

SWAA January 2023 Updates

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17 January 2023



Latest survey wave included: December 2022

To sign up for regular results updates, please sign up [here](#).

- **Source of all data (unless noted):** Survey of Working Arrangements and Attitudes (SWAA), see www.wfhresearch.com

- **When referring to these results please cite:**

Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. “Why working from home will stick,” National Bureau of Economic Research Working Paper 28731.

www.wfhresearch.com

The Survey of Working Arrangements and Attitudes



- Monthly online survey since May 2020, >100,000 observations to date.
- We design the survey instrument.
- Target population: U.S. residents, 20-64, who earned \geq \$10K in 2019 (\geq \$20K in early survey waves). From January to March 2022, we transitioned to earned \geq \$10K in prior year.
- The SWAA is fielded by market research firms that rely on wholesale aggregators (e.g., [Lucid](#)) for lists of potential survey participants.
- After dropping “speeders” (~16% of sample), we re-weight to match 2010-2019 CPS worker shares in age-sex-education-earnings cells. Dropping those who fail attention checks (roughly another 12%) sharpens some results.
- Median response time: 7 to 12 minutes, after dropping speeders
- Results, micro data, survey instruments, and more are freely available at www.WFHresearch.com.

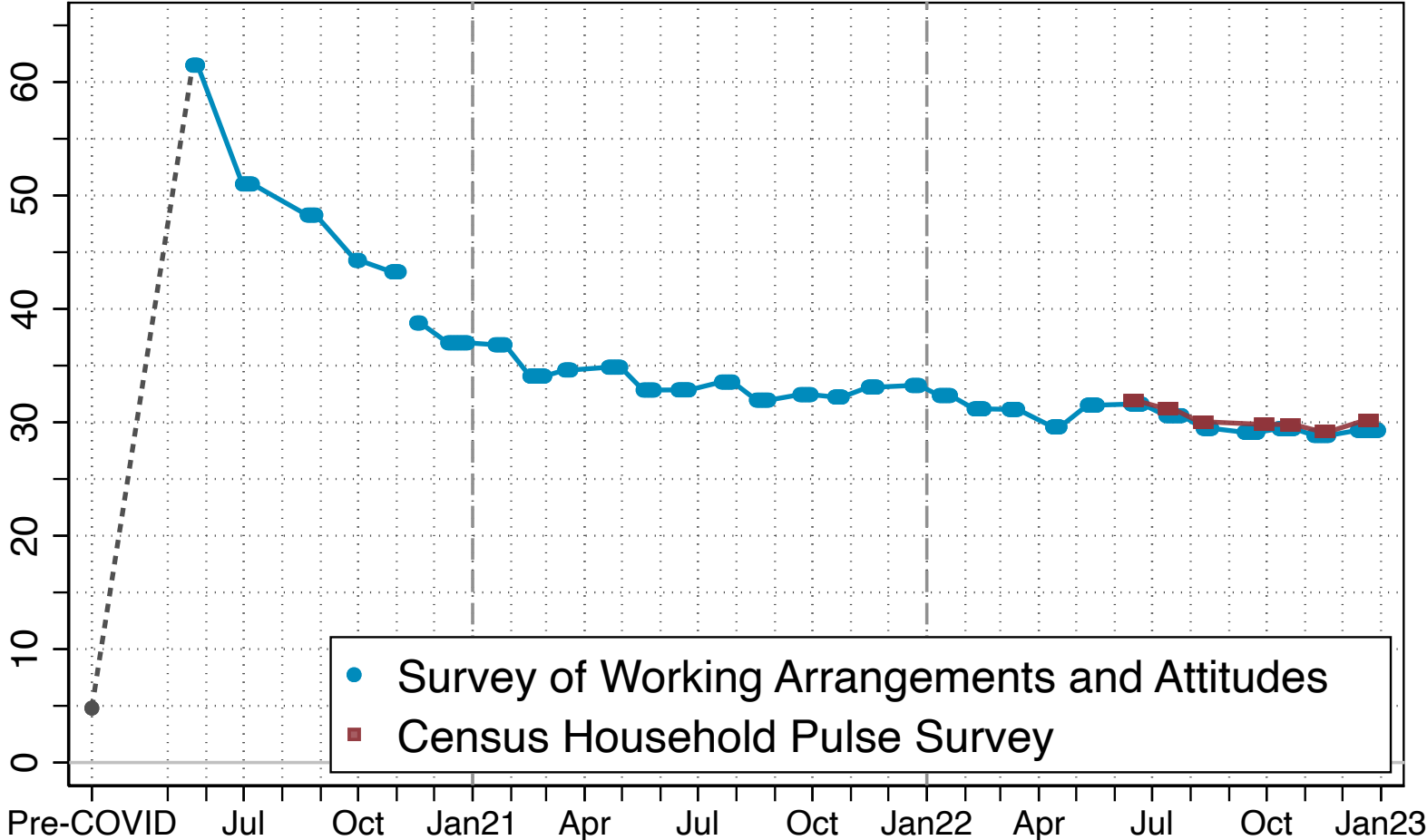
Representativeness

- By design, we focus on persons who exhibit some attachment to the workforce, as evidenced by prior earnings.
- No respondents are recruited based on an interest in our topics.
- Since respondents take the survey using a computer, smartphone, iPad or like device, we miss people who never use such devices.
- Before re-weighting, the SWAA under samples the less educated, particularly those who did not finish high school.
- Even after re-weighting, we may over sample those who are more tech and internet savvy, especially among the least educated.

