My Main Points

- For the last 40 years, information technology seems to have been a complement with face-to-face interaction rather than substitutes for it. So I am more skeptical about the death of the office.
  - But there is a downward shift in demand for office space, which should show up in lower rents in some places and vacancies in others.
- Work has evolved in a way that makes our economy more vulnerable to pandemics.
  - But the pandemic has so far been marked more by a shift in labor supply than a shift in labor supply..
- The rise of the service economy is also related to the terrible spatial patterns in joblessness, which are unlikely to be reduced by either zoom or the pandemic.

KASTLE BACK TO WORK BAROMETER

3.21.22

Weekly Occupancy Report from Kastle Access Control System Data

OCCUPANCY OVER TIME - MARCH 5, 2020 TO MARCH 16, 2022

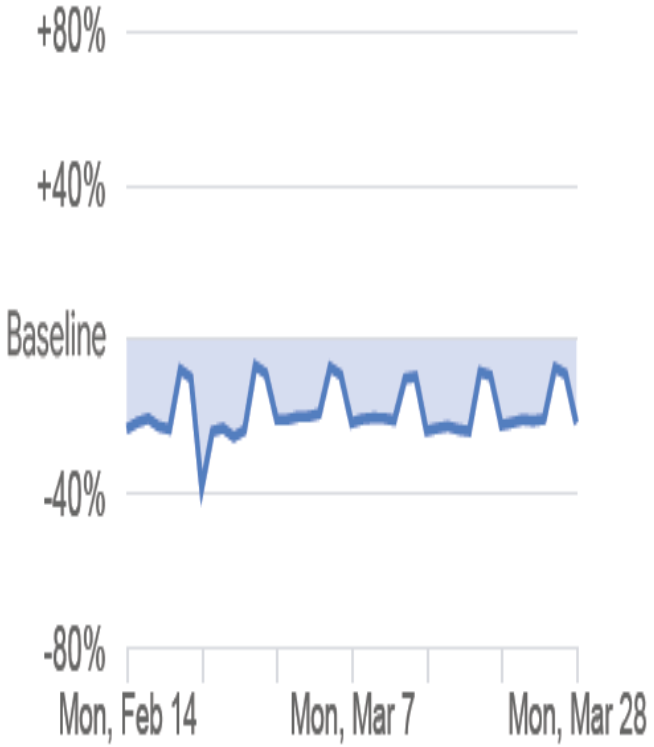
*On March 22, 2021, Kastle moved from daily to weekly data reporting to provide a more robust and comprehensive picture of office occupancy. We have also recalculated data back to the start of the time series for consistency. This has only a marginal impact on most cities and the national average.

Google Visits to Workplaces relative to January/February 2020 (US and California)

