

# Will we ever go back to work?



## KASTLE BACK TO WORK BAROMETER

Weekly Occupancy Report from Kastle Access Control System Data

9.5.22

### OCCUPANCY OVER TIME - MARCH 4, 2020 TO AUGUST 31, 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.

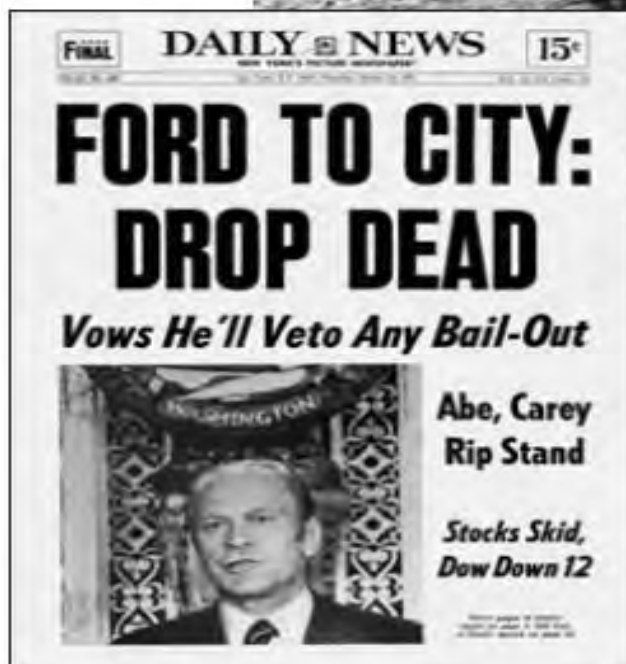


# Technology and the City



Photo by Bernard Gagnon





Cities are so monumental that we easily forget how fast they can fall—and rise. In the 1970s, New York verged on bankruptcy; President Ford refused to bail it out (left), and President Carter toured the grim ruins of the South Bronx (above). Three decades before these iconic images, Gotham had been an urban paragon, and three decades after them, it is again.

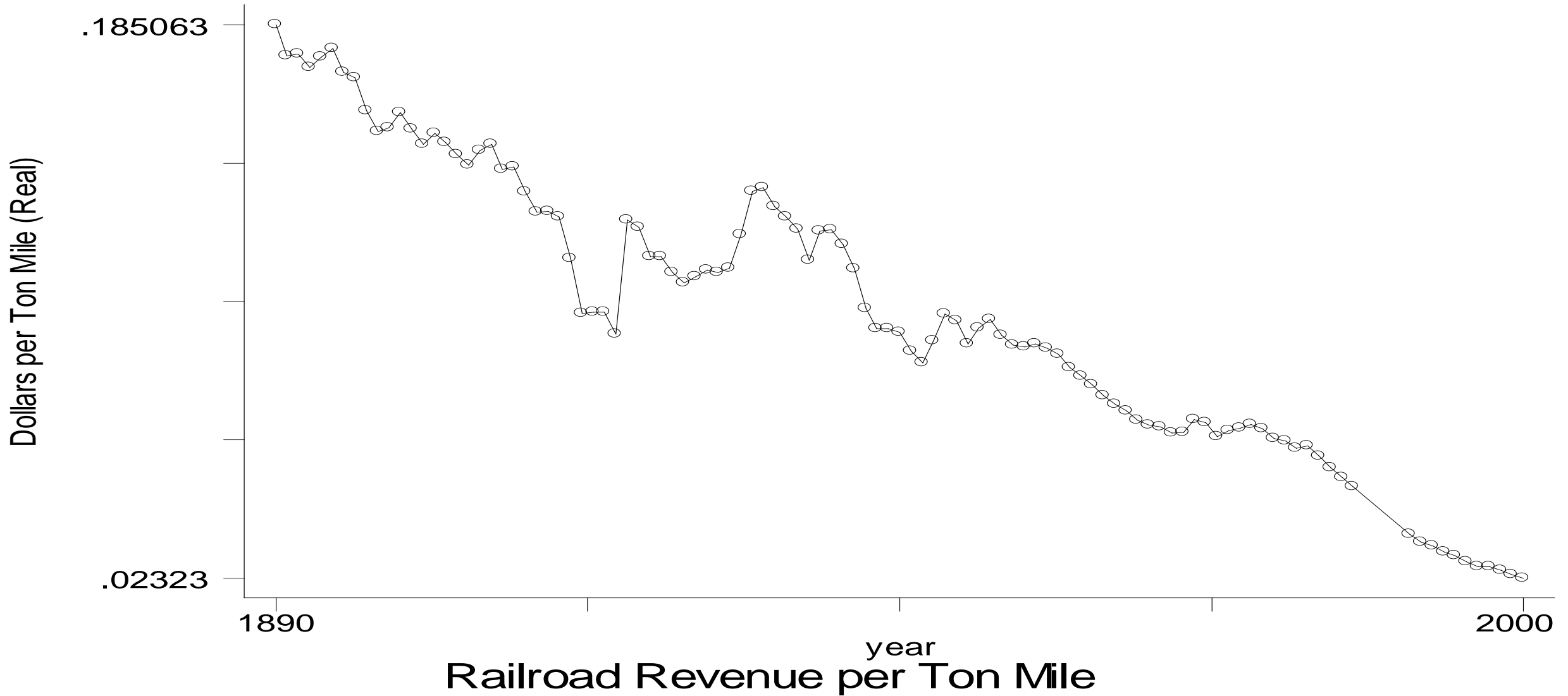
[Art 1:] *New York Daily News Archive / Getty Images*

[Art 2:] *Teresa Zabala / The New York Times / Redux Pictures*

# The Age of Centrifugal Cars (and Radios and TVs)



# The Decline of the Costs of Moving Goods





# Sprawl in the New World and Old

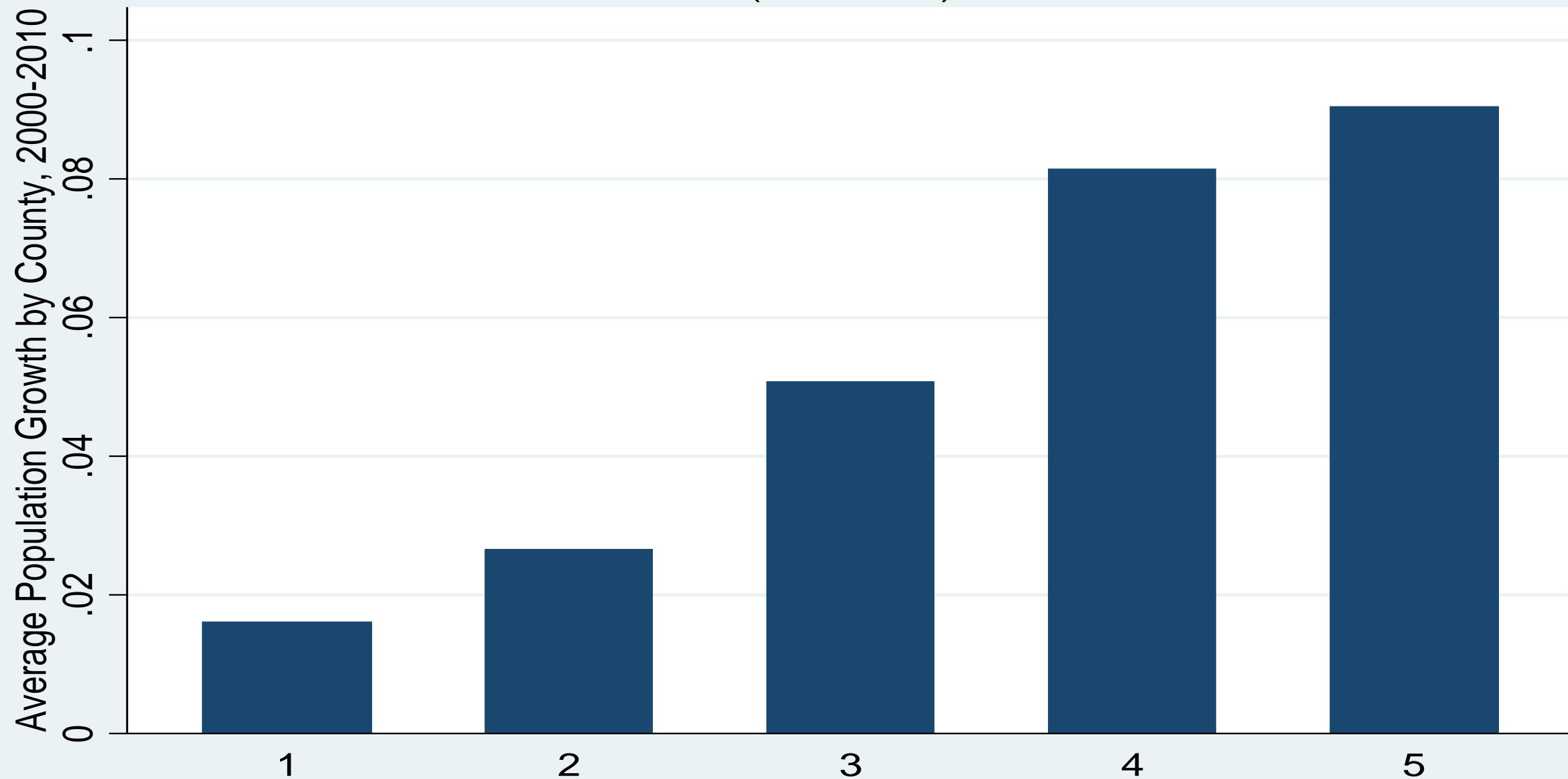


Photo by Simon P



Photo by David Monniaux

## Average Population Growth by Average January Temperature (Quintiles)





# Cheap Transport killed Urban Industry, Like NYC Garments





City	1950 Pop.	2000 Pop.	Change
New York	7,891,957	8,008,278	+1.5 %
Chicago	3.620,962	2,896,016	-20%
Philadelphia	2,071,605	1,517,550	-27%
Los Angeles	1,970,358	3,694,820	+87%
Detroit	1,849,568	951,270	-52%
Baltimore	949,708	651,154	-32%
Cleveland	914,808	478,403	-48%
St. Louis	856,796	348,189	-60%
Washington	802,178	572,059	-29%
Boston	801,444	589,141	-26%

So, why didn't these...



Image by ChtiTux



Image by Danamania

# kill urban knowledge industries



Image by Runner1928



Will the last person to leave Seattle (and Boston) please turn out the lights?

