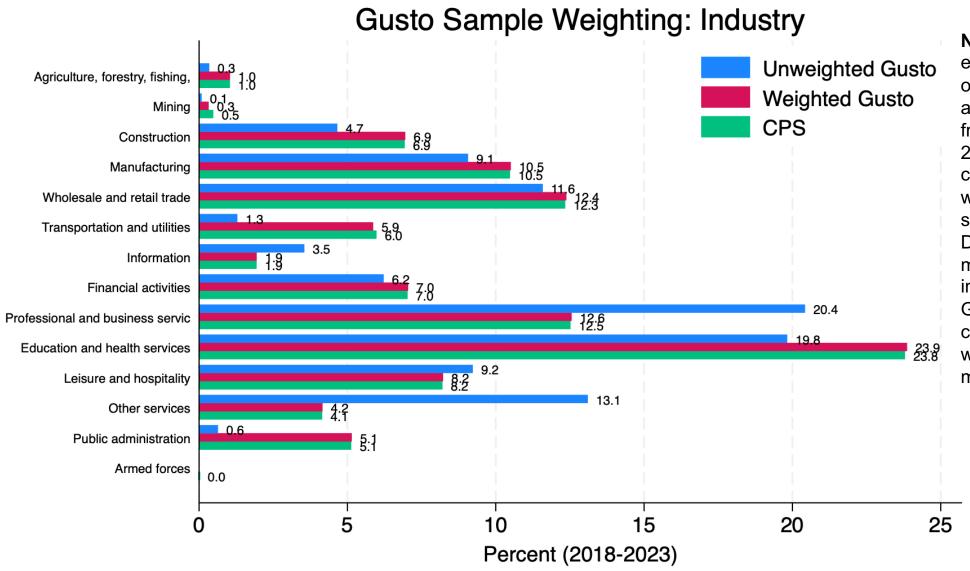
Notes: Sample is employees of the balanced panel of 6813 firms from January 2018 to December 2023 after the firm level data cleaning for long pre-pandemic work-home distances.

We reweighted the Gusto data to match the current population survey by employee age and gender



Notes: Gusto sample is employees of the balanced panel of 5793 firms with non-missing age, gender, and industry codes from January 2018 to December 2023 after the firm level data cleaning for long pre-pandemic work-home distances. The CPS sample is from January 2018 to December 2023. The weights to match the gender-age bin-industry sector cell densities in Gusto to CPS cell densities are capped so that cells are not weighted less than 0.05x or more than 20x.

We also reweighted to match the CPS by industry



Notes: Gusto sample is employees of the balanced panel of 5793 firms with non-missing age, gender, and industry codes from January 2018 to December 2023 after the firm level data cleaning for long pre-pandemic work-home distances. The CPS sample is from January 2018 to December 2023. The weights to match the gender-age binindustry sector cell densities in Gusto to CPS cell densities are capped so that cells are not weighted less than 0.05x or more than 20x.