Days Worked from Home are Stabilizing at Near 30%



Percentage of paid full days worked from home



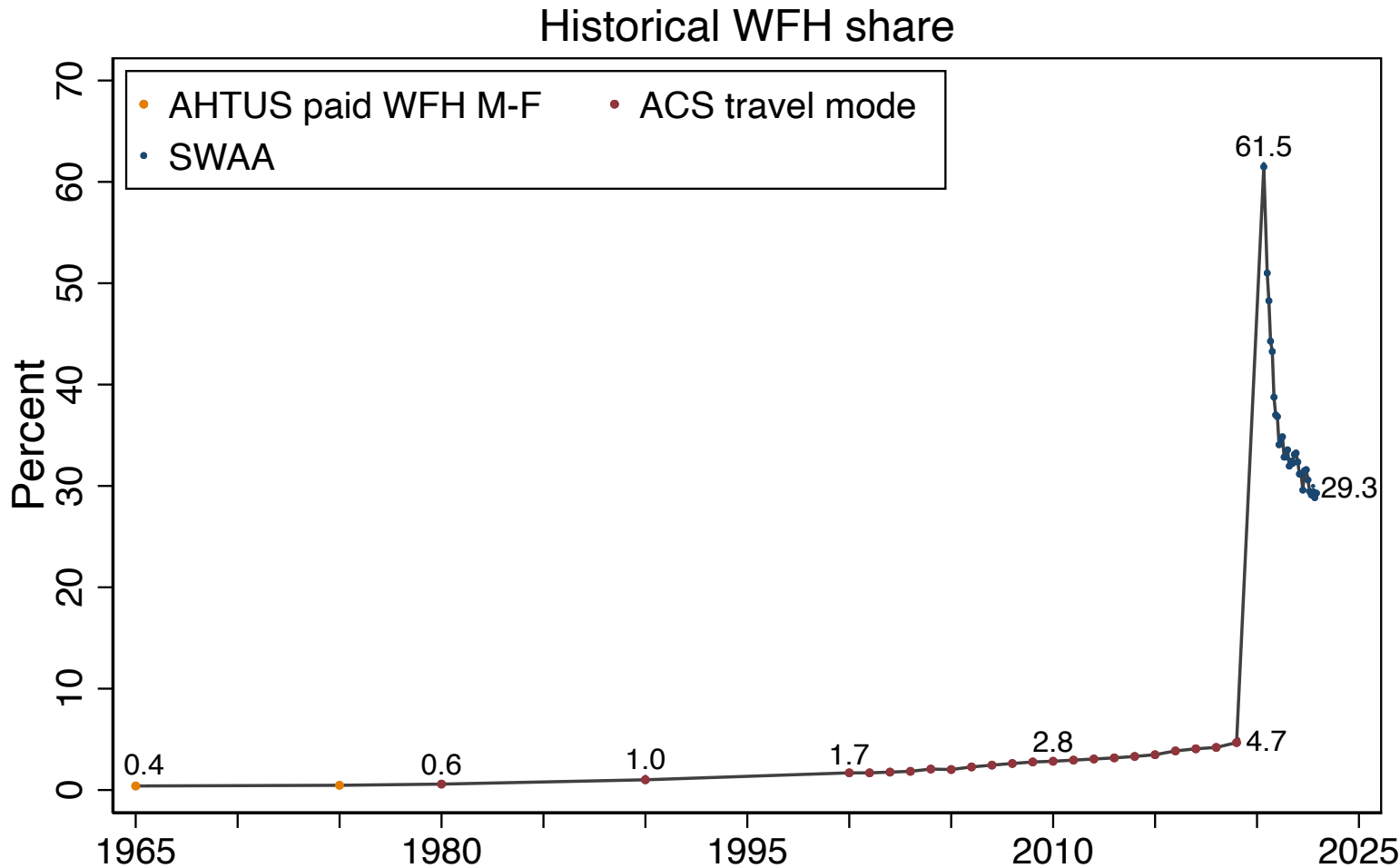
*Pre-COVID estimate taken from the 2017-2018 American Time Use Survey
 *The break in the series in November 2020 reflects a change in the survey question.

Source: Responses to the questions:
 - **Currently (this week) what is your work status?** (SWAA)
 - **For each day last week, did you work a full day (6 or more hours), and if so where?** (SWAA)
 - **In the last 7 days, have you...teleworked or worked from home?** (HHP)

Notes: For each wave, we compute the percent of paid full days worked from home in the SWAA and Household Pulse Survey (HHP) and plot it on the vertical axis. The horizontal-axis location shows when the survey was in the field. The pre-COVID figure is from the 2017-2018 American Time Use Survey. SWAA: Before November 2020, we asked the first question above. Since November 2021, we have asked the second question. From November 2020 to October 2021, we back-cast responses to the current question using a regression model based on current-question responses and another question (not shown). We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells. HHP: We focus on individuals aged 20 to 64 with household incomes above \$25,000 per year. We assign 30% of days WFH if the respondent did so for “for 1-2 days;” 70% if they did so “for 3-4 days;” 100% if “5 or more days;” and 0 for “No.”