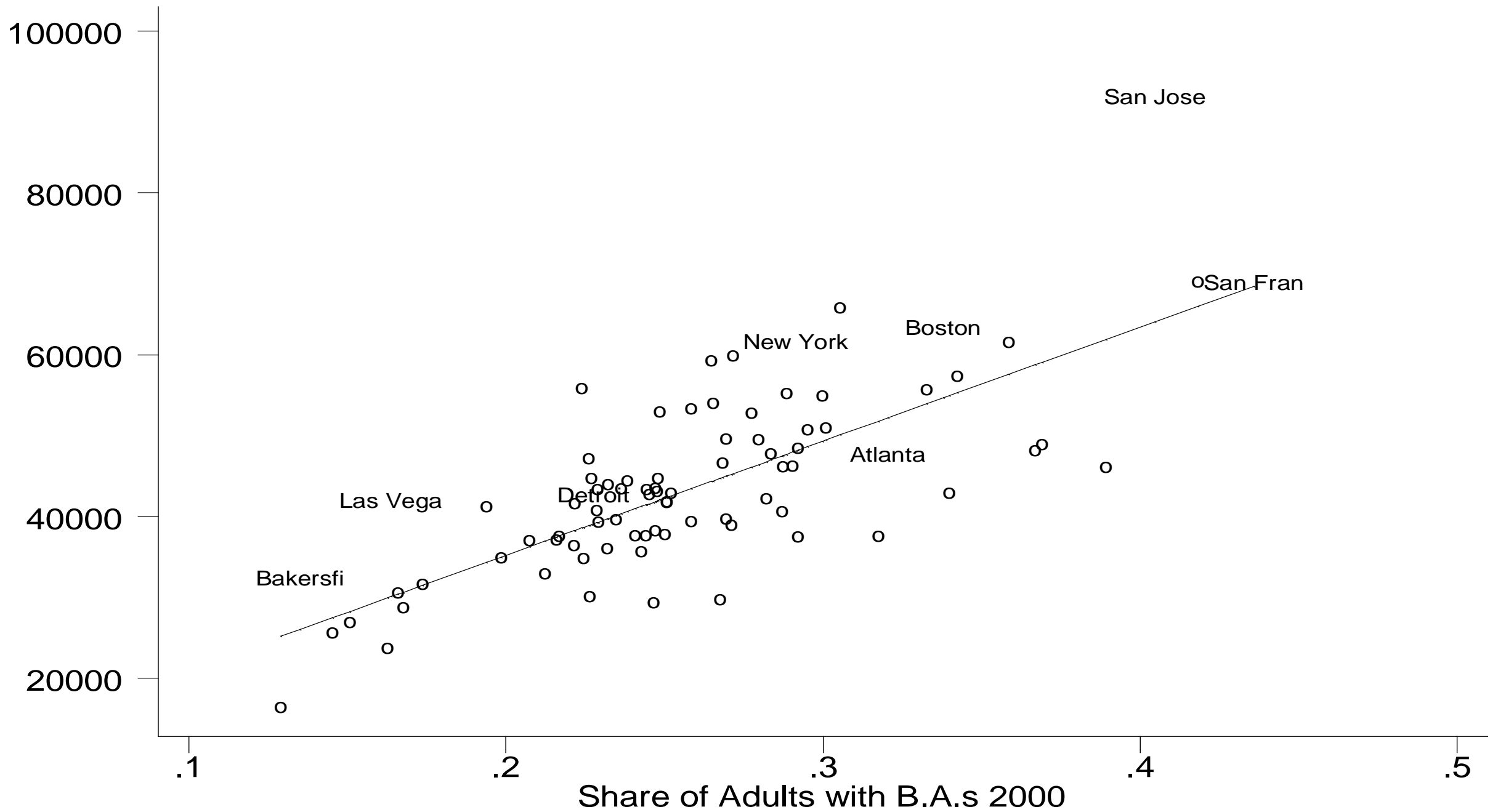


Photo by Postdil

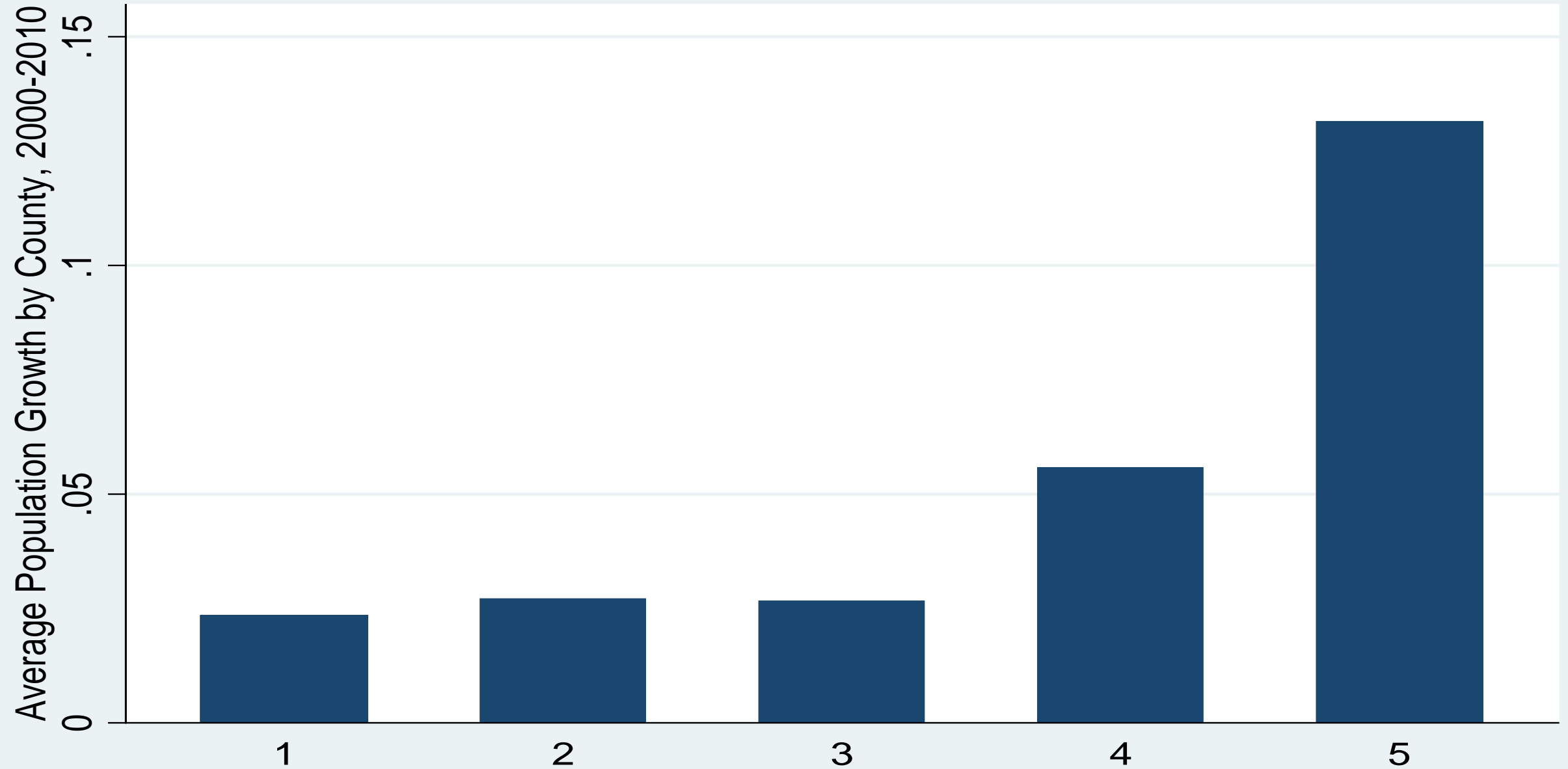


Image by M2545

# Per Capita GDP 2010



Average Population Growth by Share with BA in 2000  
(Quintiles)