Workplaces

-21%

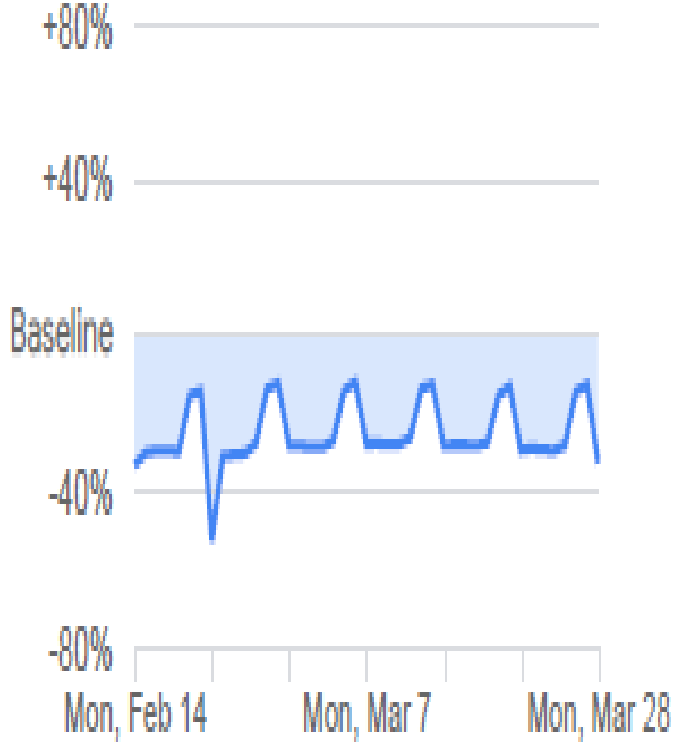
compared to baseline

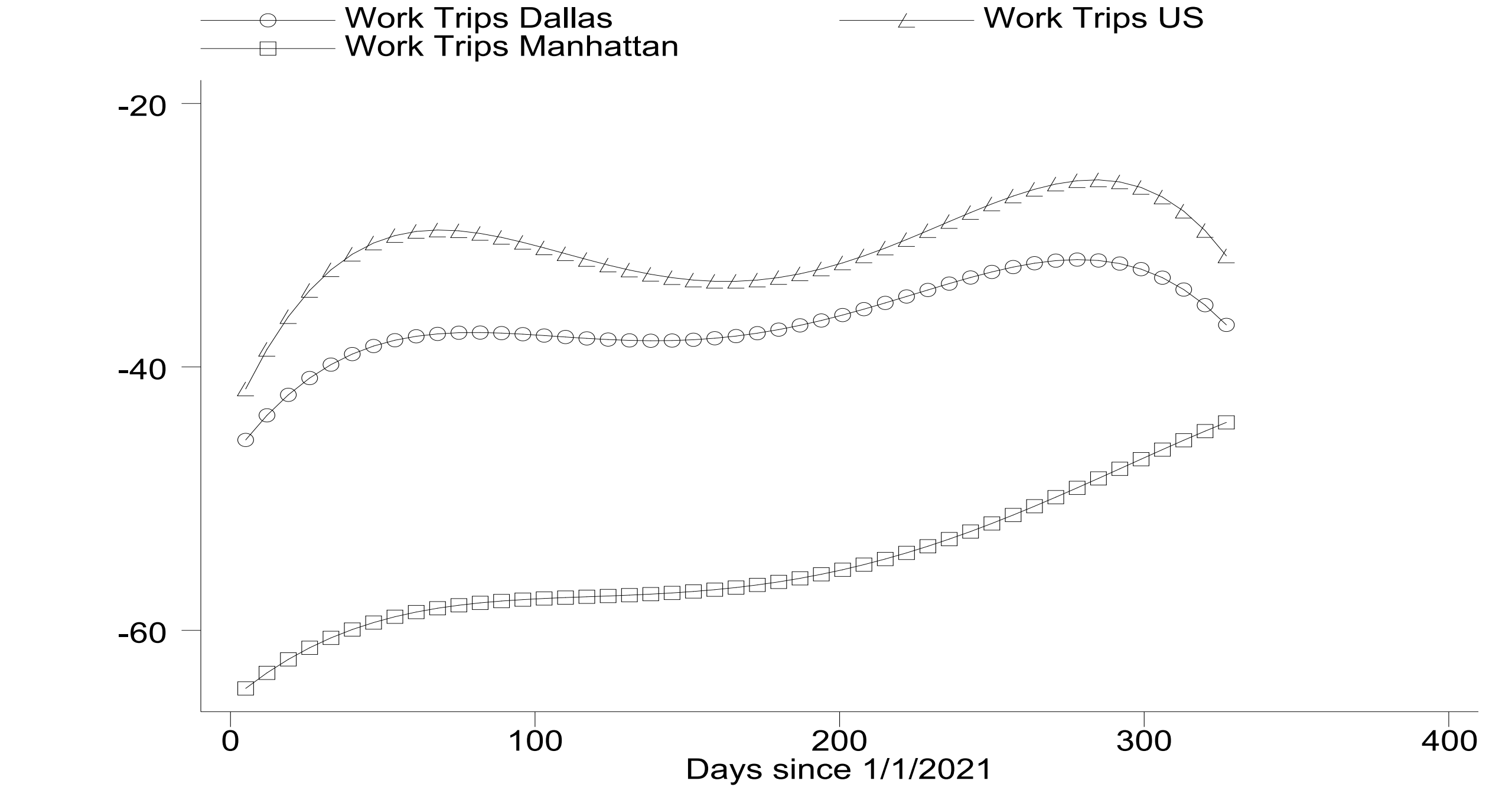


Workplaces

-33%

compared to baseline





Decline in Google Work Visits Relative to Jan. 2020

Globalization and Automation Killed NYC Industries, Like NYC Garments

But these…

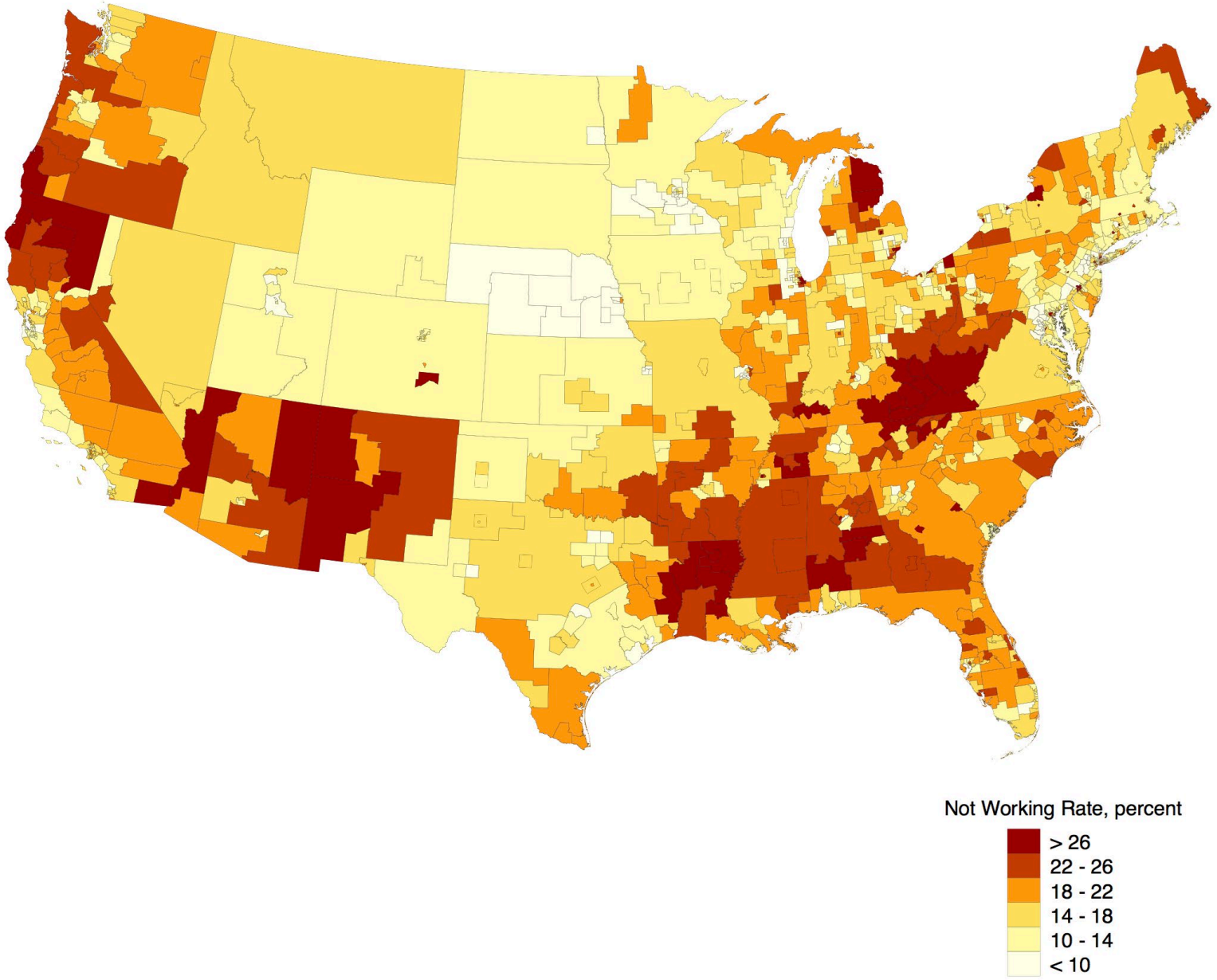
Image by ChtiTux

Image by Danamania

Didn’t kill finance and urban information jobs, and zoom is unlikely to kill the office either

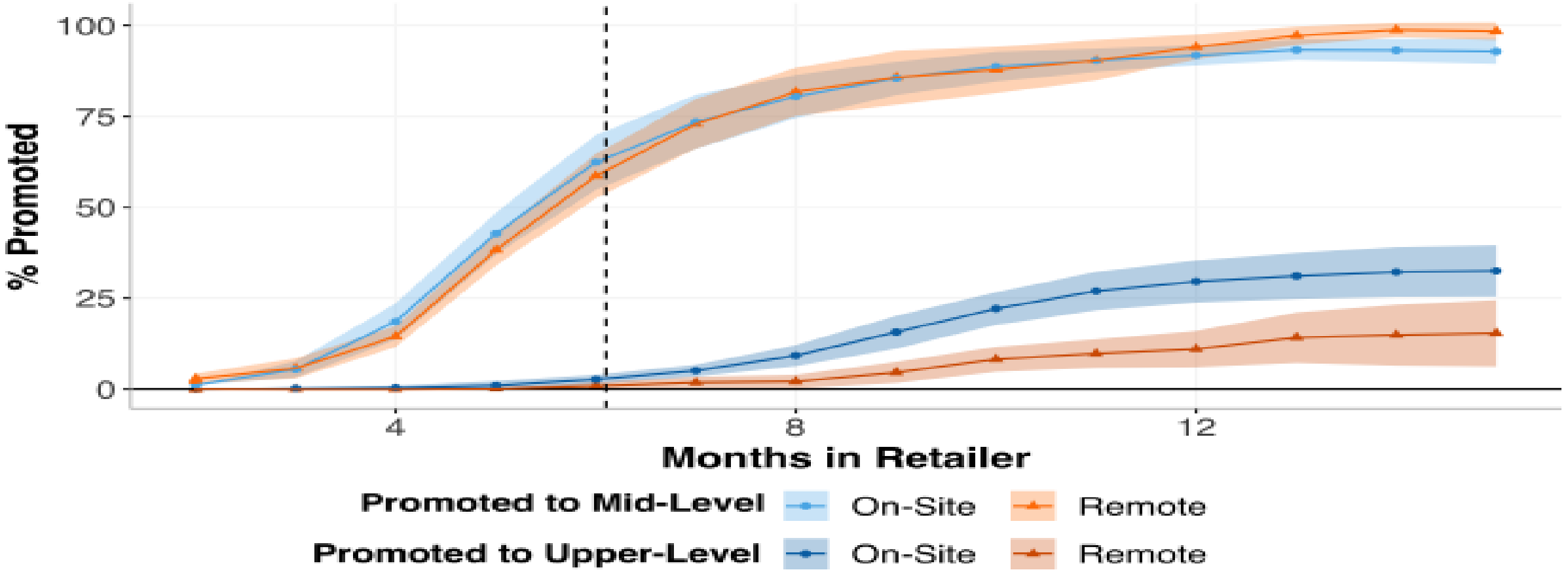
Image by Runner1928

Geography of not working: Prime men 2015



Emmanuel and Harrington: Going Remote

Figure A.2: Promotion Shares By Tenure for Remote and On-Site Workers



nature human behaviour

ARTICLES

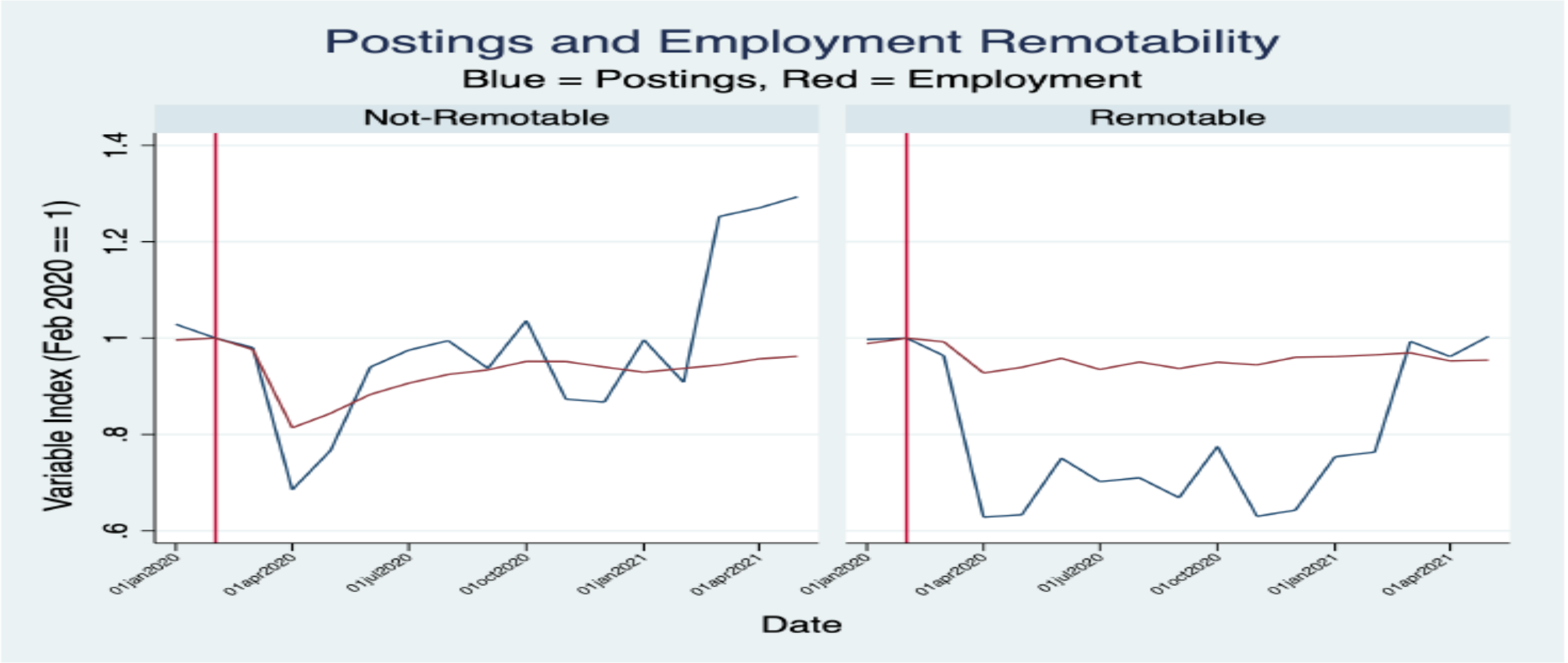
https://doi.org/10.1038/s41562-021-01196-4