N = 108,696 (SWAA) N = 203,576 (HHP)

The Pandemic Permanently Increased WFH, Equivalent to Almost 40 Years of Pre-Pandemic Growth



1965-1975 uses data from the American Historical Time Use Survey.
 1980-2019 uses data from American Community Survey.
 May 2020 - December 2022 uses data from the Survey of Working Arrangements and Attitudes.

Source: Responses to the questions:

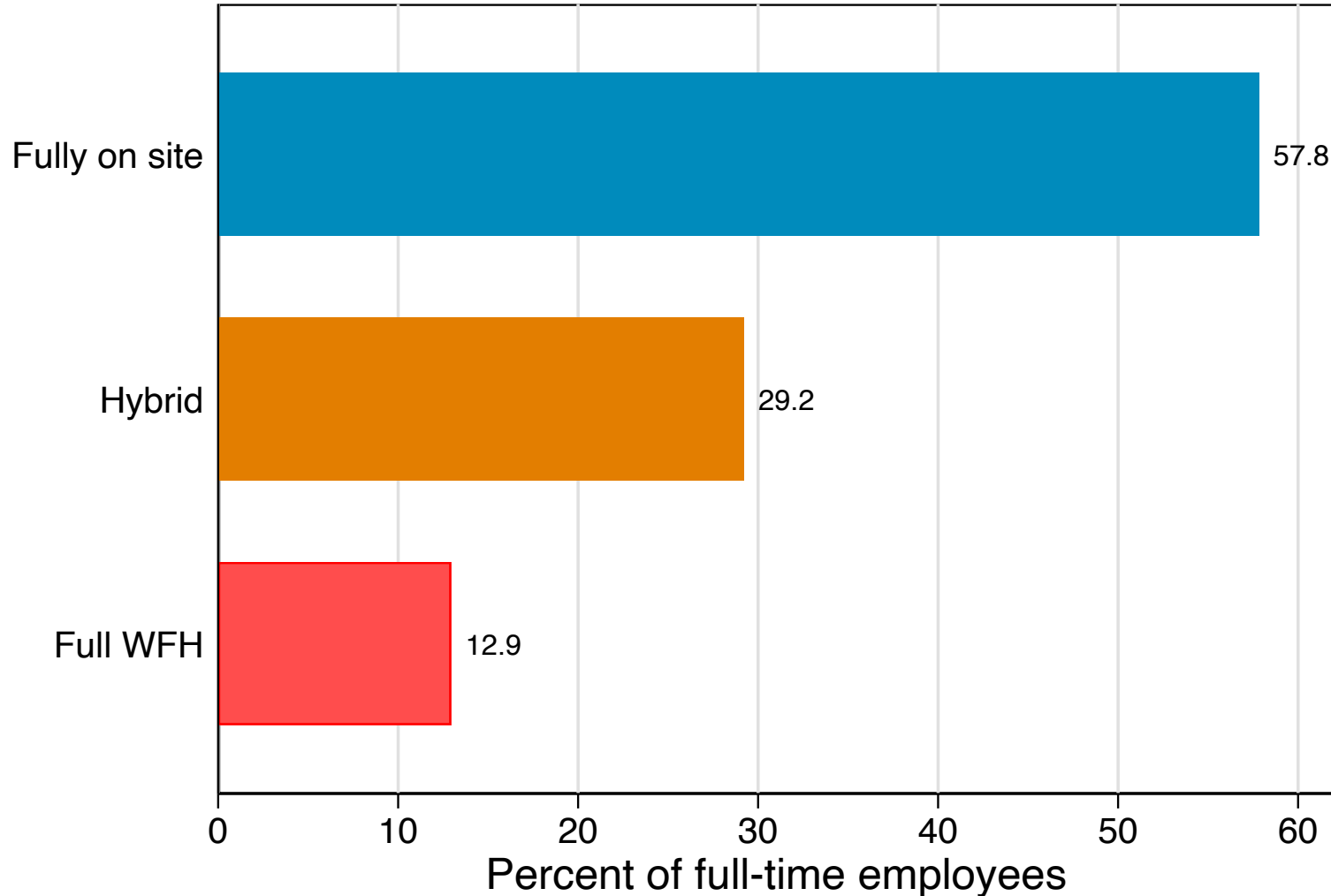
- *In their time diary the respondent listed the activity "Paid work at home" for **6 or more hours.** (AHTUS)*
- *How did this person **usually** get to work last week? (ACS)*
- *For each day last week, did you work a full day (6 or more hours), and, if so, where? (SWAA)*

Notes: For each dataset, we compute the percent of working individuals who worked full days at home during the survey's reference period. For the AHTUS and ACS, if an individual reports usually working from home, we mark them as working from home 100% of the time. In SWAA we compute the percent of full paid days at home to account for a hybrid work schedule. Then we plot each percentage on the vertical axis. We re-weight the sample of US residents aged 20 to 64 earning \$20,000 or more in 2019 dollars to overall population shares.

