Urban Winners and Losers After COVID-19

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Harvard University and NBER
Farm to Factory to Urban Service Workers: to Extreme Pandemic Vulnerability
Employment levels by industry, seasonally adjusted

Click and drag inside chart to change dates displayed

- Total nonfarm
- Total private
- Mining and logging
- Construction
- Manufacturing
- Wholesale trade
- Retail trade
- Transportation and warehousing
- Utilities
- Information
- Financial activities
- Professional and business services
- Education and health services
- Leisure and hospitality
- Other services
- Government
- Federal government
- State government
- Local government

Thousands

Hundreds

Mar 2000
Mar 2002
Mar 2004
Mar 2006
Mar 2008
Mar 2010
Mar 2012
Mar 2014
Mar 2016
Mar 2018
Mar 2020

Hover over chart to view data.
Note: Shaded areas represent recessions, as determined by the National Bureau of Economic Research.
(b) Cases per Person
(a) $\% \Delta$ in Trips vs. $Share_{Essential_i}$

(b) $\% \Delta$ in Trips vs. $Share_{Telework_i}$

Source: % Change in trips from SafeGraph Weekly Patterns Data, using visitors traveling from home. % 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.
Closure Rates by Industry (circa April 1, 2020)

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

Change in Employment 2019-2021 vs. Change in Wage 2019-2021

Cities:
- Atlanta
- Austin
- Baltimore
- Birmingham
- Boston
- Buffalo
- Charlotte
- Chicago
- Cincinnati
- Columbus
- Dallas
- Denver
- Detroit
- Hartford
- Houston
- Indianapolis
- Jacksonville
- Kansas City
- Las Vegas
- Los Angeles
- Memphis
- Miami
- Milwaukee
- Minneapolis
- Nashville
- New Orleans
- New York
- Oklahoma City
- Orlando
- Philadelphia
- Phoenix
- Pittsburgh
- Portland
- Providence
- Raleigh
- Richmond
- Riverside
- Sacramento
- San Antonio
- San Diego
- San Francisco
- San Jose
- Seattle
- St. Louis
- Salt Lake City
- San Jose
- San Francisco
- Seattle
- Washington D.C.
<table>
<thead>
<tr>
<th>Correlation Coefficients (50 observations)</th>
<th>Change in Earnings 2019-2021</th>
<th>Change in Employment 2019-2021</th>
<th>Total COVID-19 Death Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Earnings</td>
<td>1.000</td>
<td>-0.0616</td>
<td>-0.4369</td>
</tr>
<tr>
<td>Change in Employment</td>
<td>-0.0616</td>
<td>1.000</td>
<td>-0.1475</td>
</tr>
<tr>
<td>COVID-19 Death Rate</td>
<td>-0.4369</td>
<td>-0.1475</td>
<td>1.00</td>
</tr>
<tr>
<td>Log(Population)</td>
<td>0.1142</td>
<td>-0.0724</td>
<td>-0.0922</td>
</tr>
<tr>
<td>Share of Adults with a B.A. or More</td>
<td>0.4040</td>
<td>-0.0538</td>
<td>-0.7115</td>
</tr>
<tr>
<td>Share of Adults with a Professional Degree +</td>
<td>0.4644</td>
<td>-0.2708</td>
<td>-0.5730</td>
</tr>
<tr>
<td>Average Precipitation</td>
<td>-0.1009</td>
<td>0.2027</td>
<td>-0.0720</td>
</tr>
<tr>
<td>Average Maximum Temperature</td>
<td>0.1549</td>
<td>0.4283</td>
<td>0.0651</td>
</tr>
</tbody>
</table>
Change in Wage 2019-2021  _______ Fitted values