The effects of remote work on collaboration among information workers

Longqi Yang[1]✉, David Holtz[2,3], Sonia Jaffe[1], Siddharth Suri[1], Shilpi Sinha[1], Jeffrey Weston[1], Connor Joyce[1], Neha Shah[1], Kevin Sherman[1], Brent Hecht[1] and Jaime Teevan[1]

The coronavirus disease 2019 (COVID-19) pandemic caused a rapid shift to full-time remote work for many information workers. Viewing this shift as a natural experiment in which some workers were already working remotely before the pandemic enables us to separate the effects of firm-wide remote work from other pandemic-related confounding factors. Here, we use rich data on the emails, calendars, instant messages, video/audio calls and workweek hours of 61,182 US Microsoft employees over the first six months of 2020 to estimate the causal effects of firm-wide remote work on collaboration and communication. Our results show that firm-wide remote work caused the collaboration network of workers to become more static and siloed, with fewer bridges between disparate parts. Furthermore, there was a decrease in synchronous communication and an increase in asynchronous communication. Together, these effects may make it harder for employees to acquire and share new information across the network.

Companies Didn’t Hire Remote Workers! (Work is by Morales-Arilla and Daboin)



The Inequality of the Remote Workplace

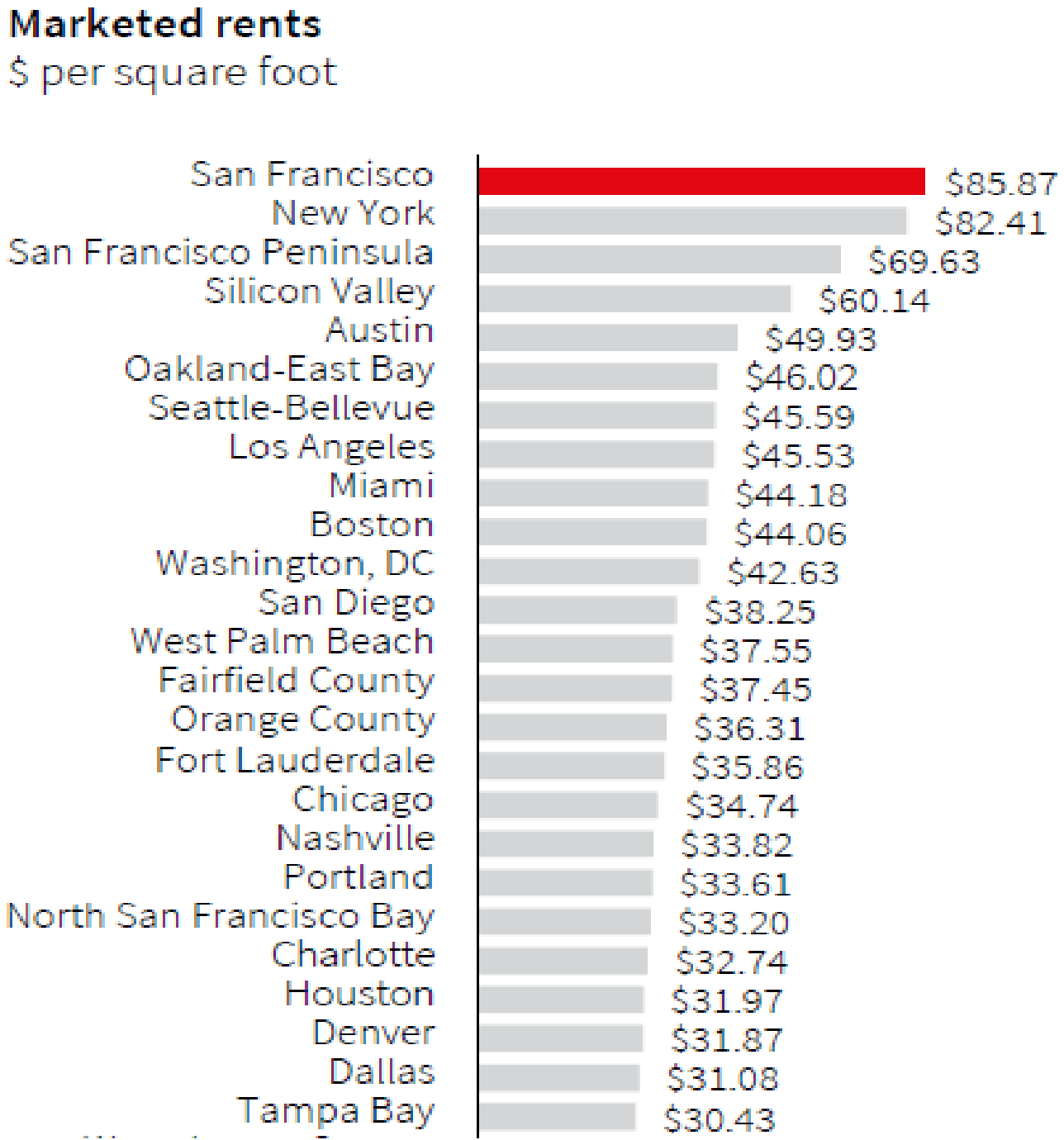
May 2020	Total Civilian Population	Unable to Work Due to Pandemic (Closure or Lost Business)		Total Employed Population	Teleworking Due to Pandemic	
		Number	Percent		Number	Percent
Total, 25 years and over	222,559	41,616	18.7	123,109	45,989	37.4
Less than a high school diploma	19,607	3,941	20.1	6,887	355	5.2
High school graduates, no college[3]	61,403	12,025	19.6	28,708	4,379	15.3
Some college or associate degree	57,510	12,235	21.3	31,581	7,928	25.1
Bachelor's degree and higher[4]	84,038	13,416	16.0	55,933	33,327	59.6
Bachelor's degree only	51,890	9,011	17.4	33,778	18,069	53.5
Advanced Degree	32,148	4,405	13.7	22,155	15,258	68.9

Data from JLL

These high end markets are unlikely to see large scale vacancies, even with substantial price falls

The margin of error between current price and operating cost is too large.

Some Class C may convert to residential



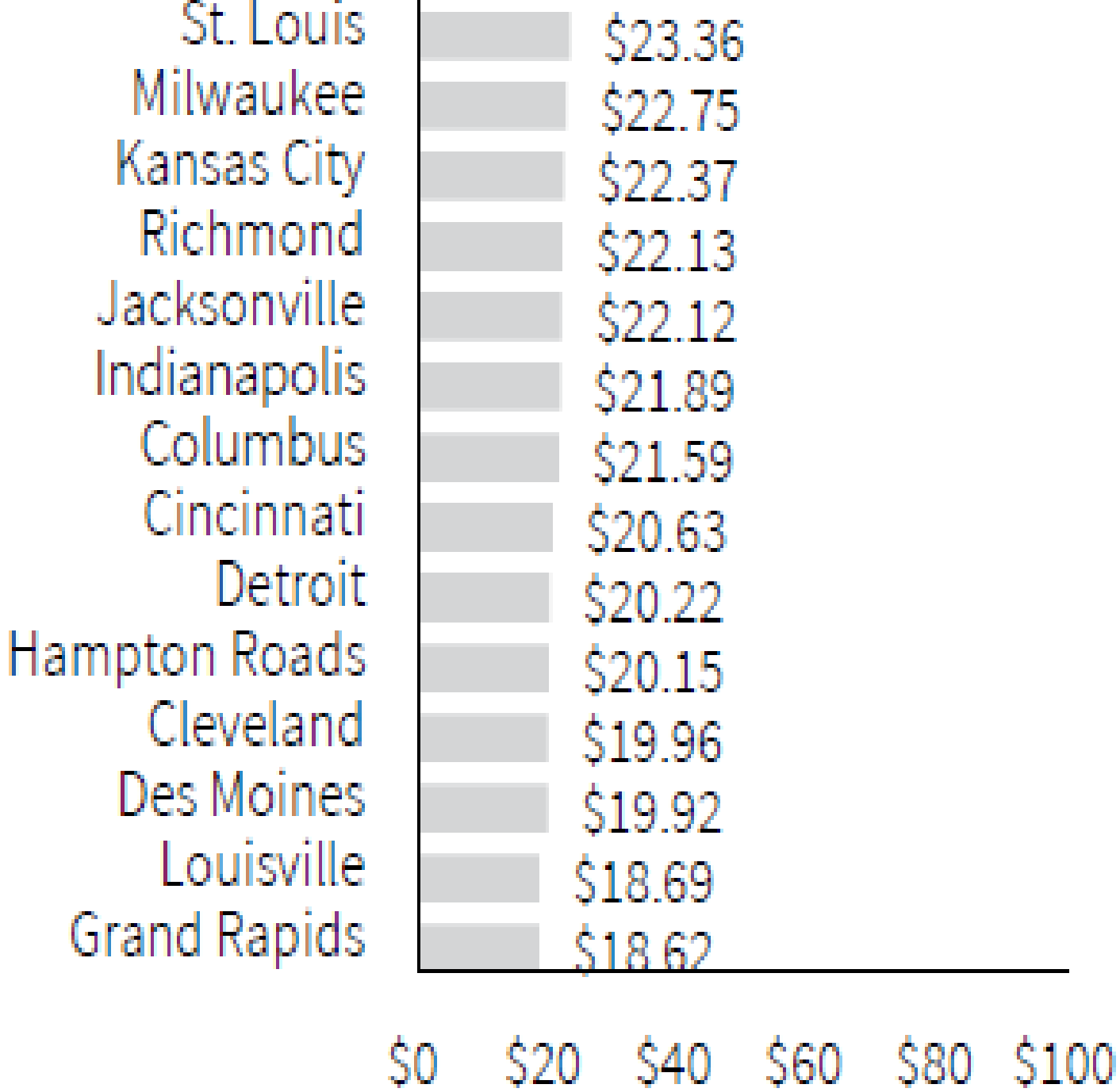
Data from JLL

These lower end markets have a much smaller margin of error.