As of 2022Q4: 13% of Full-Time Employees are Fully Remote, 58% are Full-Time on Site, and 29% are in a Hybrid Arrangement



Working Arrangements



Source: Responses to the questions:

- *For each day last week, did you work a full day (6 or more hours), and if so where?*

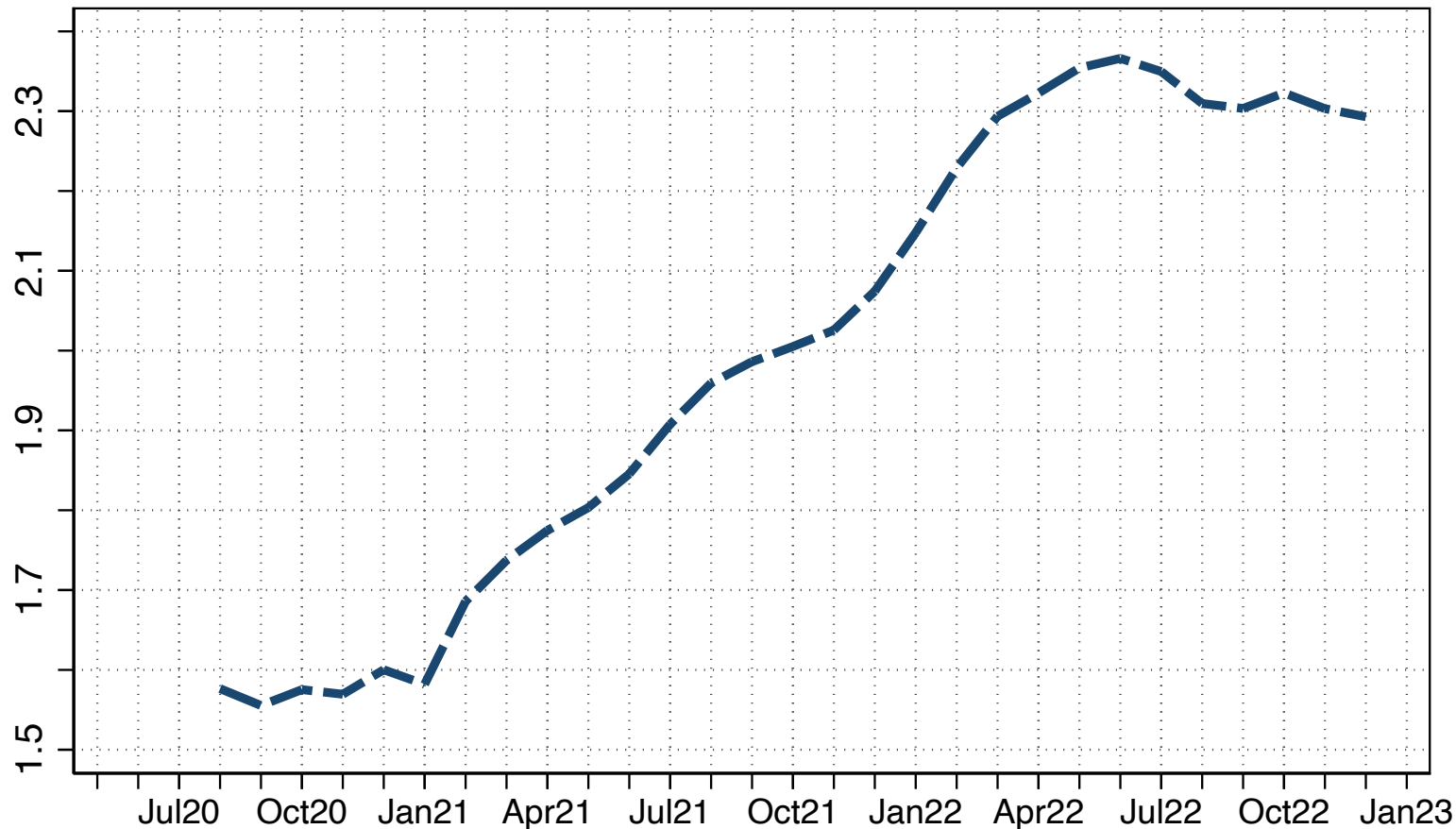
Notes: For each wave, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey's reference week. Then we show the percentage for each group. The sample covers the September to December 2022 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

N = 15,737

Employer Plans for WFH Remain Close to 2.3 Days per Week (for persons able to work from home)



Average Days per Week Working From Home
As the Pandemic Ends: Employer Plans



Sample: Workers able to work from home

Responses to the question:

- *As the pandemic ends, how often is your employer planning for you to work full days at home?*