Share with more than Pro. Degree

Cities:
- San Francisco (San Fran)
- San Jose
- Boston-C
- New York
- Portland
- Seattle-
- Austin-R
- Dallas-F
- Oklahoma
- Houston-
- Los Angeles
- San Diego
- New Orleans
- Washington
- Denver-
- Chicago-
- Milwaukee
- Buffalo-
- Buffalo-
- Cleveland
- Detroit
- Nashville
- Richmond
- Baton Rouge
- Portland
- Sacramento
- Atlanta-
- Salt Lake
- Kansas City
- Columbus
- Indianapolis
- St. Louis
- Raleigh
- Birmingham
- Philadelphia
- Miami-Ford Lauderdale
- Miami-
- Jamaican
- San Antonio
- Charlotte
- Riverside
- Tampa-St.
- Orlando-St.
- Jacksonville
- Minneapolis
- Atlanta
- Memphis
- Oklahoma
- Riverside
- Las Vegas
- Phoenix
- San Jose
- Orlando-St.
- Denver-A
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: Change in Emp\*0.2\*Change in Emp=Great Resignation (labor supply elasticities of 0.1-0.3) – strongly correlated with temperature.
Housing Markets: The Strange Case of Philadelphia (we’re just going to drop it for the housing work)
Changes in Prices and Changes in Permits: Moving along a housing supply curve

[Graph showing changes in FHFA Price vs. changes in permits full year for various cities.]
<table>
<thead>
<tr>
<th>Correlation Coefficients (49 observations)</th>
<th>Change in Housing Prices 2019-2021</th>
<th>Change in Permits 2019-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Prices</td>
<td>1.000</td>
<td>0.3157</td>
</tr>
<tr>
<td>Change in Permits</td>
<td>0.3157</td>
<td>1.000</td>
</tr>
<tr>
<td>Change in Earnings</td>
<td>0.1202</td>
<td>-0.3654</td>
</tr>
<tr>
<td>Change in Employment</td>
<td>0.7784</td>
<td>0.3917</td>
</tr>
<tr>
<td>COVID-19 Death Rate</td>
<td>-0.0125</td>
<td>0.2172</td>
</tr>
<tr>
<td>Log(Population)</td>
<td>-0.1038</td>
<td>-0.2785</td>
</tr>
<tr>
<td>Share of Adults with a B.A. or More</td>
<td>-0.2063</td>
<td>-0.2202</td>
</tr>
<tr>
<td>Share of Adults with a Professional Degree +</td>
<td>-0.3223</td>
<td>-0.3950</td>
</tr>
<tr>
<td>Average Precipitation</td>
<td>-0.2595</td>
<td>-0.0056</td>
</tr>
<tr>
<td>Average Maximum Temperature</td>
<td>0.5140</td>
<td>0.1863</td>
</tr>
</tbody>
</table>
Putting Things Together