And less demand for residential conversion.

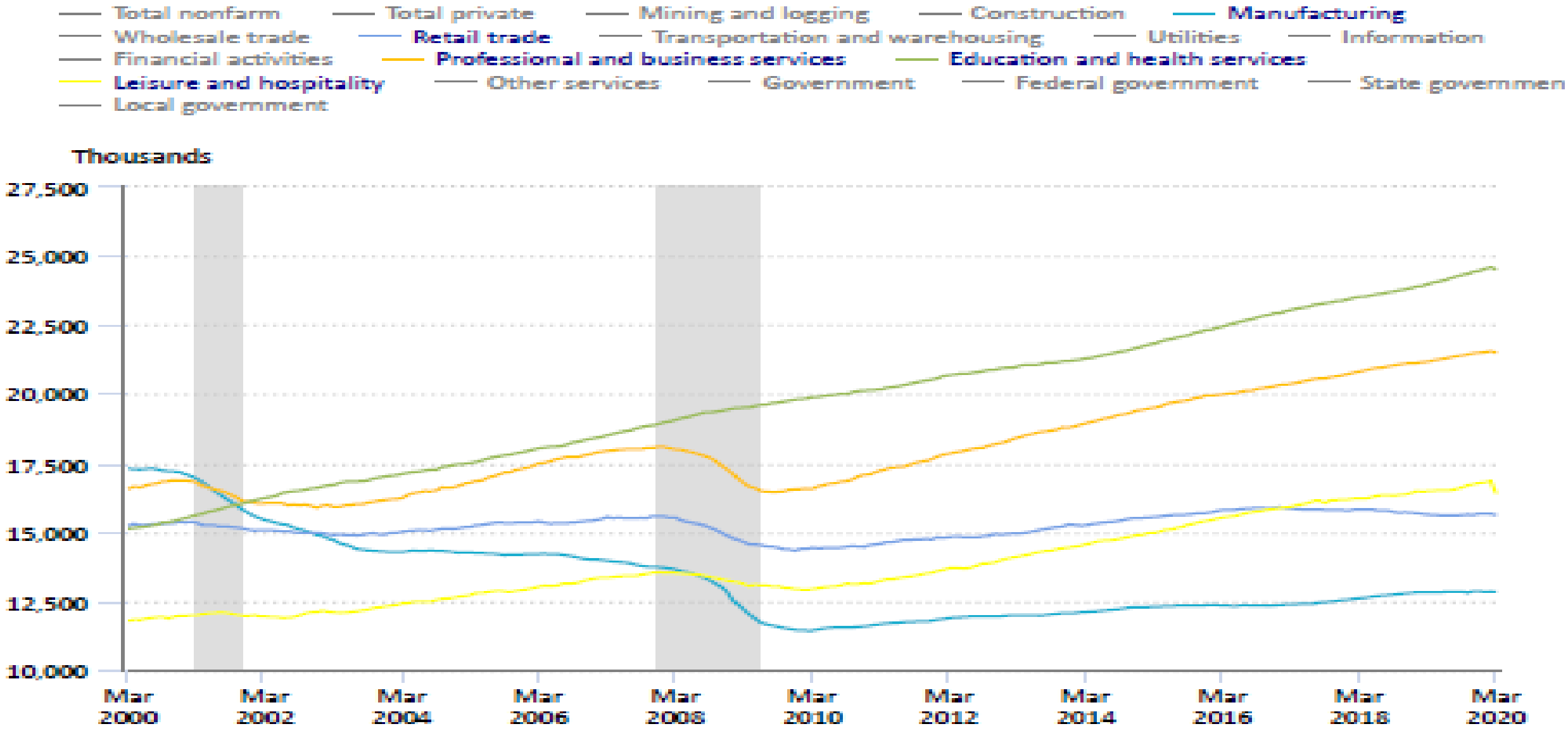
This should mean that vacancies are far more plausible.

That will create negative local spillovers.



Employment levels by industry, seasonally adjusted

Click and drag inside chart to change dates displayed



Hover over chart to view data.

Note: Shaded areas represent recessions, as determined by the National Bureau of Economic Research.

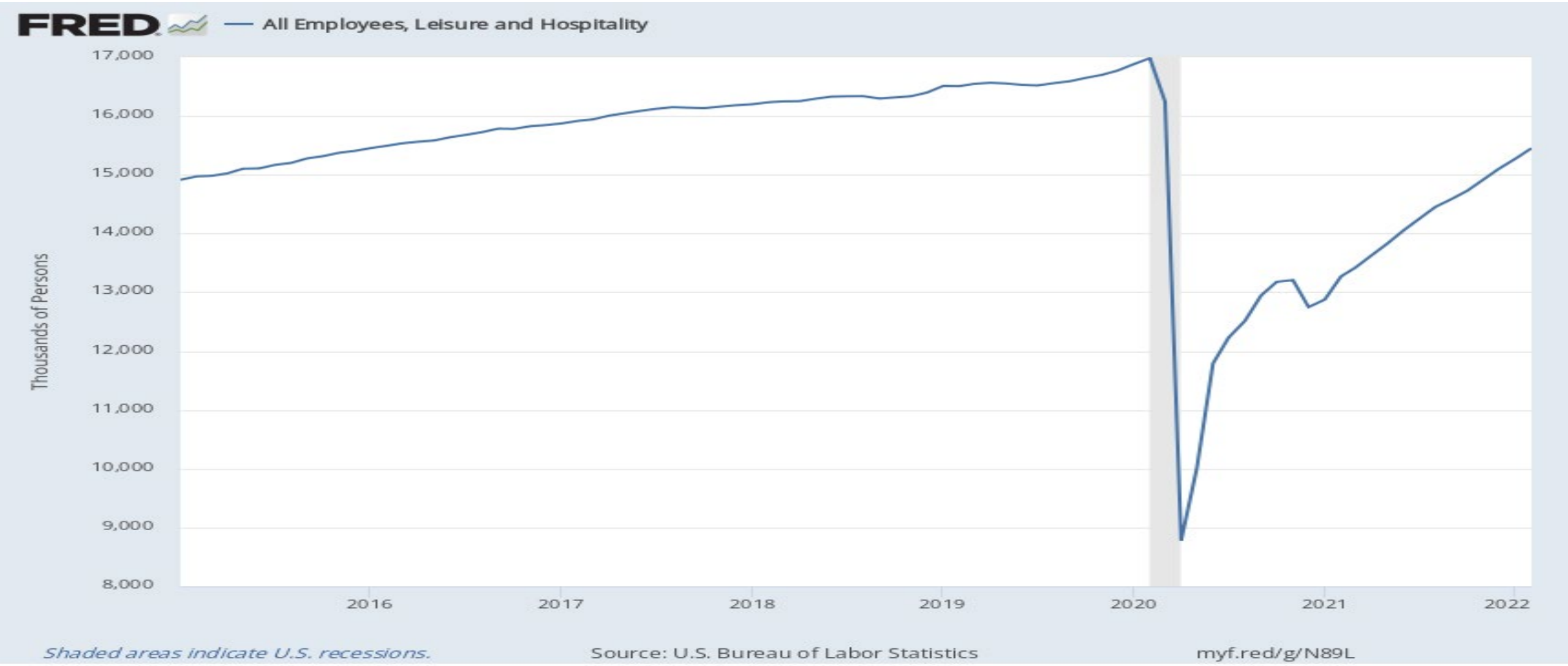
Source: U.S. Bureau of Labor Statistics.