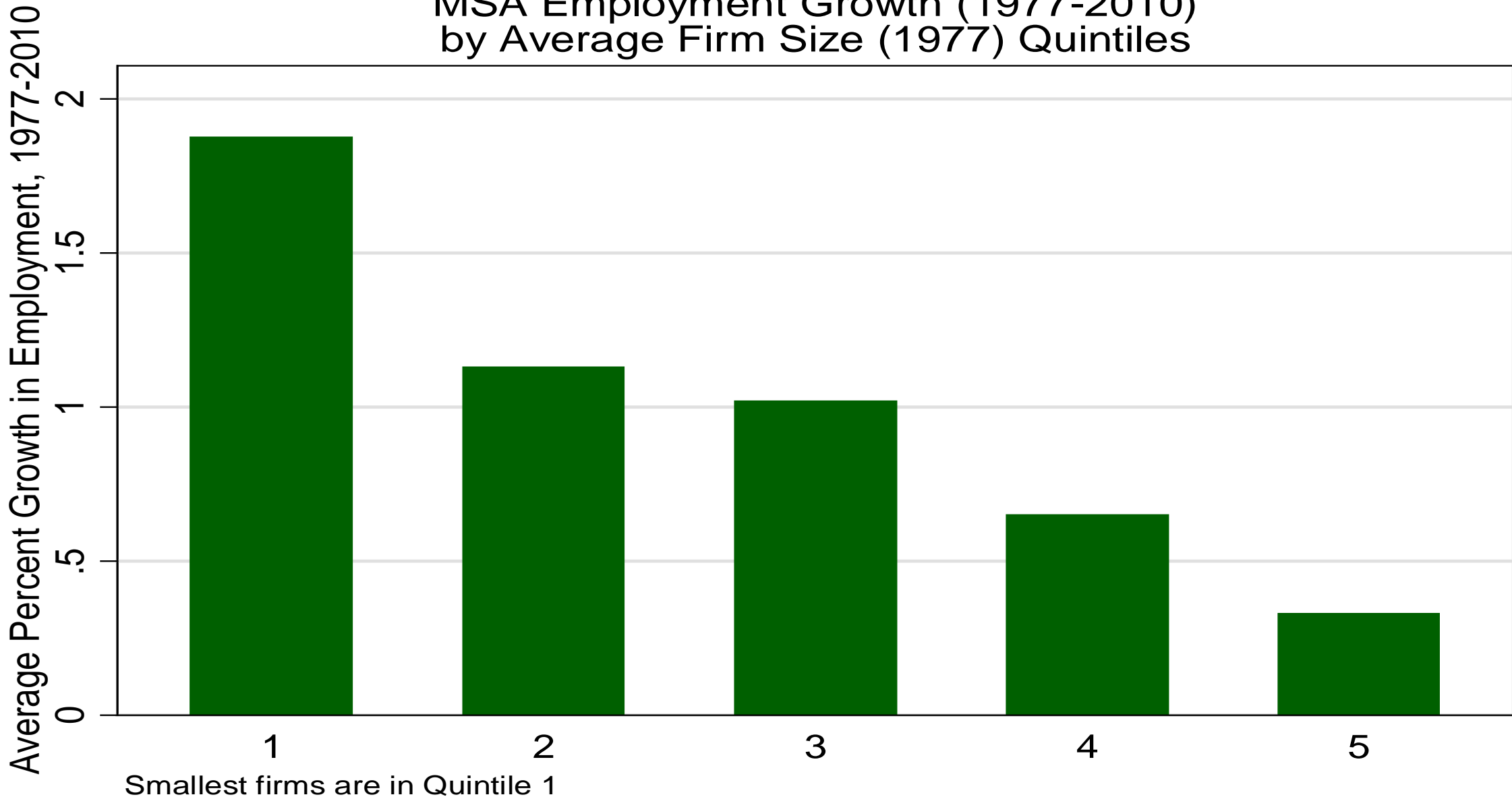


# Chinitz: Contrasts in Agglomeration: New York and Pittsburgh



# Economic Growth and Firm Size

MSA Employment Growth (1977-2010)  
by Average Firm Size (1977) Quintiles

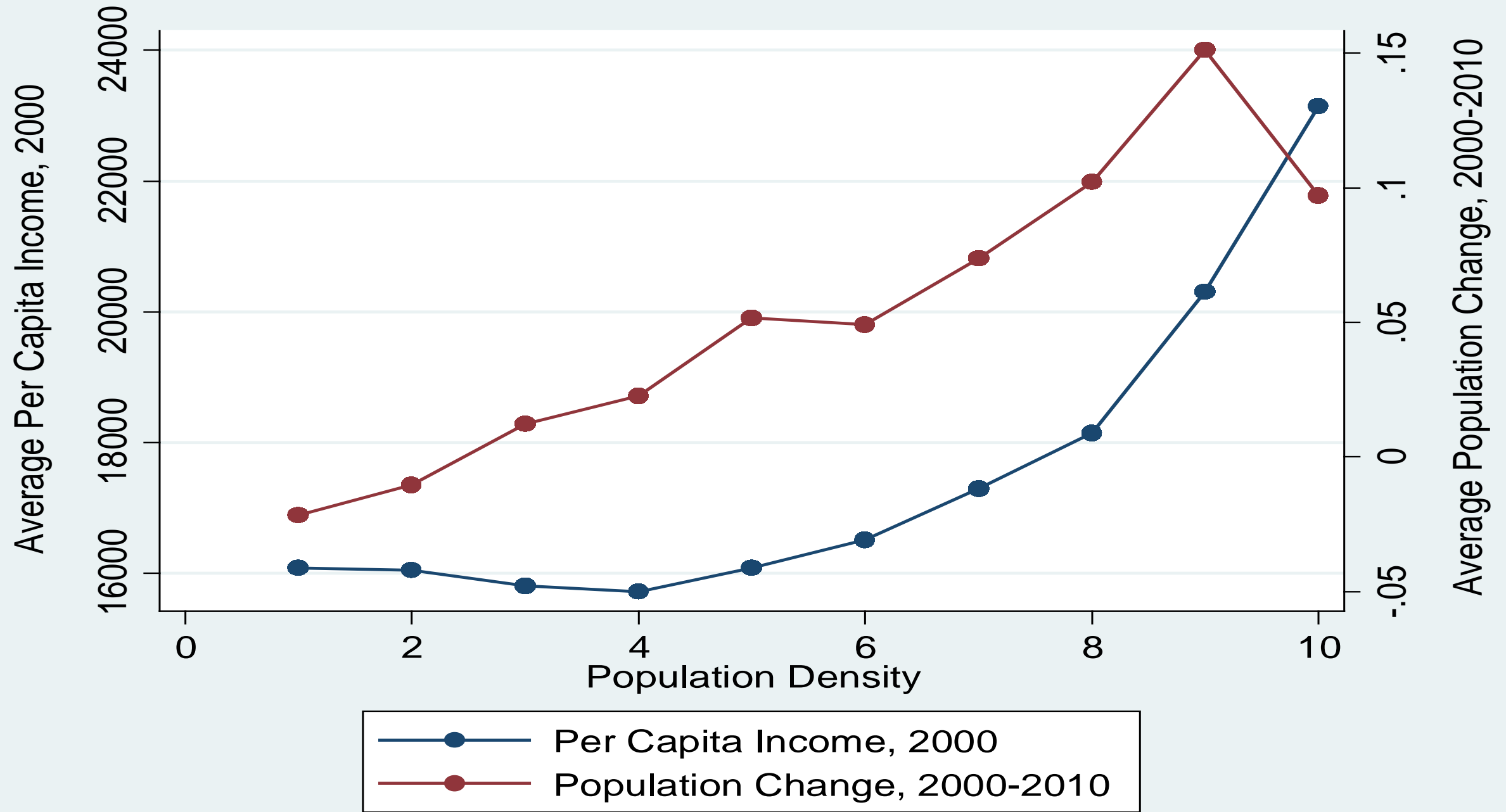


...Kill finance and urban information industries?



Image by Runner1928





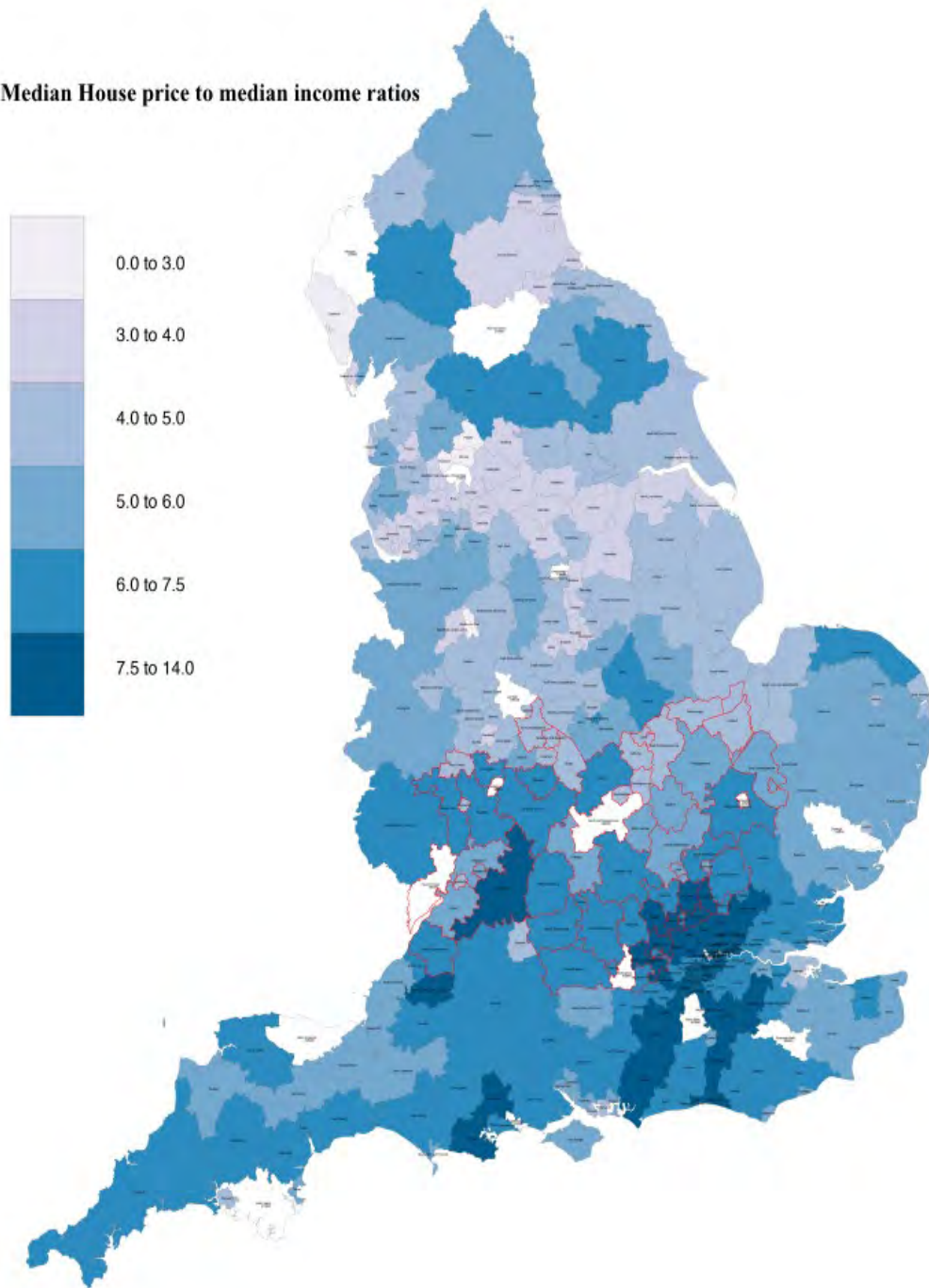
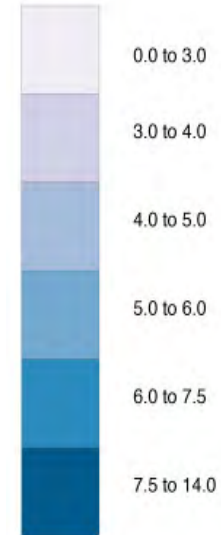
Source: U.S. Census

# The Rise of the Consumer City



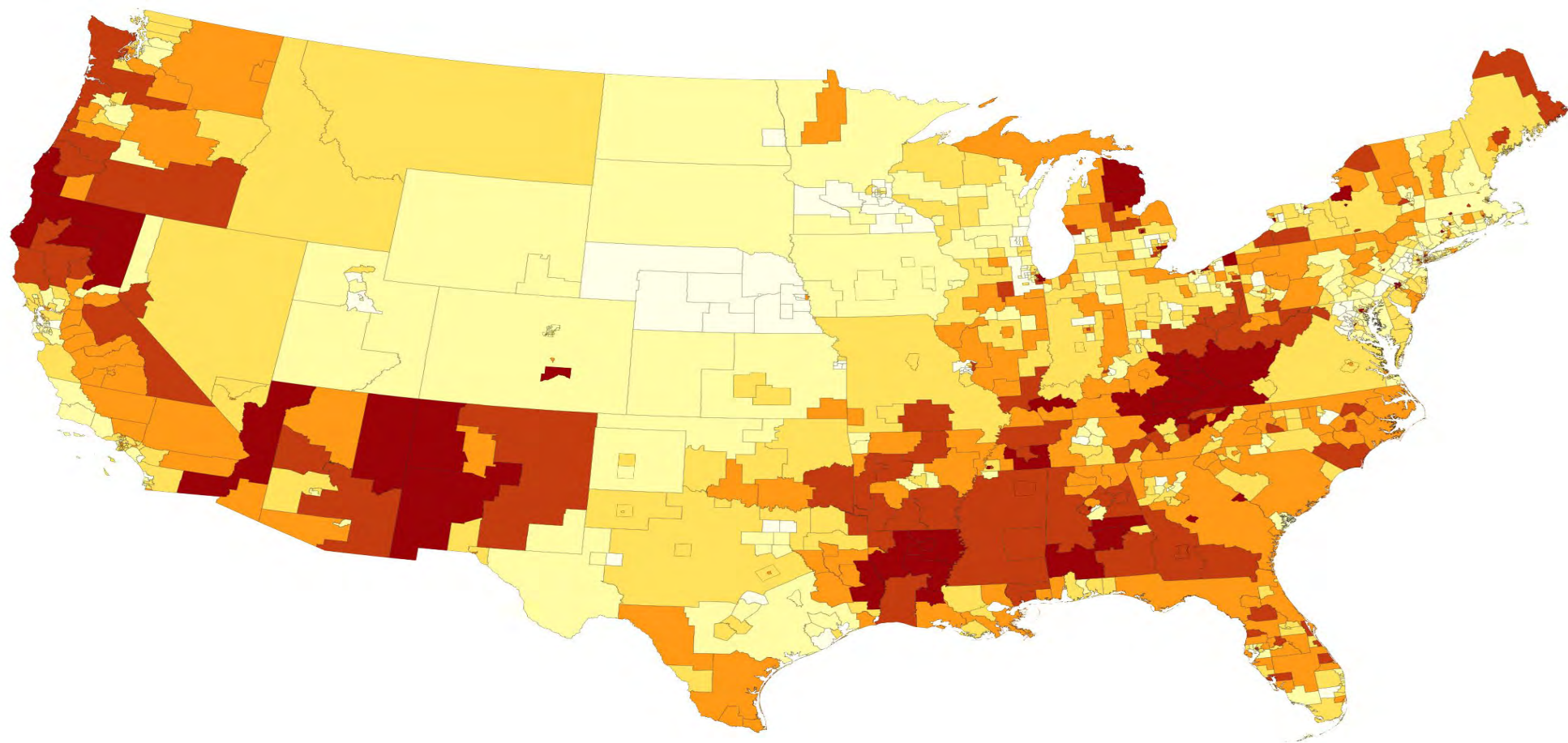
Photo by Dietmar Rabich

Median House price to median income ratios

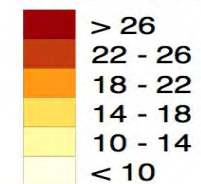




## Geography of not working: Prime men 2015



Not Working Rate, percent









# SURVIVAL OF THE CITY

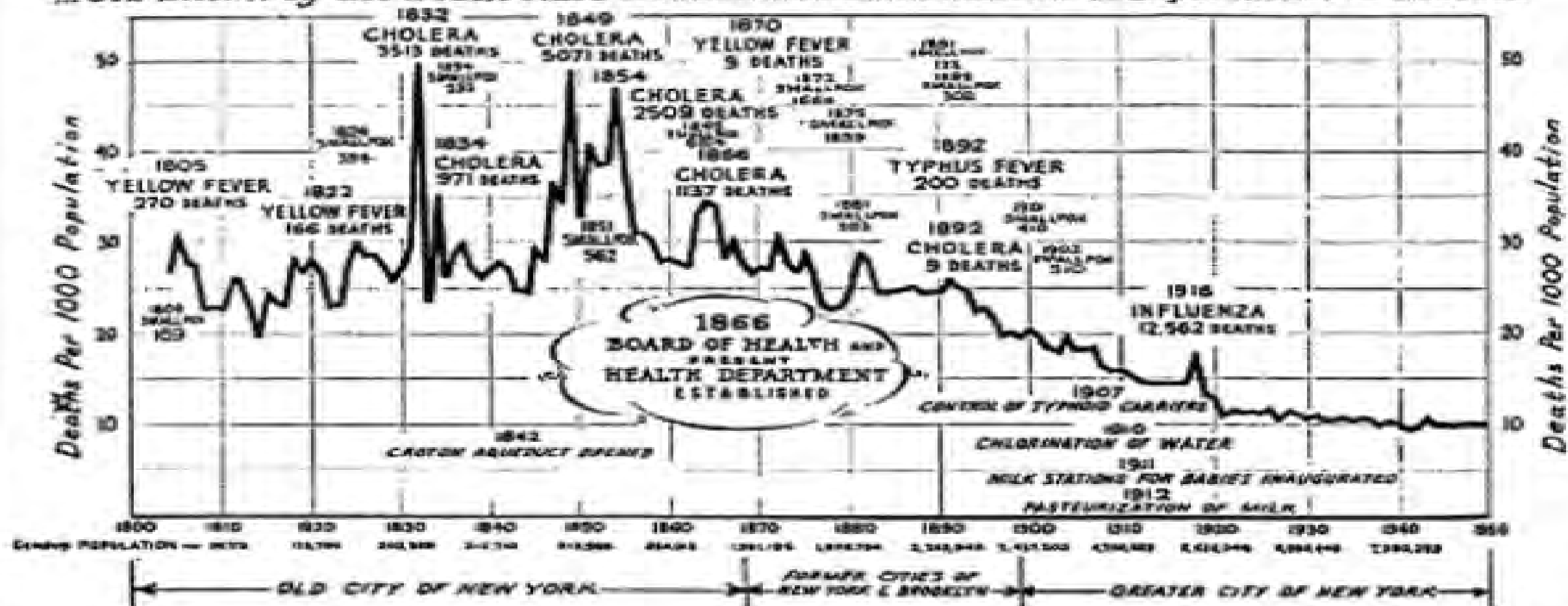
LIVING AND THRIVING  
IN AN AGE OF ISOLATION