• First, if I was in the macro-prudential business, I would start getting worried about price corrections in the housing sphere.
• The Phoenix MSA experienced massive price increases over the last two years (40% real) and is permitting 15% more units than in 2006.
• Second, there is less of an obvious theoretical justification for using both permits and prices to get at the total state of the housing market.
• The demand curve is supposed to be a function of the total level of housing (old and new) in a metropolitan area; the supply curve is a function of the current flow of housing.
• There are models that suggest putting them together, but instead I am just going to use the average z-score for percent changes in permits, prices, wages and employment level– and I’ll stick Philly back in for good measure.
The Index is not linked to overall population
But it is strongly correlated with temperature
<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Percent Home Price Growth</th>
<th>Percent Weekly Wage Growth</th>
<th>Percent Employment Growth</th>
<th>Percent Change in Housing Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin-Round Rock-Georgetown, TX</td>
<td>38.3%</td>
<td>10.4%</td>
<td>5.0%</td>
<td>58.5%</td>
</tr>
<tr>
<td>Phoenix-Mesa-Chandler, AZ</td>
<td>38.5%</td>
<td>8.0%</td>
<td>0.3%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Jacksonville, FL</td>
<td>29.7%</td>
<td>6.4%</td>
<td>0.9%</td>
<td>52.8%</td>
</tr>
<tr>
<td>Salt Lake City, UT</td>
<td>35.4%</td>
<td>6.4%</td>
<td>2.5%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Riverside-San Bernardino-Ontario, CA</td>
<td>33.1%</td>
<td>6.9%</td>
<td>2.1%</td>
<td>9%</td>
</tr>
<tr>
<td>Tampa-St. Petersburg-Clearwater, FL</td>
<td>33.7%</td>
<td>8.4%</td>
<td>0.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Raleigh-Cary, NC</td>
<td>28.7%</td>
<td>3.0%</td>
<td>1.7%</td>
<td>44.6%</td>
</tr>
<tr>
<td>Philadelphia-Camden-Wilmington, PA-NJ-DE-MD</td>
<td>12.6%</td>
<td>4.8%</td>
<td>-4.7%</td>
<td>142.8%</td>
</tr>
<tr>
<td>Nashville-Davidson--Murfreesboro--Franklin, TN</td>
<td>29.7%</td>
<td>5.8%</td>
<td>-0.3%</td>
<td>39.5%</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-Pompano Beach, FL</td>
<td>28.1%</td>
<td>11.3%</td>
<td>-2.1%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Charlotte-Concord-Gastonia, NC-SC</td>
<td>29.0%</td>
<td>6.5%</td>
<td>0.0%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Denver-Aurora-Lakewood, CO</td>
<td>21.3%</td>
<td>7.0%</td>
<td>-1.2%</td>
<td>55.6%</td>
</tr>
<tr>
<td>Memphis, TN-MS-AR</td>
<td>20.9%</td>
<td>10.2%</td>
<td>-2.3%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Seattle-Tacoma-Bellevue, WA</td>
<td>25.7%</td>
<td>12.5%</td>
<td>-2.9%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Sacramento-Roseville-Folsom, CA</td>
<td>25.7%</td>
<td>6.2%</td>
<td>-0.7%</td>
<td>29.1%</td>
</tr>
<tr>
<td>San Diego-Chula Vista-Carlsbad, CA</td>
<td>29.6%</td>
<td>9.1%</td>
<td>-2.8%</td>
<td>15.8%</td>
</tr>
<tr>
<td>San Antonio-New Braunfels, TX</td>
<td>24.7%</td>
<td>5.5%</td>
<td>-1.3%</td>
<td>39.6%</td>
</tr>
<tr>
<td>San Jose-Sunnyvale-Santa Clara, CA</td>
<td>20.8%</td>
<td>22.5%</td>
<td>-3.7%</td>
<td>-25.1%</td>
</tr>
<tr>
<td>San Francisco-Oakland-Berkeley, CA</td>
<td>12.6%</td>
<td>25.4%</td>
<td>-5.5%</td>
<td>-4.3%</td>
</tr>
<tr>
<td>Dallas-Fort Worth-Arlington, TX</td>
<td>22.9%</td>
<td>3.9%</td>
<td>1.3%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Las Vegas-Henderson-Paradise, NV</td>
<td>27.0%</td>
<td>7.8%</td>
<td>-3.8%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Orlando-Kissimmee-Sanford, FL</td>
<td>23.0%</td>
<td>9.0%</td>
<td>-2.3%</td>
<td>23.2%</td>
</tr>
<tr>
<td>Indianapolis-Carmel-Anderson, IN</td>
<td>20.4%</td>
<td>4.5%</td>
<td>-0.7%</td>
<td>41.4%</td>
</tr>
<tr>
<td>Columbus, OH</td>
<td>21.1%</td>
<td>5.1%</td>
<td>-1.5%</td>
<td>42.0%</td>
</tr>
<tr>
<td>Atlanta-Sandy Springs-Alpharetta, GA</td>
<td>25.8%</td>
<td>5.5%</td>
<td>-1.9%</td>
<td>20.1%</td>
</tr>
</tbody>
</table>
Observations on the Top Half of the List