Farm to Factory to Urban Service Workers: to Extreme Pandemic Vulnerability

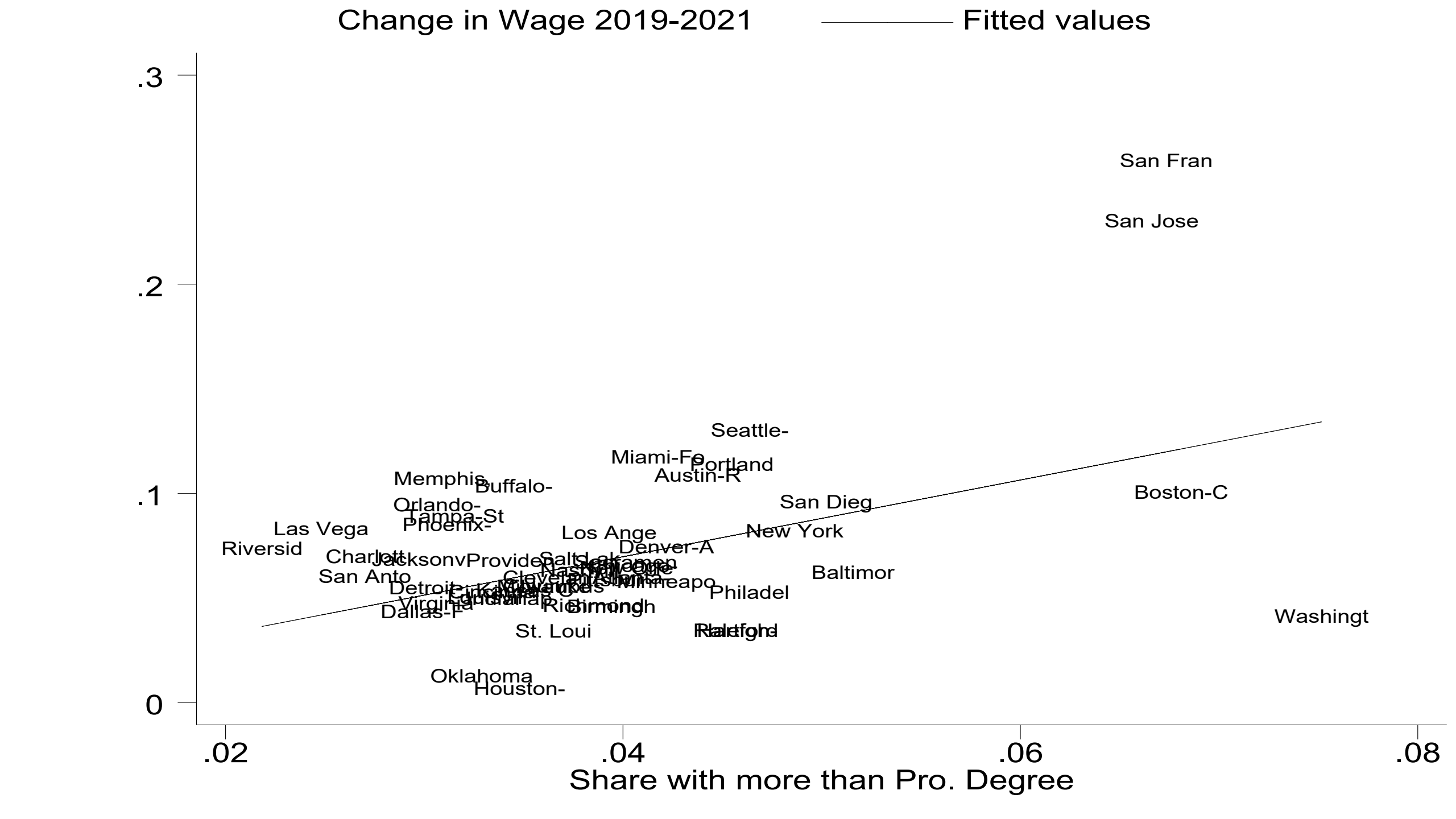
Closure Rates by Industry (circa April 1, 2020)

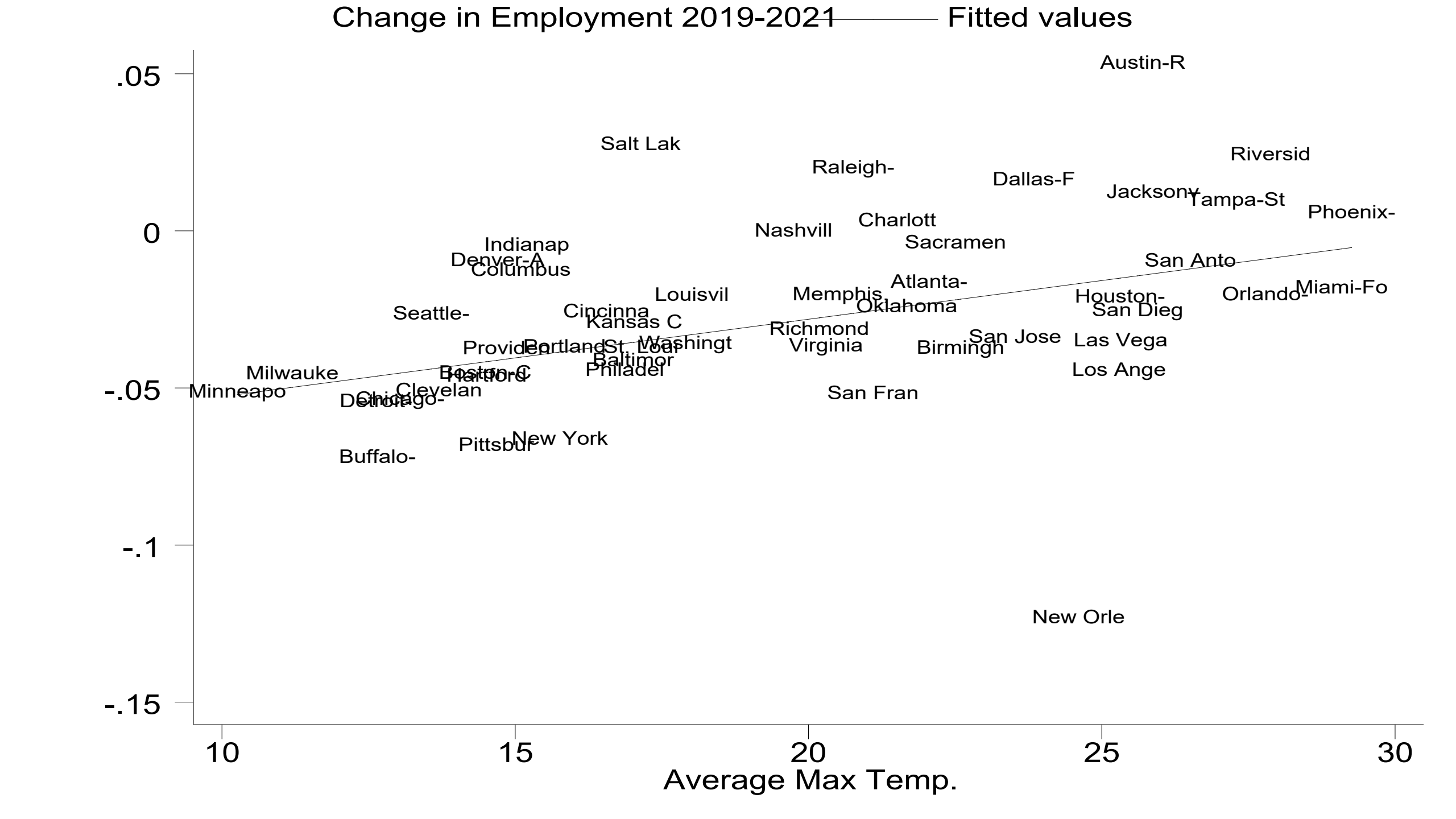
	Currently Closed		Exp Closed December		Weeks COVID Will Last		Current v Jan Employment	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Panel A: Raw Data								
All Retailers, except Grocery	0.53	0.50	0.45	0.50	14.1	9.5	0.49	0.42
Arts and entertainment	0.70	0.46	0.42	0.49	17.5	11.3	0.40	0.46
Banking/finance	0.19	0.39	0.25	0.43	16.1	10.9	0.81	0.33
Construction	0.32	0.47	0.38	0.49	14.3	10.3	0.66	0.40
Health care	0.45	0.50	0.29	0.45	15.1	10.4	0.69	0.37
Other	0.39	0.49	0.35	0.48	16.6	11.2	0.70	0.41
Personal Services	0.86	0.34	0.39	0.49	11.8	8.3	0.35	0.40
Professional Services	0.21	0.41	0.29	0.45	15.7	10.6	0.80	0.41
Real Estate	0.37	0.48	0.30	0.46	15.8	11.4	0.70	0.41
Restaurant/Bar/Catering	0.56	0.50	0.52	0.50	13.1	8.7	0.24	0.37
Tourism/Lodging	0.61	0.49	0.45	0.50	16.2	10.0	0.30	0.35
Total	0.45	0.50	0.37	0.48	15.5	10.6	0.58	0.44
N	4413	.	3953	.	4000	.	3935	.

I thought that declining demand for urban service workers would be terrible for incomes.

