The Big Shift to Remote Work

Steven J. Davis

Flexible Work Council
23 February 2022
A Note about Data Sources

• The main source of data for this slide deck is the Survey of Working Arrangements and Attitudes (SWAA), a monthly survey of American workers that Jose Maria Barrero, Nick Bloom and I design and run. When referring to SWAA results, please cite our paper on “Why working from home will stick,” NBER working paper 28731, and the website at www.wfhresearch.com.

• Certain results below draw on other surveys that I co-design:
  • An extension of the SWAA to 15+ countries that Jose, Nick and I conduct in cooperation with the European Bank for Reconstruction and Development.
  • The Survey of Business Uncertainty, a monthly panel survey of US firms that Nick and I design and conduct with the Federal Reserve Bank of Atlanta.
  • An occasional survey of employers conducted by the Federal Reserve Bank of Richmond, for which I provide advice on survey design.
Working Arrangements After the Pandemic
Based on what they tell workers, companies increasingly plan for employees to work from home after the pandemic.

Responses to the question:
- *After COVID, in 2022 and later, how often is your employer planning for you to work full days at home?*

Sample: SWAA waves from July 2020 to January 2022. Sample includes all respondents who report their employer’s plans for post-COVID WFH and who have work-from-home experience during the pandemic. We exclude persons with no employer. 

N = 61,679 (all workers) and 43,167 (able to work from home)

Methodological Note: From January 2022 onwards, we impute post-COVID WFH plans for respondents who say their employer has not discussed post-COVID WFH plans.
- If not currently doing any WFH, impute plans as no WFH post-COVID.
- If currently WFH 1+ days per week, give them the average of planned WFH days in the same survey wave among workers who are currently WFH 1+ day per week.

Before the pandemic, WFH averaged about 0.25 days per week in ATUS data.
Post COVID, three groups of employees: fully on site, hybrid, and fully remote

Front-line employees, mostly non-graduates, lower paid,

Professionals and managers, mostly graduates, higher paid

Specialized roles - IT support, payroll etc, often contractors

Source: Data from 16,575 US responses in August through December 2021, reweighted to match the US population. Details on [https://wfhresearch.com/](https://wfhresearch.com/)
Why the big pandemic-induced shift to WFH?

1. Mass experimentation and learning → re-optimization of working arrangements
2. Investments (in time, equipment, systems, and processes) by workers and firms that enable WFH
3. Attitudinal shifts:
   • Stigma around WFH has plummeted
   • Long-lingering fears of infection risks
4. A surge in innovation that supports WFH
5. Long COVID pandemic entrenches the shift to WFH
Relative to expectations, how has WFH turned out?

- Hugely better, 20%+ -- 20.2%
- Substantially better - 10 to 20% -- 22.3%
- Better -- up to 10% -- 19.0%
- About the same -- 25.4%
- Worse - up to 10% -- 6.9%
- Substantially worse - 10 to 20% -- 3.3%
- Hugely worse, 20%+ -- 3.0%

How has working from home turned out for you?

- Hugely better -- I am 20%+ more productive than I expected
- Substantially better -- I am to 10% to 19% more productive than I expected
- Better -- I am 1% to 9% more productive than I expected
- About the same
- Worse -- I am 1% to 9% less productive than I expected
- Substantially worse -- I am to 10% to 19% less productive than I expected
- Hugely worse -- I am 20%+ less productive than I expected

Compared to your expectations before COVID (in 2019) how has working from home turned out for you?
Desired and Planned Levels of WFH after the Pandemic
Rise with WFH Productivity Surprises during the Pandemic
Similar Patterns Hold in a 15-Country Sample

Working with the European Bank for Reconstruction and Development, we fielded a version of the SWAA across 15 countries in October 2021. The chart at left displays relationships in the pooled sample, which has roughly one to two thousand observations per country. Most of the countries are in Europe, but the sample includes Australia, China, Egypt, and Turkey.