- Price and Employment Growth are the strongest correlates of this aggregate measure (.8) – mainly because they correlate so strongly with each other.
- Permit growth is a .58 correlation and wages are .32.
- The top half is dominated by the sunbelt (19/25).
- The other six include Philadelphia, which doesn’t belong there.
- Salt Lake City, Seattle and Denver. Not sunbelt, but consumer cities.
- Columbus OH and Indianapolis, IN → pro-business mid-western cities.
- And Austin dominates along almost every dimension.
Three policies to reduce the risk of pandemic disease
<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Percent Home Price Growth</th>
<th>Percent Weekly Wage Growth</th>
<th>Percent Employment Growth</th>
<th>Percent Change in Housing Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati, OH-KY-IN</td>
<td>19.2</td>
<td>4.8</td>
<td>-2.9</td>
<td>39.4</td>
</tr>
<tr>
<td>Providence-Warwick, RI-MA</td>
<td>22.6</td>
<td>6.3</td>
<td>-4.0</td>
<td>13.3</td>
</tr>
<tr>
<td>Boston-Cambridge-Newton, MA-NH</td>
<td>19.0</td>
<td>9.6</td>
<td>-4.8</td>
<td>11.3</td>
</tr>
<tr>
<td>Portland-Vancouver-Hillsboro, OR-WA</td>
<td>20.2</td>
<td>10.9</td>
<td>-4.0</td>
<td>-10.7</td>
</tr>
<tr>
<td>Los Angeles-Long Beach-Anaheim, CA</td>
<td>23.1</td>
<td>7.6</td>
<td>-4.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Birmingham-Hoover, AL</td>
<td>18.2</td>
<td>4.1</td>
<td>-4.0</td>
<td>31.4</td>
</tr>
<tr>
<td>Kansas City, MO-KS</td>
<td>17.4</td>
<td>4.9</td>
<td>-3.2</td>
<td>20.8</td>
</tr>
<tr>
<td>Virginia Beach-Norfolk-Newport News, VA-NC</td>
<td>18.2</td>
<td>4.3</td>
<td>-4.0</td>
<td>26.2</td>
</tr>
<tr>
<td>Oklahoma City, OK</td>
<td>18.5</td>
<td>0.8</td>
<td>-2.7</td>
<td>26.6</td>
</tr>
<tr>
<td>Richmond, VA</td>
<td>17.3</td>
<td>4.2</td>
<td>-3.4</td>
<td>15.1</td>
</tr>
<tr>
<td>Milwaukee-Waukesha, WI</td>
<td>15.2</td>
<td>5.1</td>
<td>-4.8</td>
<td>28.4</td>
</tr>
<tr>
<td>Cleveland-Elyria, OH</td>
<td>20.0</td>
<td>5.5</td>
<td>-5.4</td>
<td>11.1</td>
</tr>
<tr>
<td>Pittsburgh, PA</td>
<td>16.1</td>
<td>5.4</td>
<td>-7.1</td>
<td>35.6</td>
</tr>
<tr>
<td>Louisville/Jefferson County, KY-IN</td>
<td>17.1</td>
<td>4.5</td>
<td>-2.4</td>
<td>-3.6</td>
</tr>
<tr>
<td>Buffalo-Cheektowaga, NY</td>
<td>21.6</td>
<td>9.9</td>
<td>-7.5</td>
<td>-9.9</td>
</tr>
<tr>
<td>Detroit-Warren-Dearborn, MI</td>
<td>17.8</td>
<td>5.0</td>
<td>-5.7</td>
<td>16.4</td>
</tr>
<tr>
<td>Baltimore-Columbia-Towson, MD</td>
<td>13.6</td>
<td>5.7</td>
<td>-4.4</td>
<td>15.0</td>
</tr>
<tr>
<td>St. Louis, MO-IL</td>
<td>13.4</td>
<td>2.9</td>
<td>-4.0</td>
<td>26.6</td>
</tr>
<tr>
<td>Hartford-East Hartford-Middletown, CT</td>
<td>19.4</td>
<td>3.0</td>
<td>-4.9</td>
<td>8.0</td>
</tr>
<tr>
<td>Minneapolis-St. Paul-Bloomington, MN-WI</td>
<td>14.3</td>
<td>5.3</td>
<td>-5.4</td>
<td>14.6</td>
</tr>
<tr>
<td>Houston-The Woodlands-Sugar Land, TX</td>
<td>12.8</td>
<td>0.2</td>
<td>-2.4</td>
<td>11.8</td>
</tr>
<tr>
<td>Chicago-Naperville-Elgin, IL-IN-WI</td>
<td>13.1</td>
<td>6.1</td>
<td>-5.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Washington-Arlington-Alexandria, DC-VA-MD-WV</td>
<td>12.0</td>
<td>3.7</td>
<td>-3.9</td>
<td>3.0</td>
</tr>
<tr>
<td>New York-Newark-Jersey City, NY-NJ-PA</td>
<td>11.9</td>
<td>7.7</td>
<td>-6.9</td>
<td>-4.5</td>
</tr>
<tr>
<td>New Orleans-Metairie, LA</td>
<td>9.6</td>
<td>6.0</td>
<td>-12.6</td>
<td>32.6</td>
</tr>
</tbody>
</table>
A Few Observations on the Bottom Half