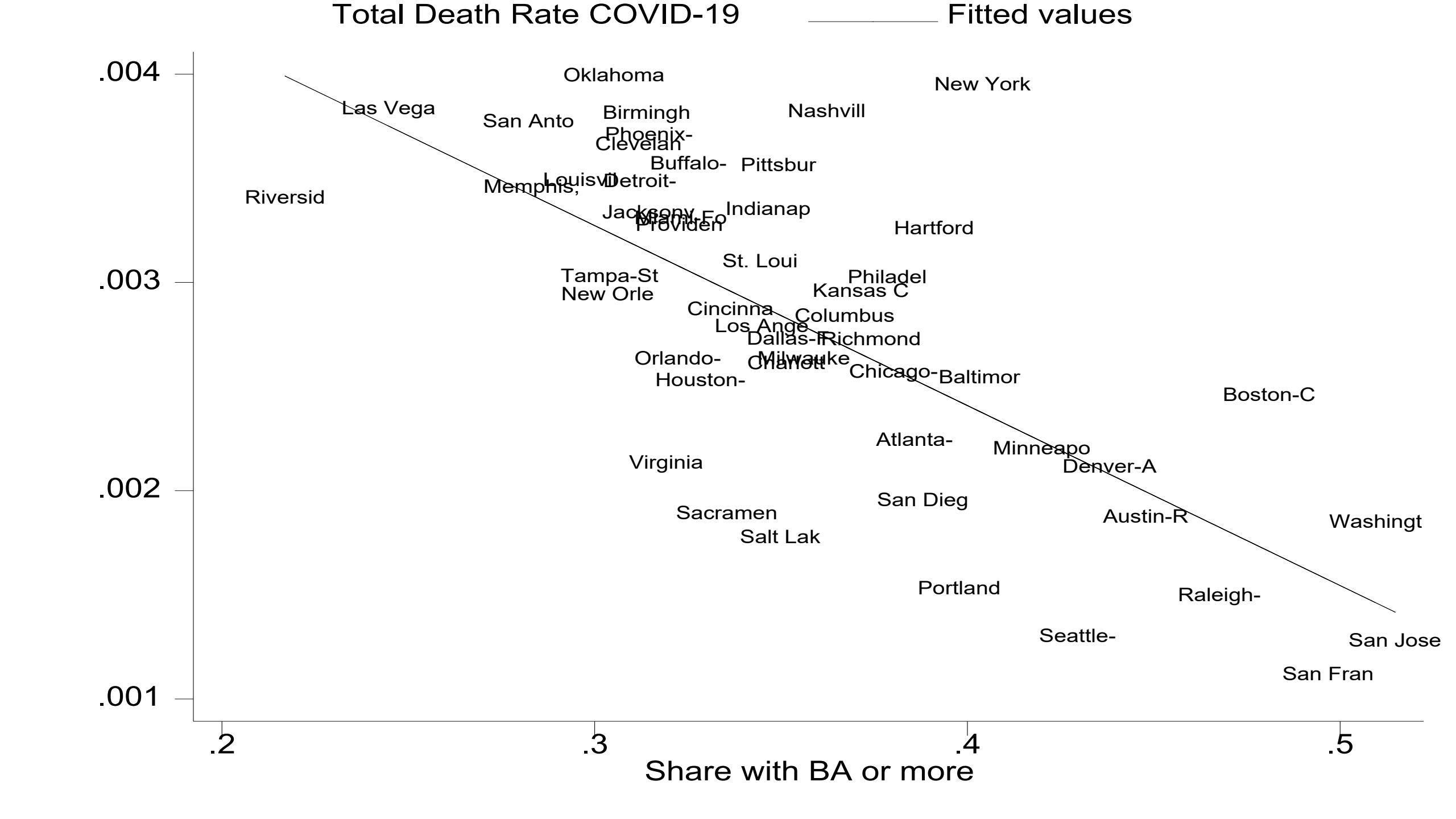


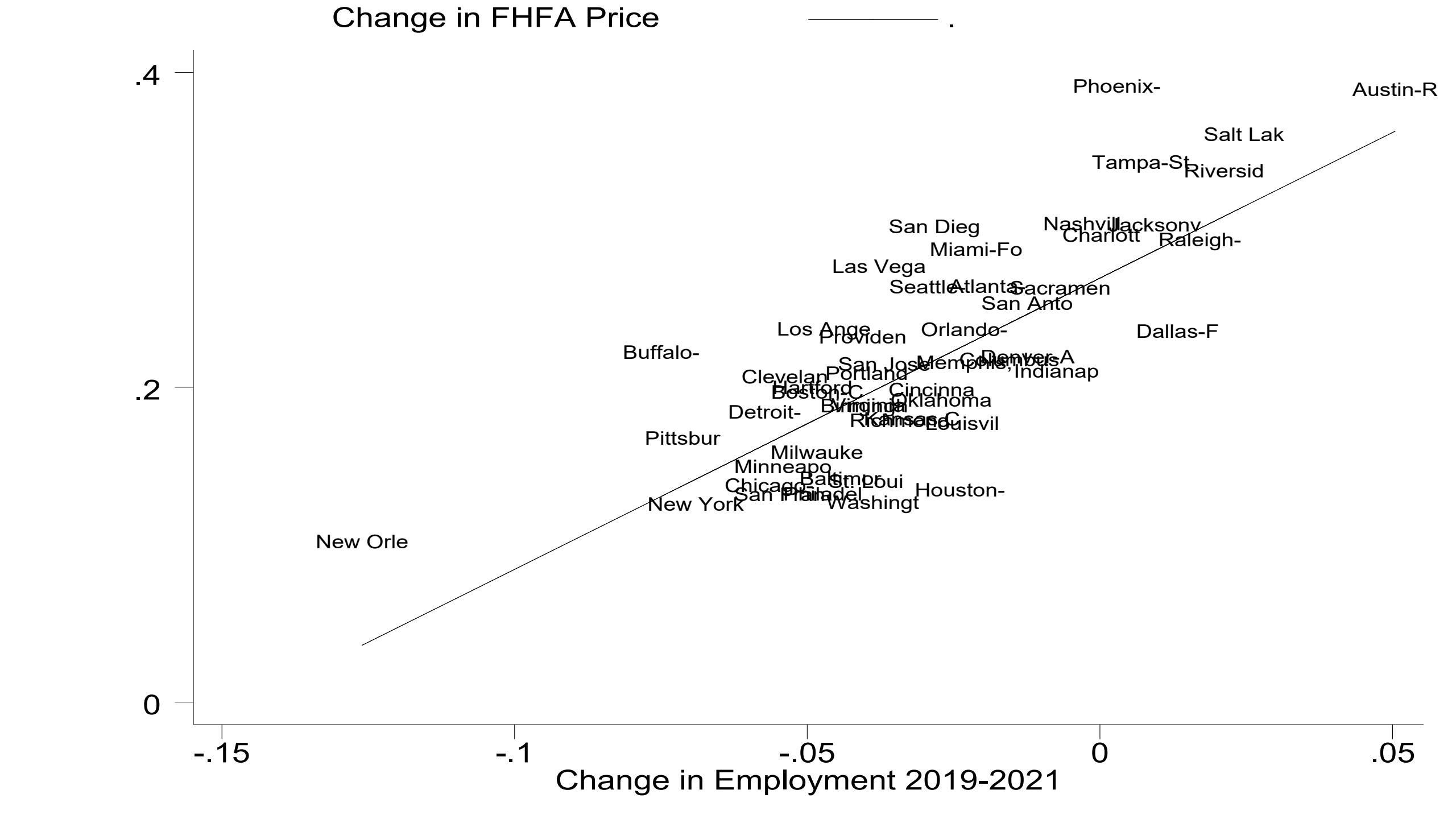
But $4 trillion in Federal spending and the great resignation mean big pay increases


Change in Wage 2019-2021
Fitted values
.3
.2
.1
0
.02
.04
.06
.08
Share with more than Pro. Degree
San Fran
San Jose
Seattle-
Miami-Fo
Portland
Austin-R
Memphis
Buffalo-
Boston-C
Orlando-
San Dieg
Tampa-St
Las Vega
Phoenix-
Los Ange
New York
Riversid
Denver-A
Charlott
Jacksonv
Provide
Baltimor
San Anto
Philadel
Dallas-F
St. Loui
Washingt
Oklahoma
Houston-