EDWARD GLAESER AND  
DAVID CUTLER



# The CONQUEST OF PESTILENCE in NEW YORK CITY ~

... As Shown by the Death Rate as Recorded in the Official Records of The Department of Health.

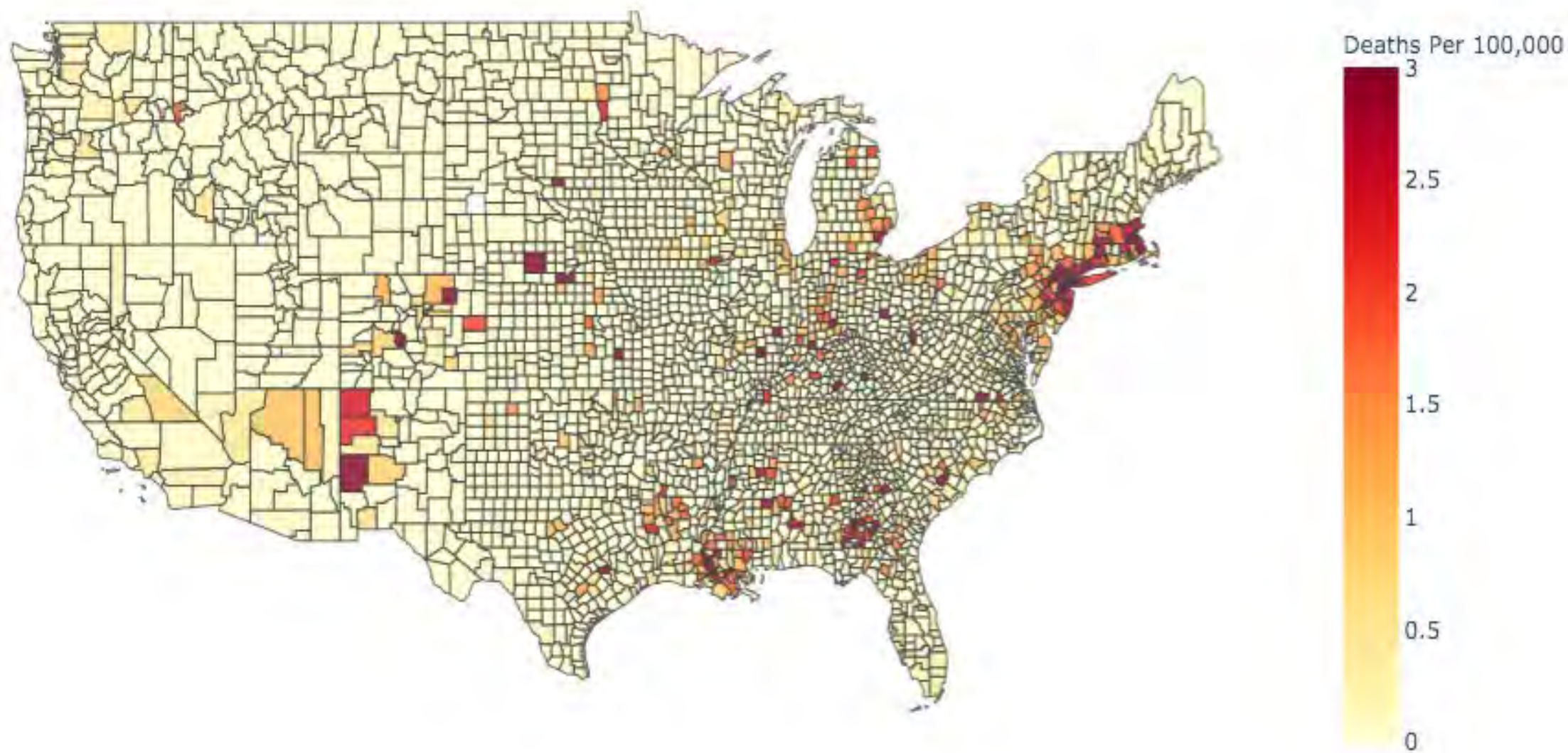


New York City's Department of Health shows the timeline of the city's mortality rate, which sharply dropped with the provision of clean water in the nineteenth century.

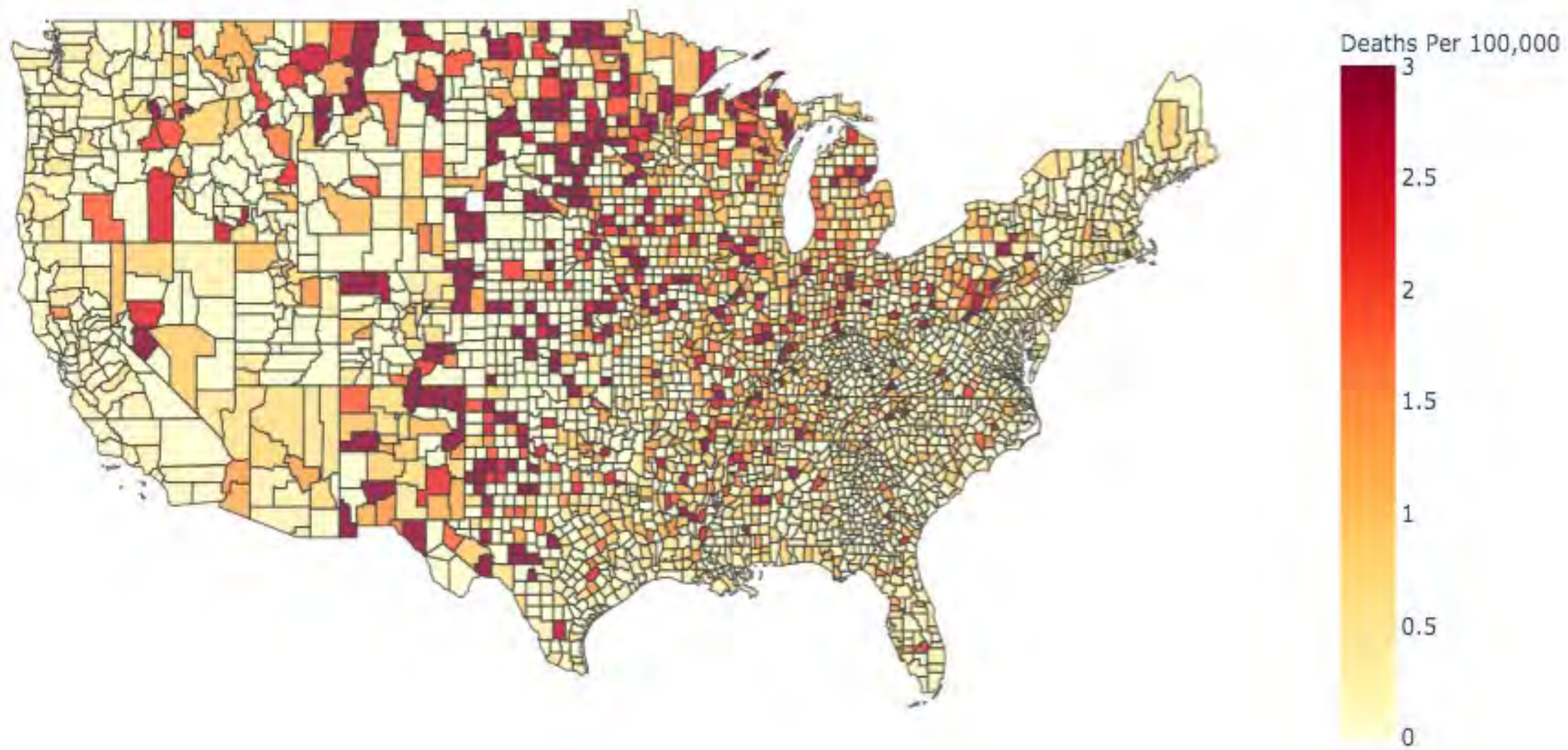
*New York City Department of Health and Mental Hygiene*



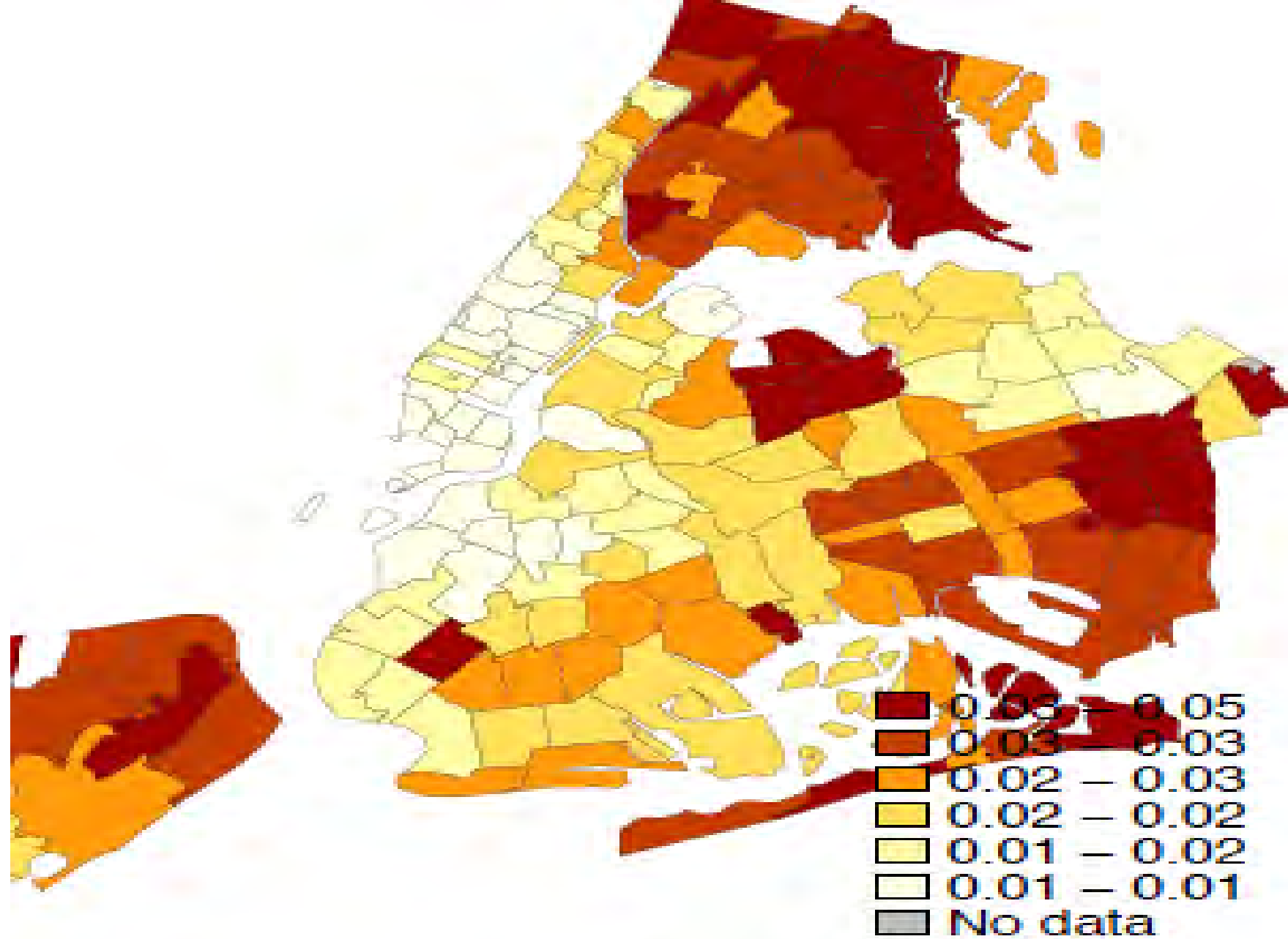
4/30/20 Daily New Deaths (7-Day Average) Per 100,000