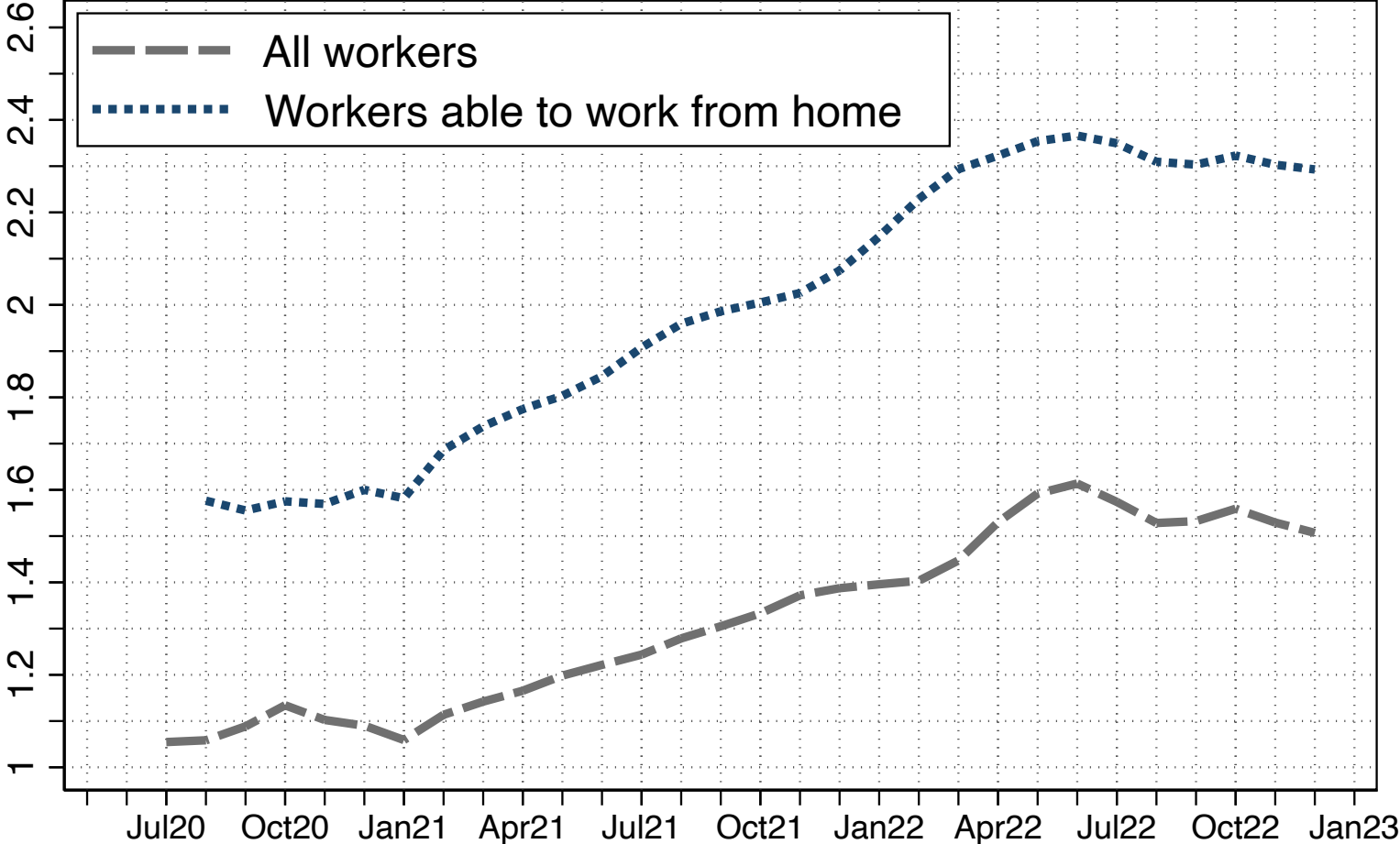
Sample: Data are from all SWAA waves, covering August 2020 to December 2022. The sample includes all respondents who reported their employer's plans for WFH as the pandemic ends and who have work-from-home experience during the pandemic (thus able to work from home). We exclude respondents who report having no employer. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

N = 85,721 (able to work from home)

Employer plans for Full Paid Days Worked from Home as the Pandemic Ends



Average Days per Week Working From Home
As the Pandemic Ends: Employer plans



Responses to the question:

- *As the pandemic ends, how often is your employer planning for you to work full days at home?*