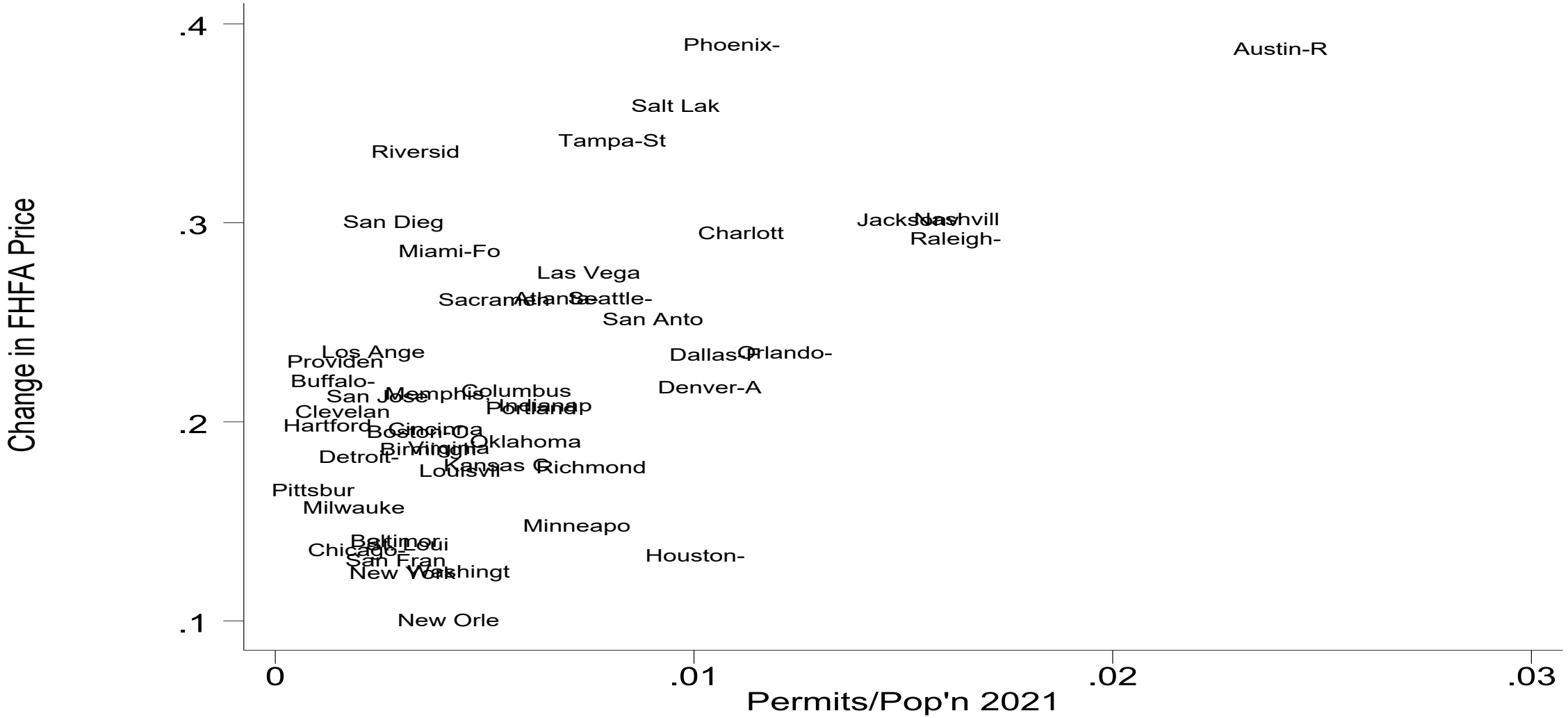

Change in Employment 2019-2021
Fitted values
.05
0
-.05
-.1
-.15
10
15
20
25
30
Average Max Temp.
Austin-R
Salt Lak
Riversid
Raleigh-
Dallas-F
Jacksony
Tampa-St
Phoenix-
Charlott
Nashvill
Sacramen
Indianap
Denver-A
Columbus
San Anto
Atlanta-
Louisvil
Memphis
Houston-
Orlando-
Miami-Fo
Oklahoma
San Dieg
Seattle-
Cincinna
Kansas C
Richmond
Virginia
San Jose
Las Vega
Birmingh
Washingt
Baltimor
Philadel
Los Ange
Milwauke
Minneapo
Cleveland
San Fran
New York
Pittsbur
Buffalo-
New Orle

Correlation Coefficients (50 observations)	Change in Earnings 2019-2021	Change in Employment 2019-2021	Total COVID-19 Death Rate
Change in Earnings	1.000	-0.0616	-0.4369
Change in Employment	-0.0616	1.000	-0.1475
COVID-19 Death Rate	-0.4369	-0.1475	1.00
Log(Population)	0.1142	-0.0724	-0.0922
Share of Adults with a B.A. or More	0.4040	-0.0538	-0.7115
Share of Adults with a Professional Degree +	0.4644	-0.2708	-0.5730
Average Precipitation	-0.1009	0.2027	-0.0720
Average Maximum Temperature	0.1549	0.4283	0.0651

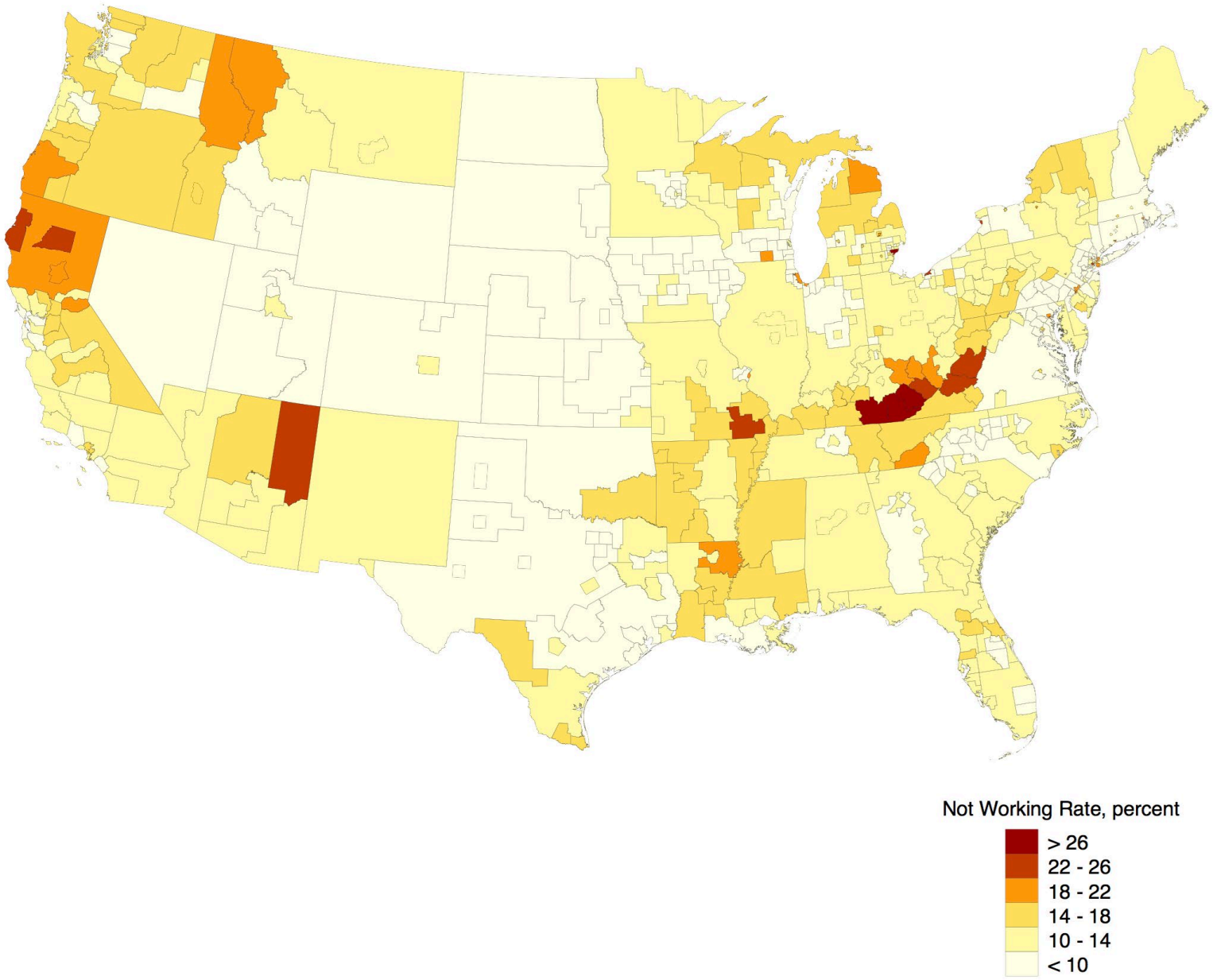

Total Death Rate COVID-19
Fitted values
.004
.003
.002
.001
.2
.3
.4
.5
Share with BA or more
Oklahoma
New York
Las Vega
San Anto
Birmingh
Nashvill
Phoenix-
Clevelan
Buffalo-
Pittsbur
Louisvil
Detroit-
Memphis,
Riversid
Jacksony
Indianap
Hartford
Providen
St. Loui
Tampa-St
New Orle
Philadel
Kansas C
Cincinna
Columbus
Los Ange
Dallas-F
Richmond
Orlando-
Milwauke
Charlott
Chicago-
Baltimor
Houston-
Boston-C
Atlanta-
Minneapo
Virginia
Denver-A
San Dieg
Sacramen
Austin-R
Washingt
Salt Lak
Portland
Raleigh-
Seattle-
San Jose
San Fran


Change in FHFA Price
.4
.2
0
-.15
-.1
-.05
0
.05
Change in Employment 2019-2021
Phoenix-
Austin-R
Salt Lak
Tampa-St
Riversid
San Dieg
Nashvill
Jacksony
Charlott
Raleigh-
Miami-Fo
Las Vega
Seattle-
Atlanta-
Sacramen
San Anto
Los Ange
Orlando-
Dallas-F
Providen
Buffalo-
Indianap
Clevelan
Portland
Cincinna
Oklahoma
Detroit-
Louisvil
Pittsbur
Milwauke
Minneapo
Houston-
New York
Washingt
New Orle