11/30/20 Daily New Deaths (7-Day Average) Per 100,000

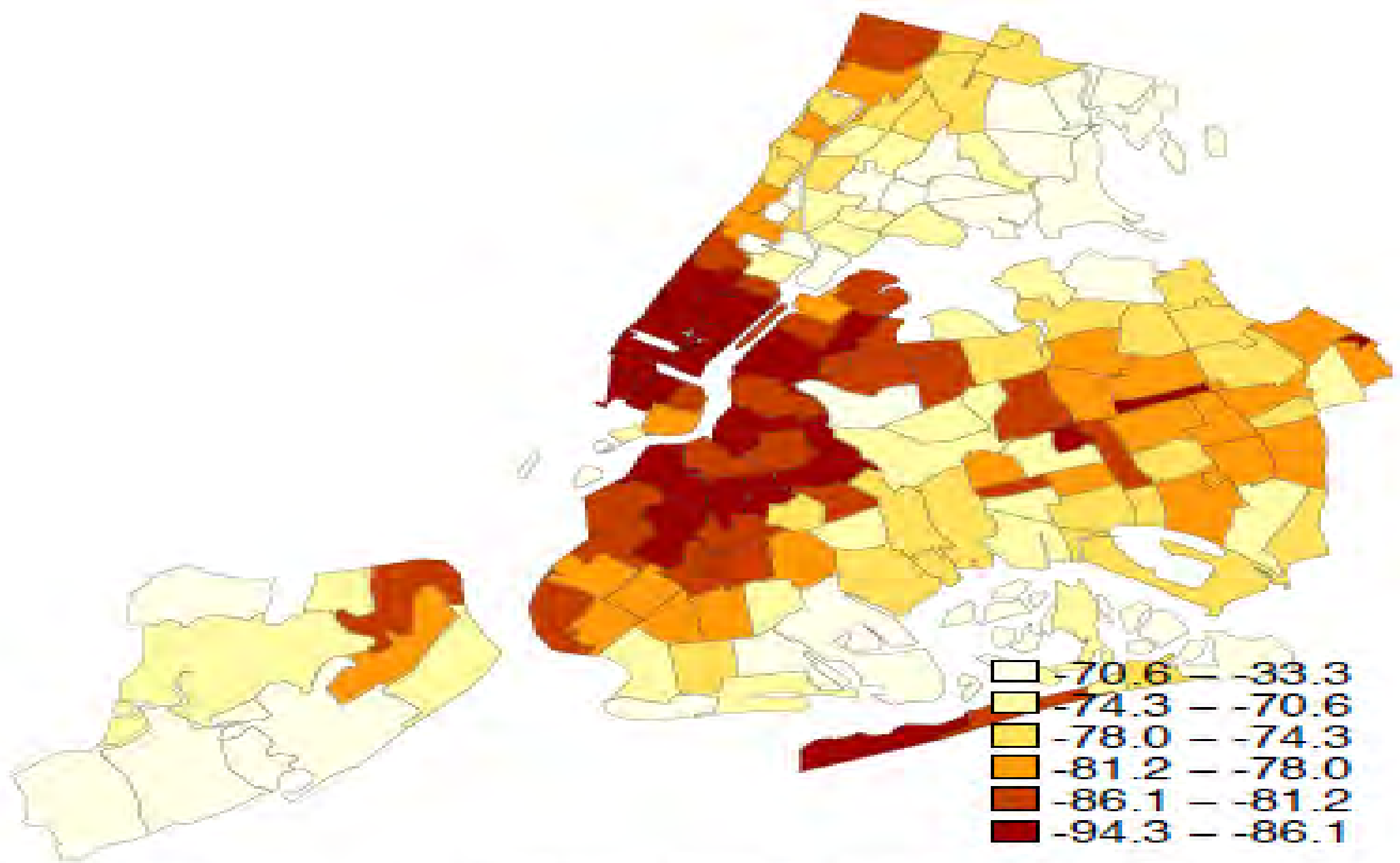






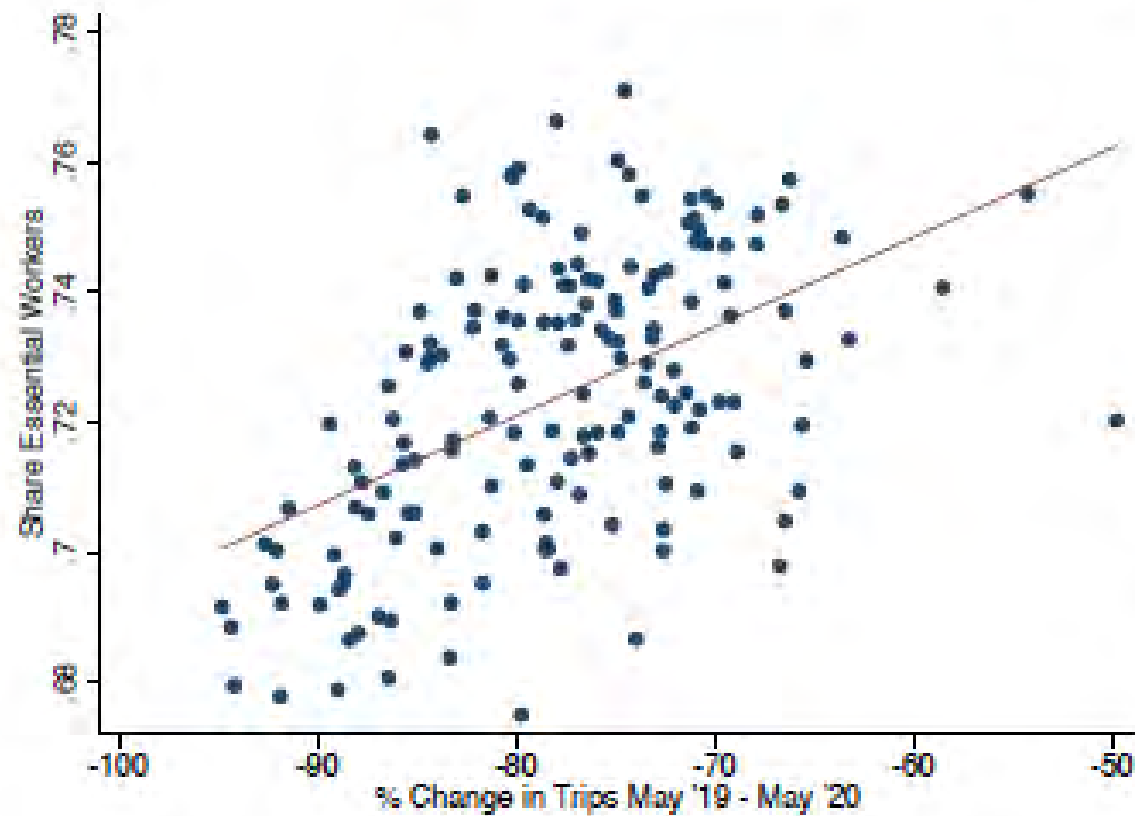
(b) Cases per Person



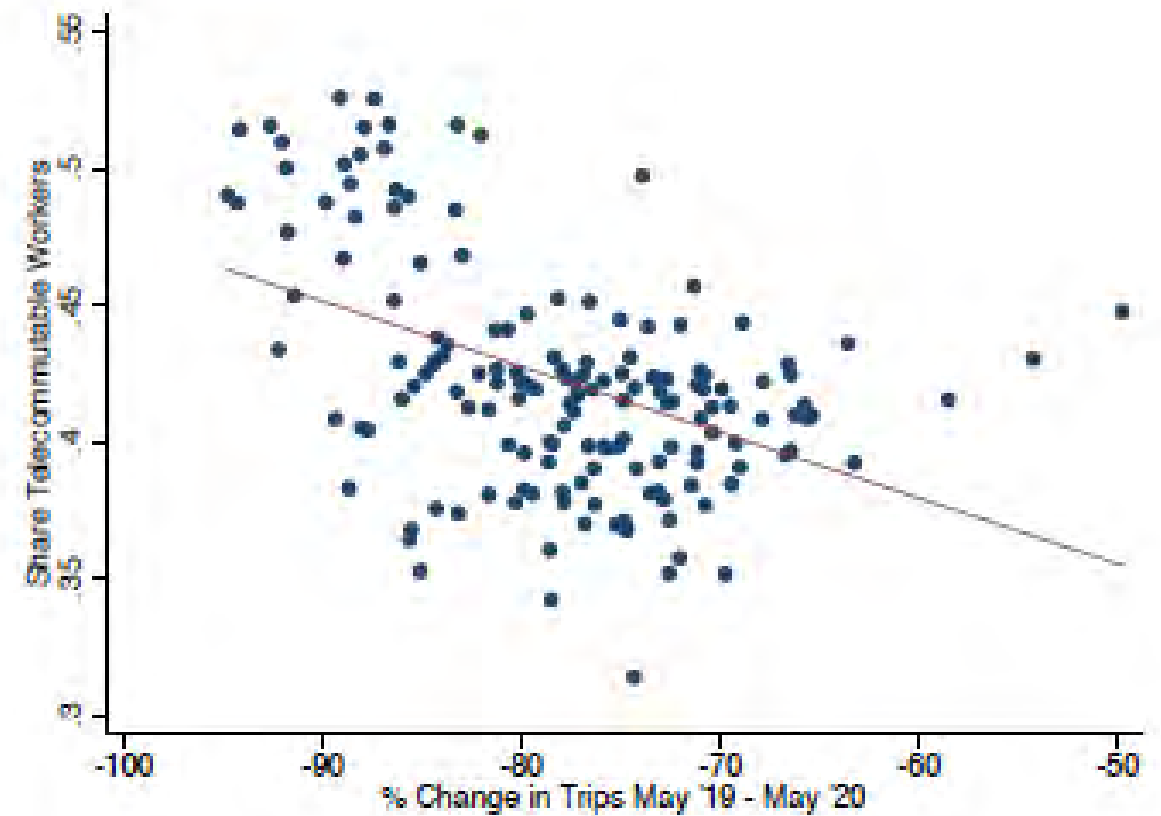


(a) Change in Trips, by Residential Zip code (SafeGraph)

# Travel Change and Instruments in NYC



(a)  $\% \Delta$  in Trips vs.  $ShareEssential_i$



(b)  $\% \Delta$  in Trips vs.  $ShareTelework_i$

*Source:*  $\% \Delta$  Change in trips from SafeGraph Weekly Patterns Data, using visitors traveling from home.  $\% \Delta$  Change in trips calculated between May 13-19, 2019 and May 4-10, 2020. Share Essential workers calculated from DE and MN 4-digit NAICS essential industries. Share Telework created at the zip level using data from Dingel and Neiman (2020) weighted by local neighborhood employment composition.