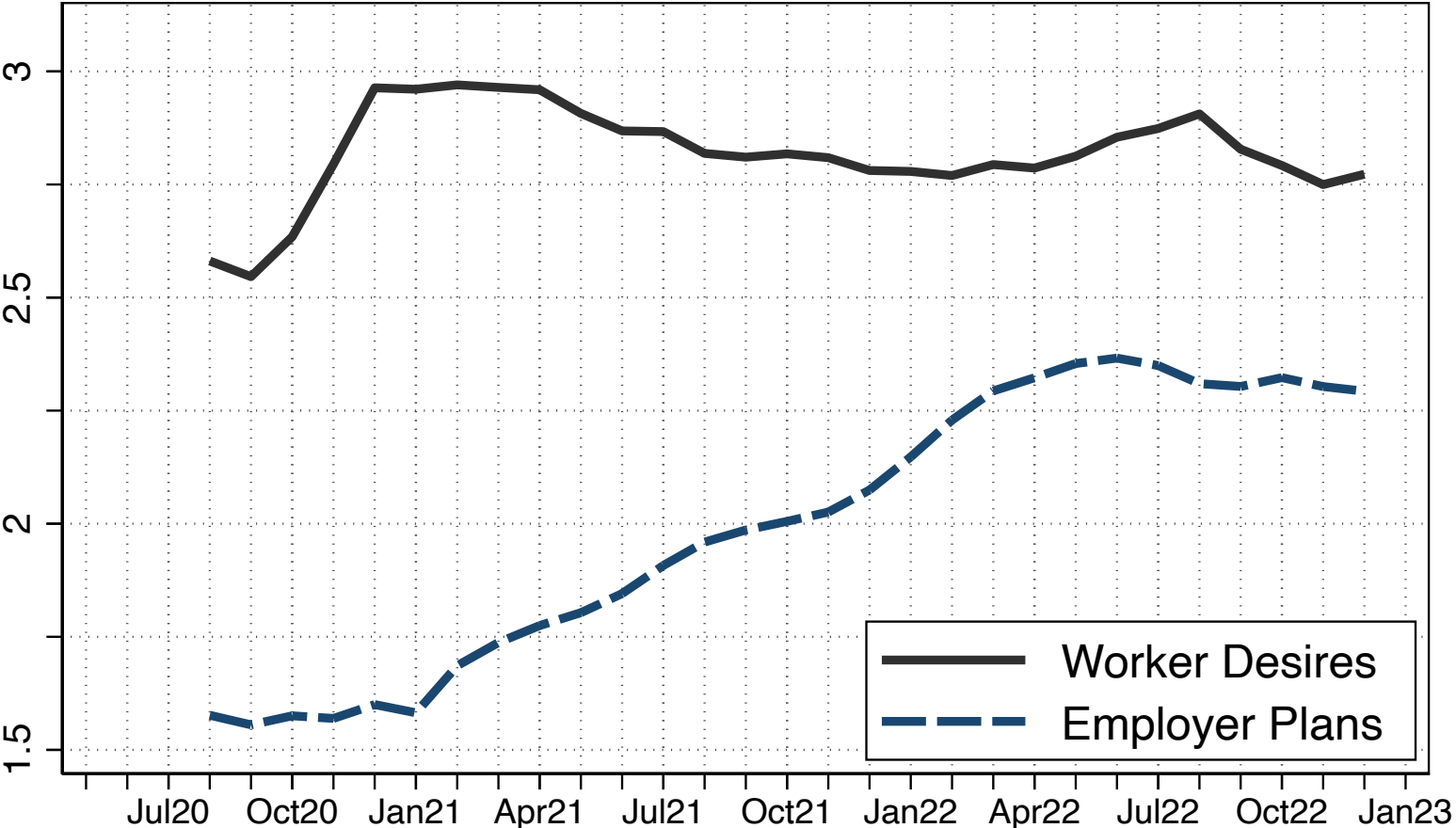
Sample: Data are from all SWAA waves, covering July 2020 to December 2022. The sample includes all respondents who reported their employer’s plans for WFH as the pandemic ends (“All workers” series), but the series labeled “Workers able to work from home” restricts attention to workers who have work-from-home experience during the pandemic. In both cases, we exclude respondents who report having no employer. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

N = 120,689 (all respondents) and 85,721 (able to work from home)

The Gap Between How Much Employees Want to Work from Home and Employer Plans Continues to Shrink



Average Days per Week Working From Home After the Pandemic Ends: Workers Able to WFH



Responses to the questions:

- After the pandemic ends, how often would you like to have full paid days at home?
- After the pandemic ends, how often is your employer planning for you to work full days at home?

Sample: Data are from all SWAA waves, covering August 2020 to December 2022. The sample includes all respondents who responded to the relevant survey and have work-from-home experience during the pandemic. For the employer plans series, we exclude respondents who report having no employer.

N = 85,721 (employer plans, able to work from home)