- LA is drawn down by its low housing permits growth; Portland is down because it permitted fewer units than in 2019.
- Houston doesn’t deserve to be at the bottom. It didn’t have massive permitting growth, because it was already permitting 60,000 units per year and people don’t expect to pay much more than housing costs for a unit.
- New Orleans is pretty much at the bottom by any measure.
- NYC’s wage growth is good, but pretty much everything is a next to New Orleans.
- Ranks 37-47 is filled with the former industrial heavyweights.
But don’t count NYC out.

• Crisis # 1: The British occupation ends in 1783 leaving the cities deserted.
  • Followed by New York’s explosion as the continent’s most important port and eventually the center of American manufacturing.

• Crisis # 2: The 1929 crash leaves the financial markets in shambles. The city’s massive building boom ensured empty towers for over a decade.
  • WWII and then the 1950s led to a revitalization of the city.

• Crisis # 3: De-industrialization plus rising social problems plus the coming of the car created the crisis of the 1970s.
  • The reinvention of NYC around financial services was the crucial adjustment.
Globalization and Automation Killed NYC Industries, Like NYC Garments
The Decline of the Costs of Moving Goods

Dollars per Ton Mile (Real)

Railroad Revenue per Ton Mile

year

1890

2000

0.185063

0.02323
Average Population Growth by Average January Temperature (Quintiles)
But these...
Didn’t kill finance and urban information jobs, and zoom is unlikely to kill the office either.
Emmanuel and Harrington: Going Remote

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

% Promoted

Promoted to Mid-Level
Promoted to Upper-Level

Months in Retailer

On-Site
Remote
The effects of remote work on collaboration among information workers

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

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)
# The Inequality of the Remote Workplace

<table>
<thead>
<tr>
<th>May 2020</th>
<th>Total Civilian Population</th>
<th>Unable to Work Due to Pandemic (Closure or Lost Business)</th>
<th>Total Employed Population</th>
<th>Teleworking Due to Pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>Total, 25 years and over</td>
<td>222,559</td>
<td>41,616</td>
<td>18.7</td>
<td>123,109</td>
</tr>
<tr>
<td>Less than a high school diploma</td>
<td>19,607</td>
<td>3,941</td>
<td>20.1</td>
<td>6,887</td>
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<tr>
<td>High school graduates, no college</td>
<td>61,403</td>
<td>12,025</td>
<td>19.6</td>
<td>28,708</td>
</tr>
<tr>
<td>Some college or associate degree</td>
<td>57,510</td>
<td>12,235</td>
<td>21.3</td>
<td>31,581</td>
</tr>
<tr>
<td>Bachelor’s degree and higher^{4}</td>
<td>84,038</td>
<td>13,416</td>
<td>16.0</td>
<td>55,933</td>
</tr>
<tr>
<td>Bachelor’s degree only</td>
<td>51,890</td>
<td>9,011</td>
<td>17.4</td>
<td>33,778</td>
</tr>
<tr>
<td>Advanced Degree</td>
<td>32,148</td>
<td>4,405</td>
<td>13.7</td>
<td>22,155</td>
</tr>
</tbody>
</table>
Everything Depends on the Medical Response

• # 1: If COVID-19 mutates in a deadlier fashion or if a new pandemic reappear, then the costs for cities and all the economy are enormous.

• # 2: If this finally ends, and doesn’t happen again then the shock is real but doesn’t change urban life massively. Still there will be short term shifts:
  • Commercial space is more vulnerable than residential.
  • Cities will still reallocate from old to young, and remote work will continue.

• #3: Global talent has just gotten more mobile— and yet there is a dire need to help the urban disadvantaged.
  • Smarter government rather than more or less government.
  • Fewer regulations that bind small businesses or builders.
  • The need to experiment and evaluate.
The Political Risks for Cities

https://www.graftonarchitects.ie/