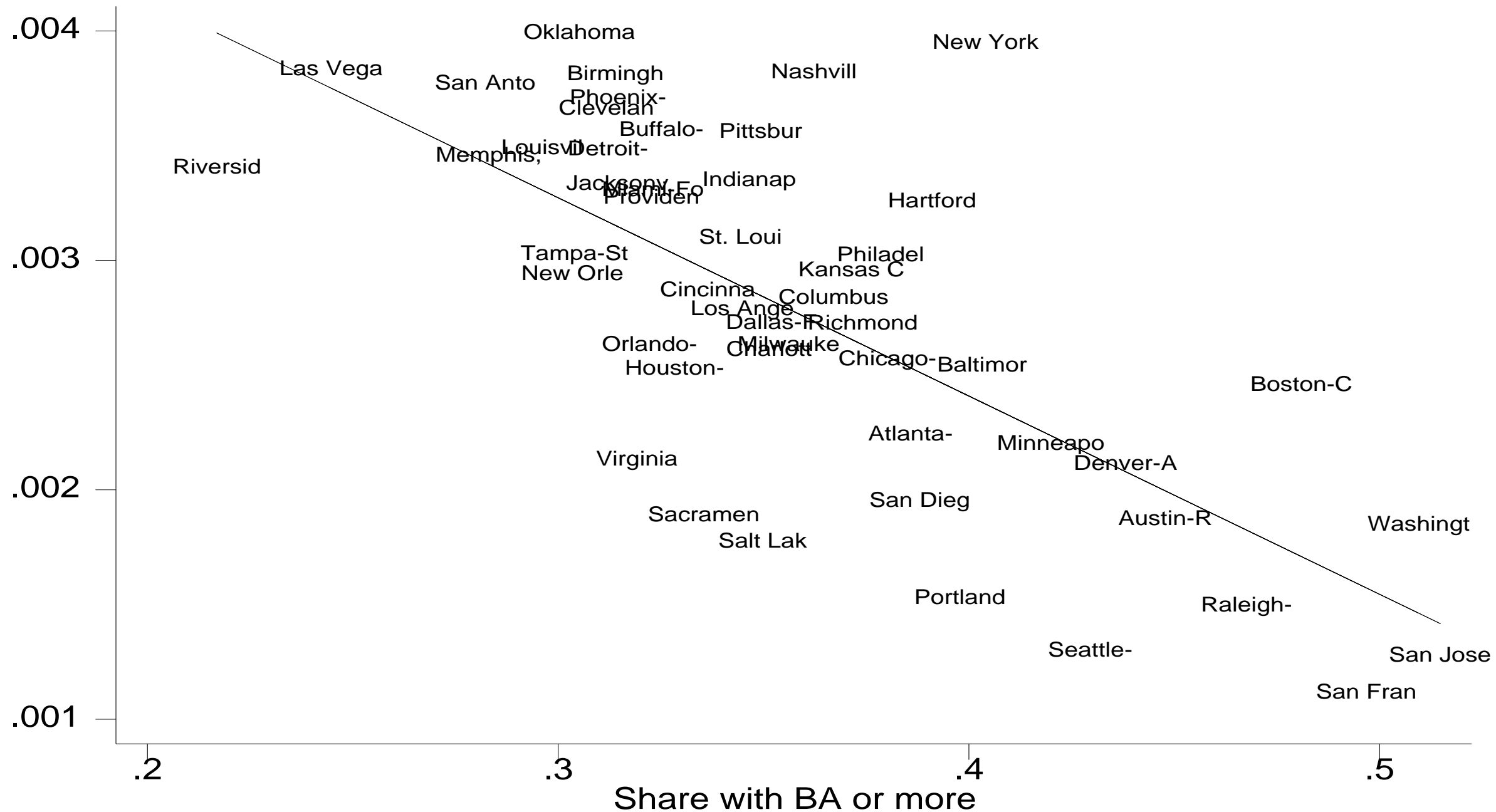
# The Inequality of the Remote Workplace

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 <sup>3</sup>	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 <sup>4</sup>	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



# Total Death Rate COVID-19

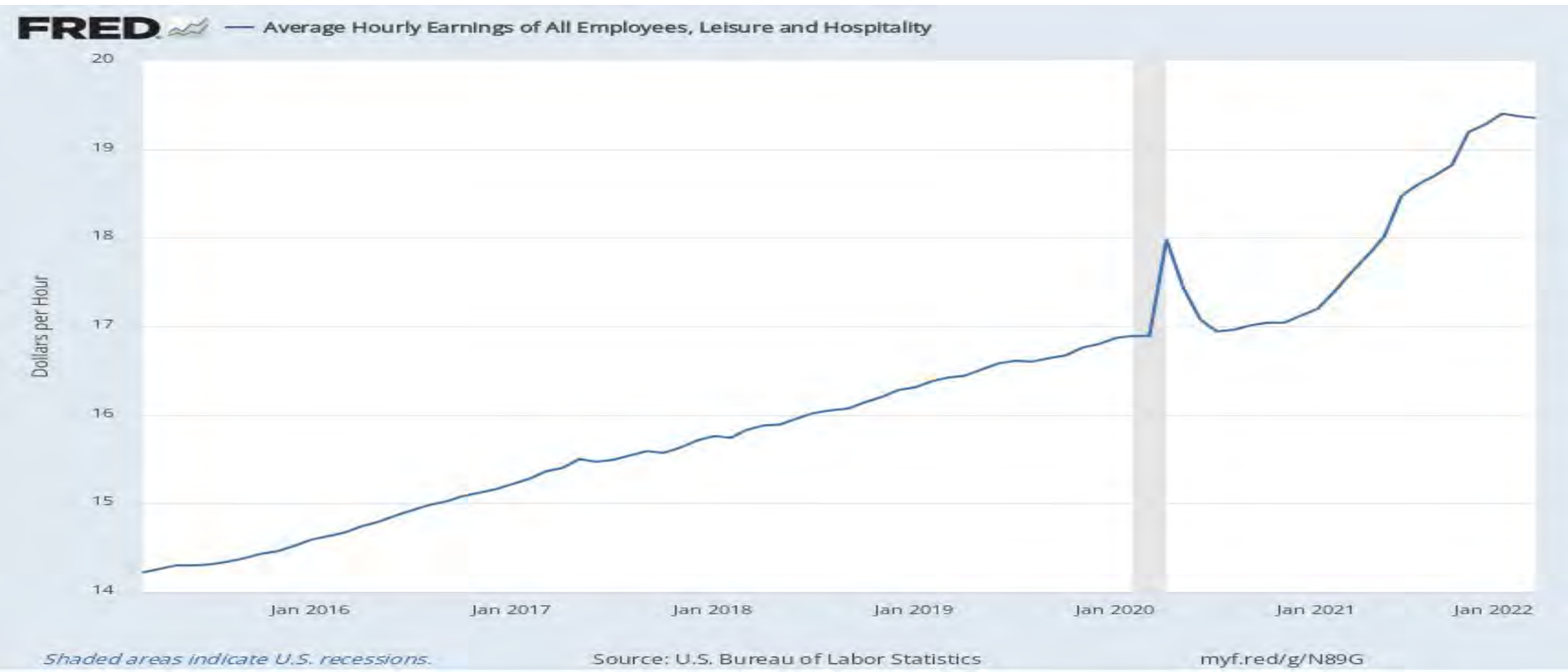
Fitted values



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



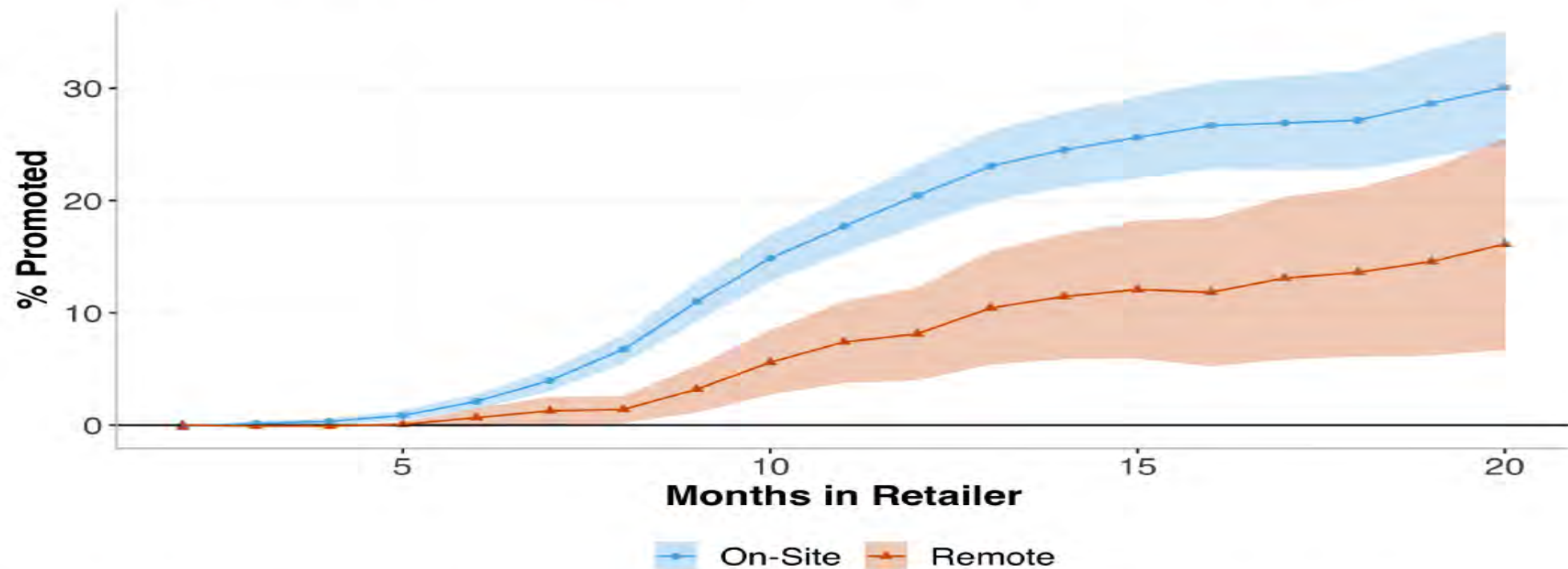
# But \$4 trillion in Federal spending and the great resignation mean big pay increases





# The Dynamic Consequences of Working Remotely: Emmanuel and Harrington (2021)

Figure 1: Promotion among Remote and On-Site Workers



*Note:* This figure considers the promotion rates of remote workers (in blue circles) and on-site workers (in orange triangles). The x-axis plots the workers' tenure and the y-axis plots the percent who have been promoted among those who persist at the retailer. The error ribbons reflect 95% confidence intervals with standard errors clustered at the worker level. The sample limits to workers hired after July 2018 when the retailer began to hire workers directly into remote jobs and before April 2020 when on-site call-centers closed due to COVID-19.



# The effects of remote work on collaboration among information workers

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

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.