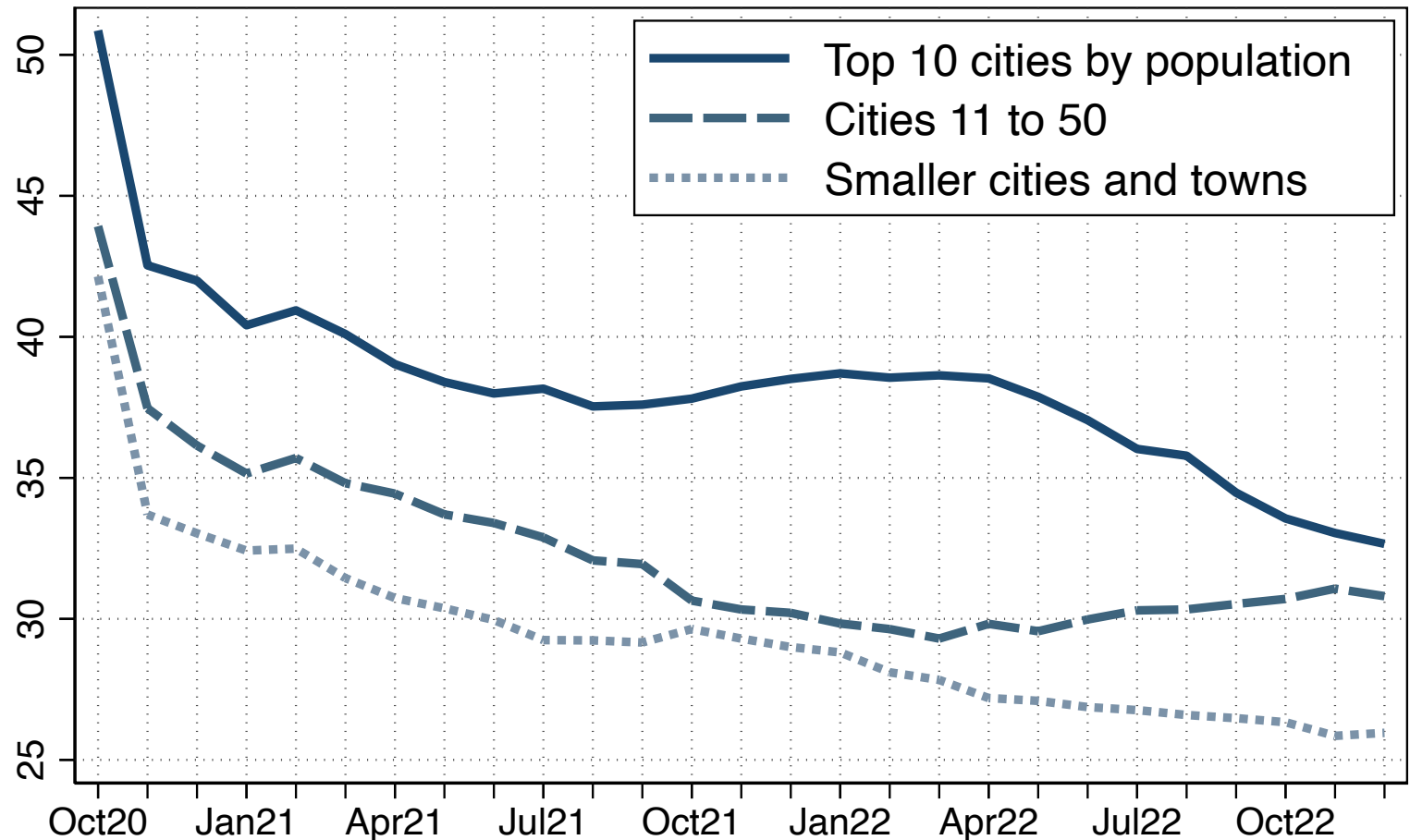
N = 92,312 (worker desires, able to work from home)

Sample: Workers able to work from home

Working From Home is More Common in Major Cities than in Smaller Cities and Towns (but Declining as of Fall 2022)



Percent of paid full days worked from home



Source: Responses to the questions:
 - **Currently (this week) what is your work status?**
 - **For each day last week, did you work a full day (6 or more hours), and if so where?**

Notes: The chart plots 6-month moving averages where available and 3-month moving averages prior to November 2020. For each wave, we compute the percent of paid full days worked from home and plot it on the vertical axis, after sorting respondents into cities (i.e., Combined Statistical Areas) by the location of their current job's business premises. Before November 2020, we asked the first question above. Since November 2021, we have asked the second question. From November 2020 to October 2021, we back-cast responses to the current question using a regression model that relates the current-question responses to the responses to another question (not shown). We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

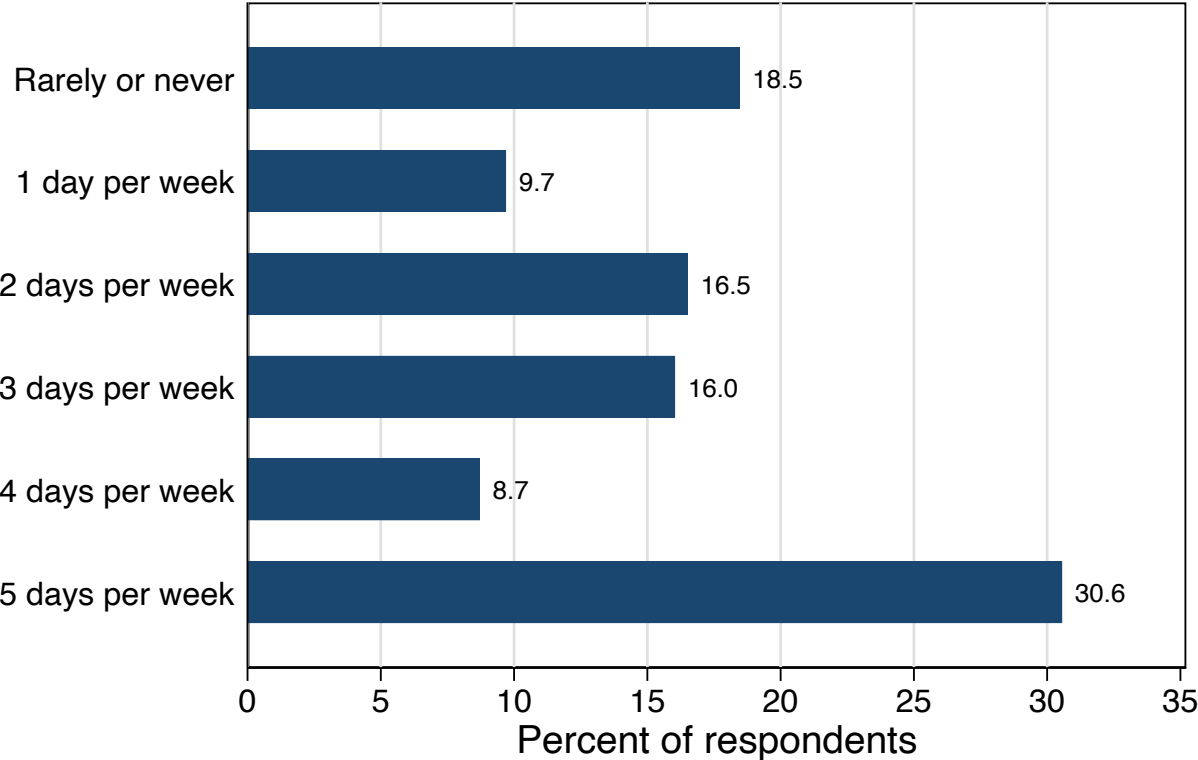
*We define cities using Combined Statistical Areas and use the location of the respondent's current job.