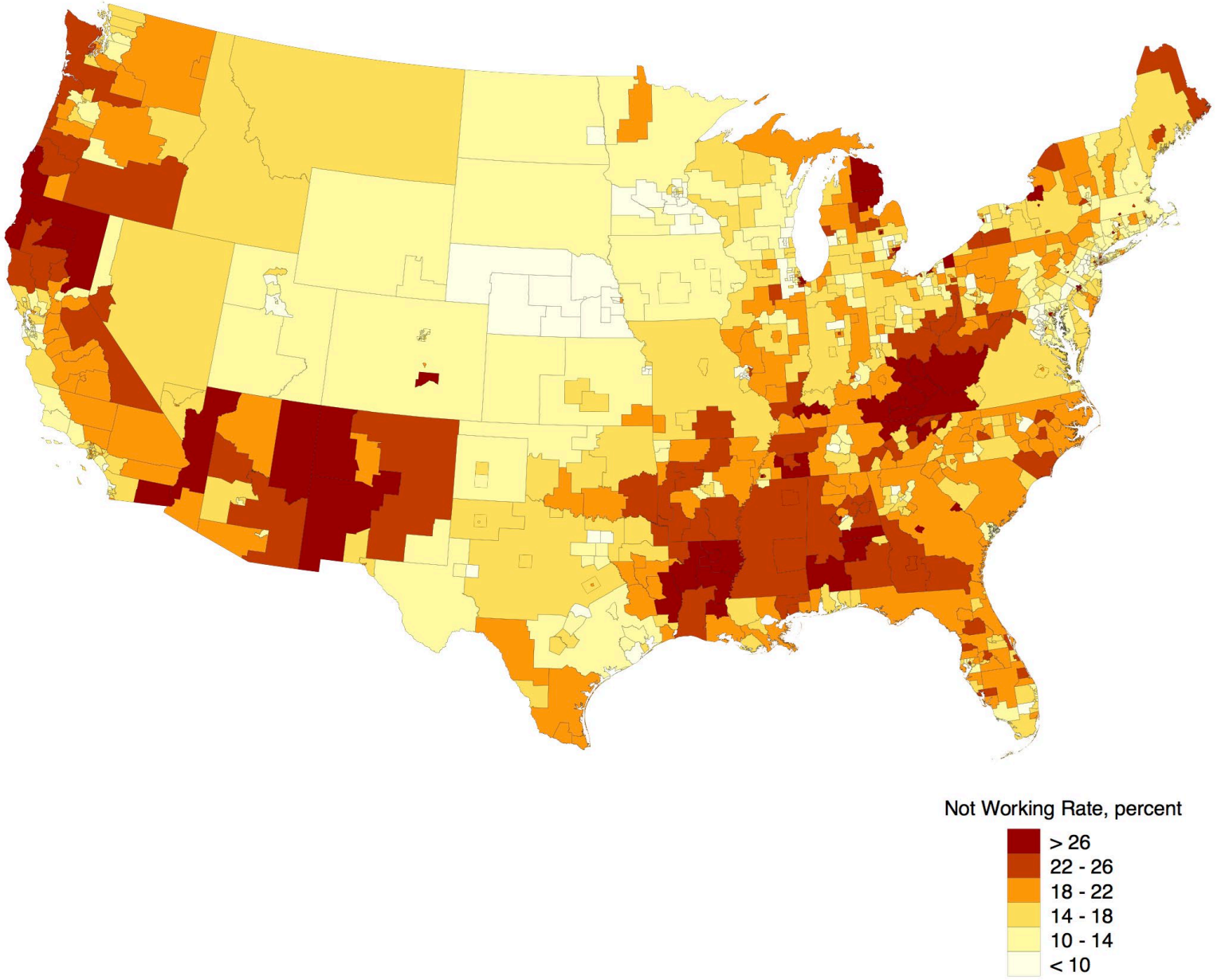
Level of Permitting and Price Growth



Geography of not working: Prime aged men 1980

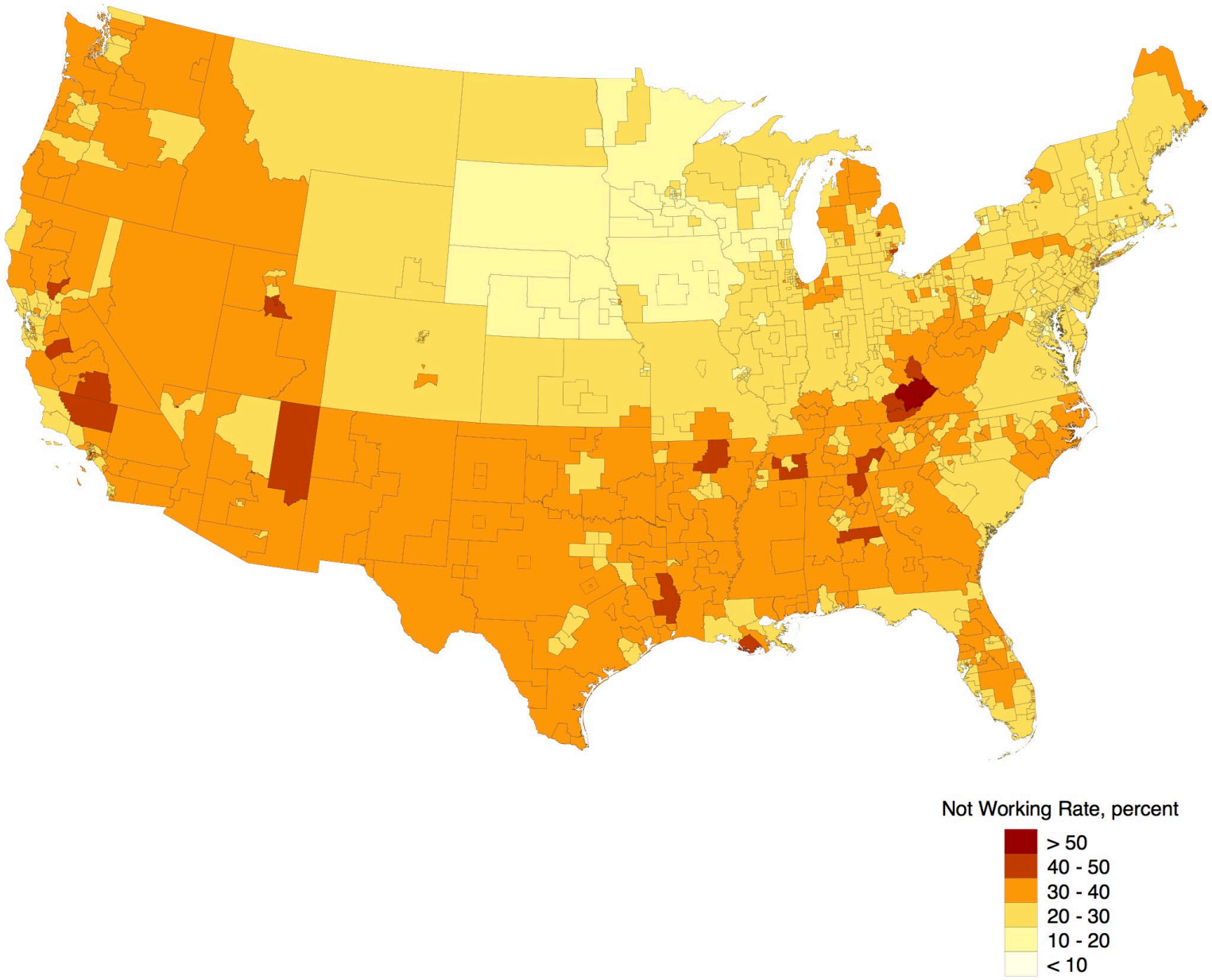


Geography of not working: Prime men 2015



Persistence of not working rates

Geography of not working: Prime aged women 2015



Prime men living with a parent, 1978-2015

Changes in the Landscape of Work

- Migration (especially migration of the less skilled) is down and not directed towards high wage areas (Ganong and Shoag, 2017)
- Successful areas make it increasingly difficult to build low cost housing (Glaeser, Gyourko, Saks, 2005), leading to spatial mismatch (Hsieh and Moretti, 2016).
- Change in share with college degrees positively correlated with initial share of population with college degrees (Moretti, 2004).
- Income convergence across metropolitan areas or PUMAs has slowed or disappeared entirely (Berry and Glaeser, 2006)
  - $\text{Log}(Y_{2010}/Y_{1980})=.02*\text{Log}(Y_{1980})$ (IV with 90^{th} and 10^{th} percentile in 1980).

Will COVID and Zoom fix any of this?

- Relocation away from expensive and difficult cities is easier and this does create challenges for NYC, Chicago, etc., but the beneficiaries of this appear to be high skill sunbelt places like Austin and Phoenix (consumer cities) that didn't have a problem to begin with.
- So far, urban service workers have largely been shielded from economic fallout of COVID, but we spent $4 trillion and that could get much worse especially in less skilled cities.
- And I didn't know where the jobs in low density, low skill places are going to come from pre-COVID and I don't know any more know.
- There is a case for reforming benefits and subsidizing employment, particularly in these places, but such policies can also go wrong.