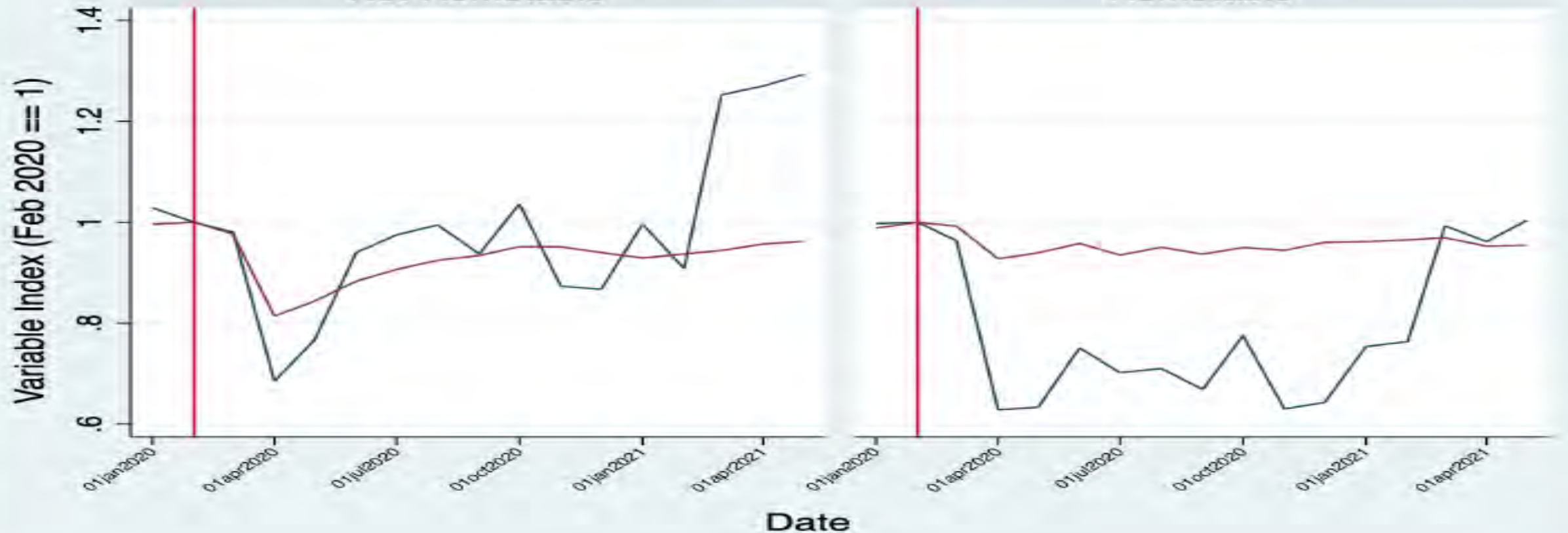
# Companies Don't Hire Remote Workers (Work is by Morales-Arilla and Daboin)

## Postings and Employment Remotability

Blue = Postings, Red = Employment

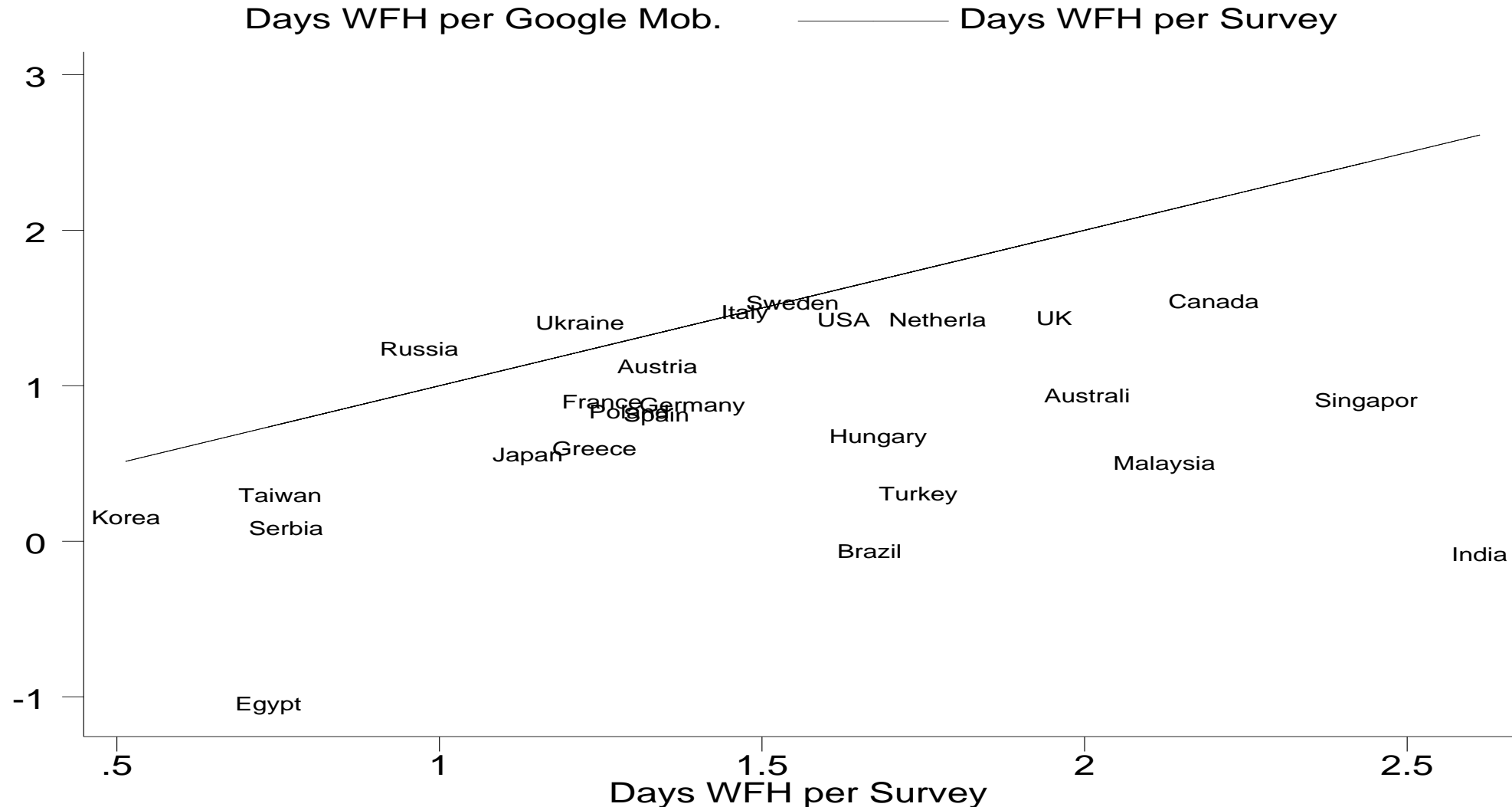
Not-Remotable

Remotable





# Bloom et al. vs. Google Mobility Work From Home=-1\*Percent Change in Workplace Visits\*5

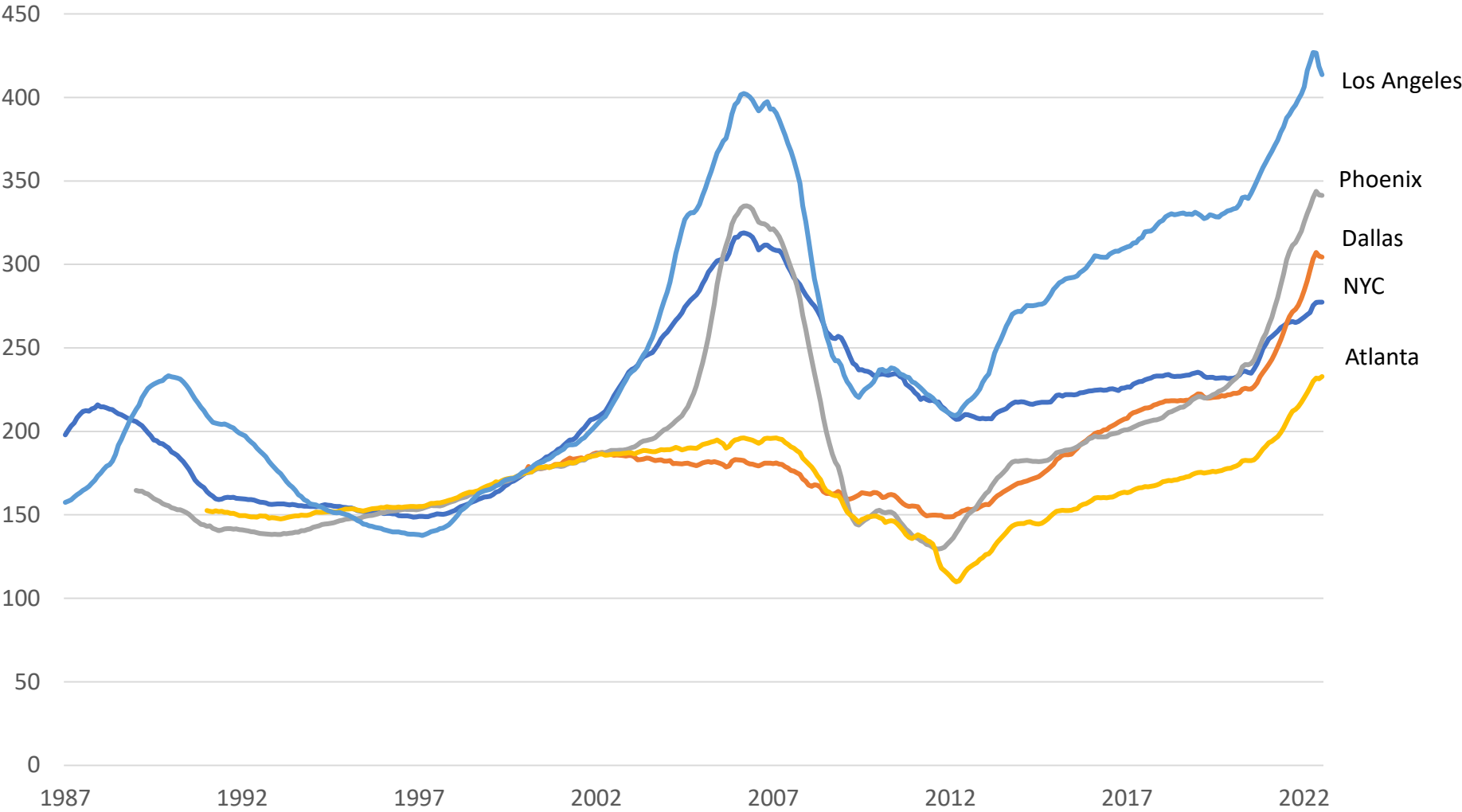


# Could Zoom Mean More Competition for Global Talent rather than an End to Offices?



Image by perzon seo

# Growth in Inflation Corrected CPI Case-Shiller House Indices



Source: Federal Reserve data, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average, Index 1982-1984=100, Monthly, Seasonally Adjusted