We are currently working with the EBRD to field a second survey wave across 25 countries.
Implications and Consequences

1. Less commuting, especially via mass transit
2. Big worker benefits, mainly for well educated & highly paid
3. Estimated one-time productivity boost from shift to WFH: 4.7% true gain and 1% measured gains.
4. Productivity gains from better internet access
   • Universal access to reliable, high-speed home internet service would raise labor productivity by another 1.1%
   • Flow gains are nearly 3X as large during COVID-like disasters
5. Big worker spending drops in city centers
6. Management challenges (next topic)

Points 3 and 4 above reflect estimates for the U.S. The extent of the shift to WFH and its impact on productivity will differ greatly across countries.
When employees work from home, they save an average 65 minutes per day by not commuting and taking less time to get ready for work. The chart shows time saved by age of youngest child.

Source: Data from 8,313 SWAA respondents who can work from home, reweighted to match the US population. See https://wfhresearch.com/.
The Value to Employees of Hybrid Working Arrangements, Percent of Take-Home Pay by Industry

- Technology
- Finance
- Business Services
- Retail Trade
- Education
- Health Care
- Government
- Manufacturing

Source: Data from 17,087 responses through 2021, reweighted to match US population.
The Value to Employees of Hybrid Working Arrangements, Women and Men by Schooling Age of Youngest Child

Source: Data from 17,087 responses through 2021, reweighted to match US population. Split by gender of respondee and by schooling of youngest child at home. Details on https://wfhresearch.com/
How did you use the commuting time you saved by working from home, percent

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage of time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working more on my job</td>
<td>40.7</td>
</tr>
<tr>
<td>Indoor leisure (TV, games etc)</td>
<td>19.7</td>
</tr>
<tr>
<td>Outdoor leisure or exercise</td>
<td>13.5</td>
</tr>
<tr>
<td>Chores and home improvements</td>
<td>16.2</td>
</tr>
<tr>
<td>Childcare</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Source: Data from 32,461 respondees who can work from home, reweighted to match the US population. Details on [https://wfhresearch.com/](https://wfhresearch.com/)
Some Managerial Challenges

Employee desires to WFH >> employer plans for WFH

• Bigger gaps for workers with lower earnings.
• Women express stronger desires to WFH than men.
• Minorities also express stronger desires to WFH.
• >40% of US workers say they will quit or seek another job if employer requires a return to the workplace 5 days a week.

Bring everyone back 5 days a week?

• Retention and recruitment challenges, might need to pay more.

Embrace the Shift to WFH?

• How to make it work for the organization and employees.
Worker Desires for WFH Are Flat with Respect to Earnings, But Employer Plans for WFH Rise with Earnings.

After COVID, in 2022 and later, how often would you like to have paid workdays at home?

After COVID, in 2022 and later, how often is your employer planning for you to work full days at home?

Note: Marker size is proportional to the number of respondents per income level.
On average, women report wanting to work from home more days per week after COVID than men.
People of Color Want More Work-from-Home Days

Black Americans want to work from home 2.6 days per week on average, as compared to 2.5 days per week for Asian Americans, 2.3 days per week for Hispanic Americans, and 2.2 days per week for white Americans, according to surveys of more than 10,000 Americans conducted between May and July 2021.

After Covid, in 2022 and beyond, how often would you like to have paid workdays at home?

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Asian</th>
<th>Hispanic or Latinx</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>2.6</td>
<td>2.5</td>
<td>2.3</td>
<td>2.2</td>
</tr>
</tbody>
</table>


College-Educated Women with Children Want More Work-from-Home Days

Among college-educated employees with young children, 34% of women want to work from home five days per week, compared to 26% of men.

After Covid, in 2022 and beyond, how often would you like to have paid workdays at home?

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>0-1</td>
<td>2-4</td>
</tr>
<tr>
<td>%</td>
<td>30.3</td>
<td>35.7</td>
</tr>
<tr>
<td></td>
<td>32.1</td>
<td>26.3</td>
</tr>
</tbody>
</table>

Let me work from home (part of the week), or I will find another job.