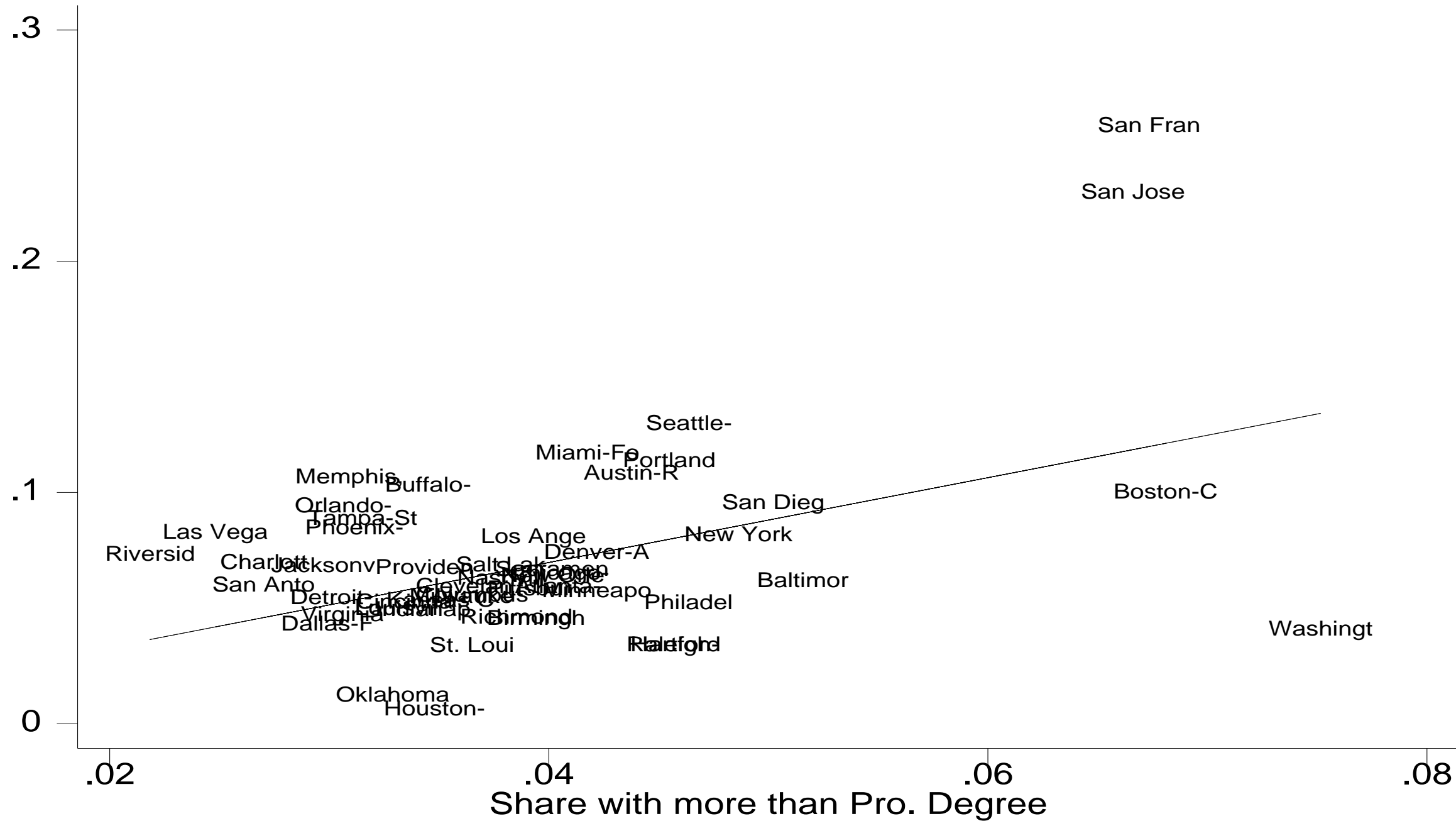


# Measuring Urban Winners and Losers

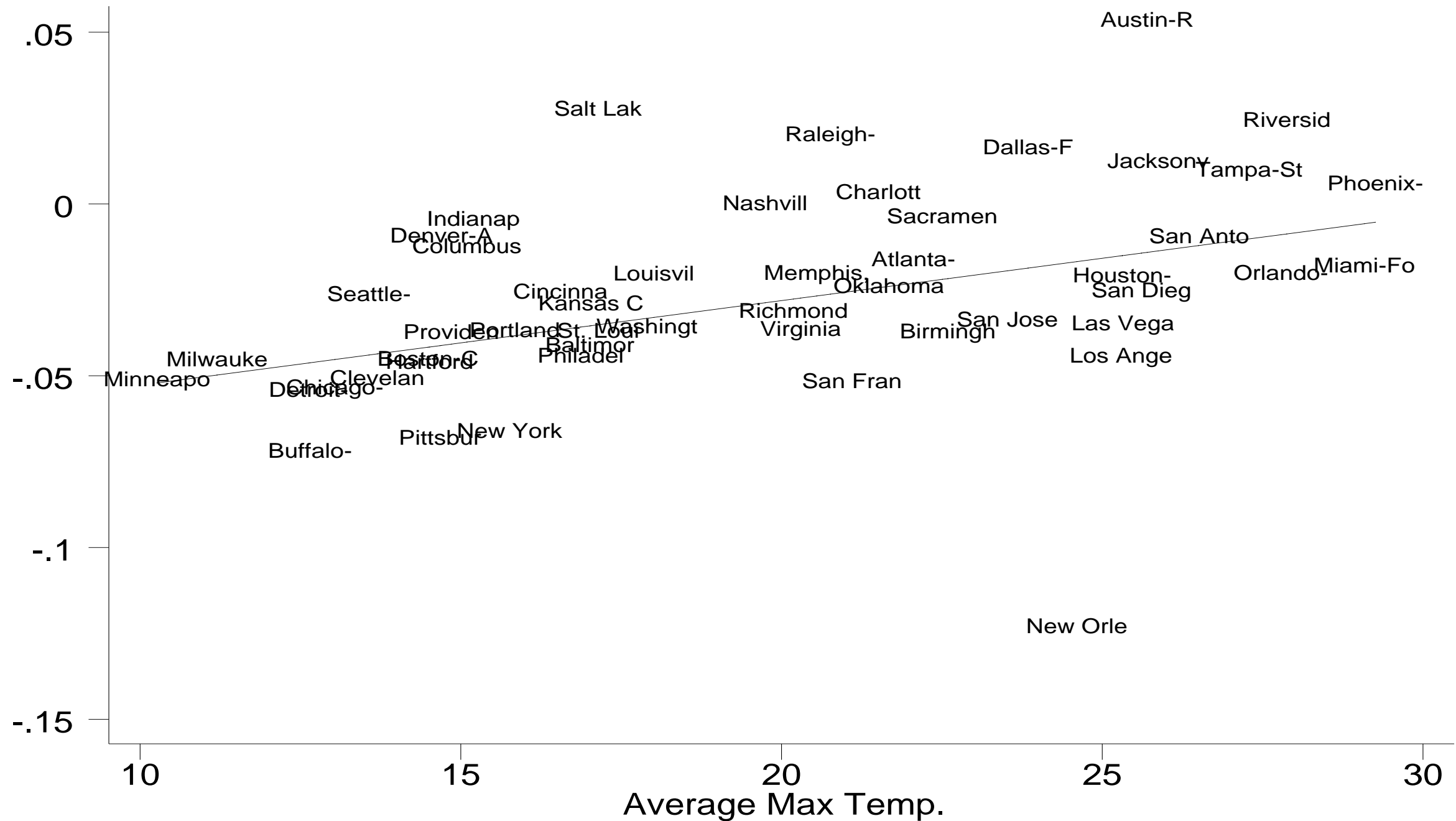
- Earnings and employment data from the Quarterly Census of Employment and Wages goes to Third Quarter 2021
- Repeat home sales data from the Federal Housing Finance Agency (FHFA) from December 2021.
- Permit data from the Census of Construction covers the entire year 2021.
- Strategy is always to take percent changes over two year period.
- For the nominal variables (prices and earnings) we correct for inflation (CPI)– 7% from Q3 2019 to Q3 2021.
- The data are interesting on their own, but we also produce an index.

## Change in Wage 2019-2021

## Fitted values



Change in Employment 2019-2021 — Fitted values





# The Non-Effect of COVID-19 on Urban Trends

- Before COVID-19, I would have highlighted the flight to the sunbelt and the rise of the skilled city as two central facts about urban change in the US since 1970.
  - I wrote a paper explaining the rise of the sunbelt in 2007: this is not a consumer city fact, it is rising productivity (probably because of pro-business policies and better infrastructure) and easy housing supply.
- To my eyes, these two effects continue to dominate changes in urban labor markets.
- Skills show up in higher wages. Temperature shows up in higher levels of employment.
- These variables may have also shifted labor supply, which seems to have shifted substantially over the period.
- Final labor market task:  $\text{Change in Emp} - .2 * \text{Change in Temp} = \text{Great Resignation}$  (labor supply elasticities of .1-.3) – strongly correlated with temperature.

<i>Metropolitan Area</i>	<i>Percent Home Price Growth</i>	<i>Percent Weekly Wage Growth</i>	<i>Percent Employment Growth</i>	<i>Percent Change in Housing Permits</i>
Austin-Round Rock-Georgetown, TX	38.3%	10.4%	5.0%	58.5%
Phoenix-Mesa-Chandler, AZ	38.5	8.0	0.3	46.7
Jacksonville, FL	29.7	6.4	0.9	52.8
Salt Lake City, UT	35.4	6.4	2.5	8.2
Riverside-San Bernardino-Ontario, CA	33.1	6.9	2.1	9
Tampa-St. Petersburg-Clearwater, FL	33.7	8.4	0.7	5.4
Raleigh-Cary, NC	28.7	3.0	1.7	44.6
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	12.6	4.8	-4.7	142.8
Nashville-Davidson--Murfreesboro--Franklin, TN	29.7	5.8	-0.3	39.5
Miami-Fort Lauderdale-Pompano Beach, FL	28.1	11.3	-2.1	20.8
Charlotte-Concord-Gastonia, NC-SC	29.0	6.5	0.0	21.5
Denver-Aurora-Lakewood, CO	21.3	7.0	-1.2	55.6
Memphis, TN-MS-AR	20.9	10.2	-2.3	42.3
Seattle-Tacoma-Bellevue, WA	25.7	12.5	-2.9	16.5
Sacramento-Roseville-Folsom, CA	25.7	6.2	-0.7	29.1
San Diego-Chula Vista-Carlsbad, CA	29.6	9.1	-2.8	15.8
San Antonio-New Braunfels, TX	24.7	5.5	-1.3	39.6
San Jose-Sunnyvale-Santa Clara, CA	20.8	22.5	-3.7	-25.1
San Francisco-Oakland-Berkeley, CA	12.6	25.4	-5.5	-4.3
Dallas-Fort Worth-Arlington, TX	22.9	3.9	1.3	22.9
Las Vegas-Henderson-Paradise, NV	27.0	7.8	-3.8	28.3
Orlando-Kissimmee-Sanford, FL	23.0	9.0	-2.3	23.2
Indianapolis-Carmel-Anderson, IN	20.4	4.5	-0.7	41.4
Columbus, OH	21.1	5.1	-1.5	42.0
Atlanta-Sandy Springs-Alpharetta, GA	25.8	5.5	-1.9	20.1

<i>Metropolitan Area</i>	<i>Percent Home Price Growth</i>	<i>Percent Weekly Wage Growth</i>	<i>Percent Employment Growth</i>	<i>Percent Change in Housing Permits</i>
Cincinnati, OH-KY-IN	19.2	4.8	-2.9	39.4
Providence-Warwick, RI-MA	22.6	6.3	-4.0	13.3
Boston-Cambridge-Newton, MA-NH	19.0	9.6	-4.8	11.3
Portland-Vancouver-Hillsboro, OR-WA	20.2	10.9	-4.0	-10.7
Los Angeles-Long Beach-Anaheim, CA	23.1	7.6	-4.7	3.0
Birmingham-Hoover, AL	18.2	4.1	-4.0	31.4
Kansas City, MO-KS	17.4	4.9	-3.2	20.8
Virginia Beach-Norfolk-Newport News, VA-NC	18.2	4.3	-4.0	26.2
Oklahoma City, OK	18.5	0.8	-2.7	26.6
Richmond, VA	17.3	4.2	-3.4	15.1
Milwaukee-Waukesha, WI	15.2	5.1	-4.8	28.4
Cleveland-Elyria, OH	20.0	5.5	-5.4	11.1
Pittsburgh, PA	16.1	5.4	-7.1	35.6
Louisville/Jefferson County, KY-IN	17.1	4.5	-2.4	-3.6
Buffalo-Cheektowaga, NY	21.6	9.9	-7.5	-9.9
Detroit-Warren-Dearborn, MI	17.8	5.0	-5.7	16.4
Baltimore-Columbia-Towson, MD	13.6	5.7	-4.4	15.0
St. Louis, MO-IL	13.4	2.9	-4.0	26.6
Hartford-East Hartford-Middletown, CT	19.4	3.0	-4.9	8.0
Minneapolis-St. Paul-Bloomington, MN-WI	14.3	5.3	-5.4	14.6
Houston-The Woodlands-Sugar Land, TX	12.8	0.2	-2.4	11.8
Chicago-Naperville-Elgin, IL-IN-WI	13.1	6.1	-5.7	2.8
Washington-Arlington-Alexandria, DC-VA-MD-WV	12.0	3.7	-3.9	3.0
New York-Newark-Jersey City, NY-NJ-PA	11.9	7.7	-6.9	-4.5
New Orleans-Metairie, LA	9.6	6.0	-12.6	32.6



# Cities are resilient! (Milan 1943 and 2014)



Photo by Jose Luis