If my employer announced that all employees must return to the worksite 5+ days a week the month-after-next, I would:

Responses to the question:
- How would you respond if your employer announced that all employees must return to the worksite 5+ days a week starting [month-after-next]?

Notes: Data are from 6,101 responses to the June, July, and August waves of the Survey of Working Arrangements and Attitudes. We re-weight raw responses to match the share of persons in a given {age x sex x education x earnings} cell in the 2010 – 2019 CPS. The sample includes employed respondents who worked at least one full day from home during the survey week.
The fraction of workers who would quit or start looking for a job allowing for some WFH is higher among women.

Responses to the question:
- How would you respond if your employer announced that all employees must return to the worksite 5+ days a week starting [month-after-next]?

Notes: Data are from 6,101 responses to the June, July, and August waves of the Survey of Working Arrangements and Attitudes. We re-weight raw responses to match the share of persons in a given {age x sex x education x earnings} cell in the 2010 – 2019 CPS. The sample includes employed respondents who worked at least one full day from home during the survey week.
The fraction of workers who would quit or start looking for a job allowing for some WFH is higher among minorities.

Responses to the question:
- How would you respond if your employer announced that all employees must return to the worksite 5+ days a week starting [month-after-next]?

Notes: Data are from 6,101 responses to the June, July, and August waves of the Survey of Working Arrangements and Attitudes. We re-weight raw responses to match the share of persons in a given {age x sex x education x earnings} cell in the 2010 – 2019 CPS. The sample includes employed respondents who worked at least one full day from home during the survey week.
## Tradeoffs

<table>
<thead>
<tr>
<th>Advantages of the Employer Worksite</th>
<th>Advantages of Working From Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Often, that’s where to engage customers/clients/patients</td>
<td>1. Saves on commute and time spent getting ready for work</td>
</tr>
<tr>
<td>2. Good for company culture and cohesion</td>
<td>2. More quiet time/fewer distractions</td>
</tr>
<tr>
<td>3. Good for creativity that flows from in-person interactions</td>
<td>3. Greater workday flexibility</td>
</tr>
<tr>
<td></td>
<td>…</td>
</tr>
</tbody>
</table>

Hybrid working arrangements aim for the best of both. But how to sustain company culture, foster creativity, mentor the less experienced, monitor and manage remote workers, coordinate remote and onsite workers, manage worker expectations and perceptions,...?
There is huge variation in what employees want, so let them choose?

Response to: “In 2022+ (after COVID) how often would you like to have paid work-days at home?”

Notes: Data from the SWAA monthly survey of 2,500+ individuals aged 20 to 64 in the US labor force. Carried out by QuestionPro and IncQuery from May 2020 to July 2021. Only the 67% of respondents reporting the ability to work from home 1+ days per week included.

Source: “Why working from home will stick”, Jose Barrero, Nick Bloom and Steve Davis (2021)
A Bit of Evidence on How Organizations Are Responding to the Challenges
Most large U.S. firms are not planning on full choice

Q: “Who decides which days and how many days employees work remotely?”

Source: Survey of Business Uncertainty, 512 US firms July 2021
https://www.atlantafed.org/research/surveys/business-uncertainty
Larger Firms Are More Likely to Offer Remote or Hybrid Working Arrangements to Recruit and Retain Employees

Are you offering remote or hybrid work arrangements ...

... to recruit new full-time employees?

... to retain existing full-time employees?

Source: A small-scale survey of employers in the Fifth District of the Federal Reserve System. The survey results are discussed more fully in Davis, Macaluso and Waddell (2022).
Remote and Hybrid Working Arrangements Are Complementary to a Broader Geographic Search for Talent

Are you offering remote or hybrid working arrangements as a way to recruit new full-time employees?

Source: A small-scale survey of employers in the Fifth District of the Federal Reserve System. The survey results are discussed more fully in Davis, Macaluso and Waddell (2022).