N = 100,808

Employers Offer Fewer Fully Remote Jobs and More Fully Onsite Jobs Than Employees Want

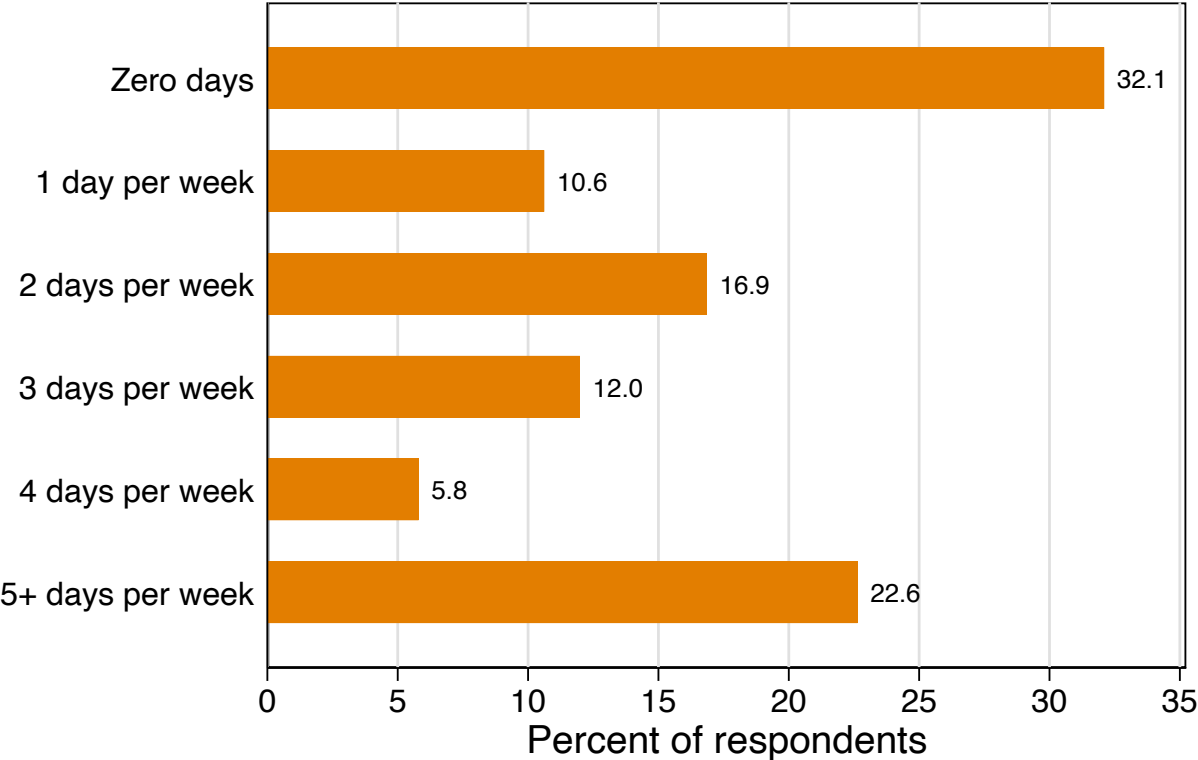


Worker desired amount of post-COVID WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 10992

Current amount of post-COVID WFH days



Sample: Full-time wage and salary employees who are able to WFH. N = 10448

Responses to the questions: *As the pandemic ends*, how often would you **like to** have paid workdays at home? *For each day last week*, did you **work a full day (6 or more hours)**, and if so **where**?

Sample: Data are from the September to December 2022 SWAA waves. The sample includes full-time wage and salary employees (i.e. who worked 5 or more days during the survey reference week) who have work-from-home experience during the pandemic and pass the attention-check questions. Numbers for “5 days per week” in the right chart include responses for 6 or 7 full days worked from home. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

Current levels of working from home are highest for the tech, finance, and professional and business services sectors



Current working from home: All wage and salary employees



Responses to the question:
 - For each day last week, did you work a full day (6 or more hours), and if so where?

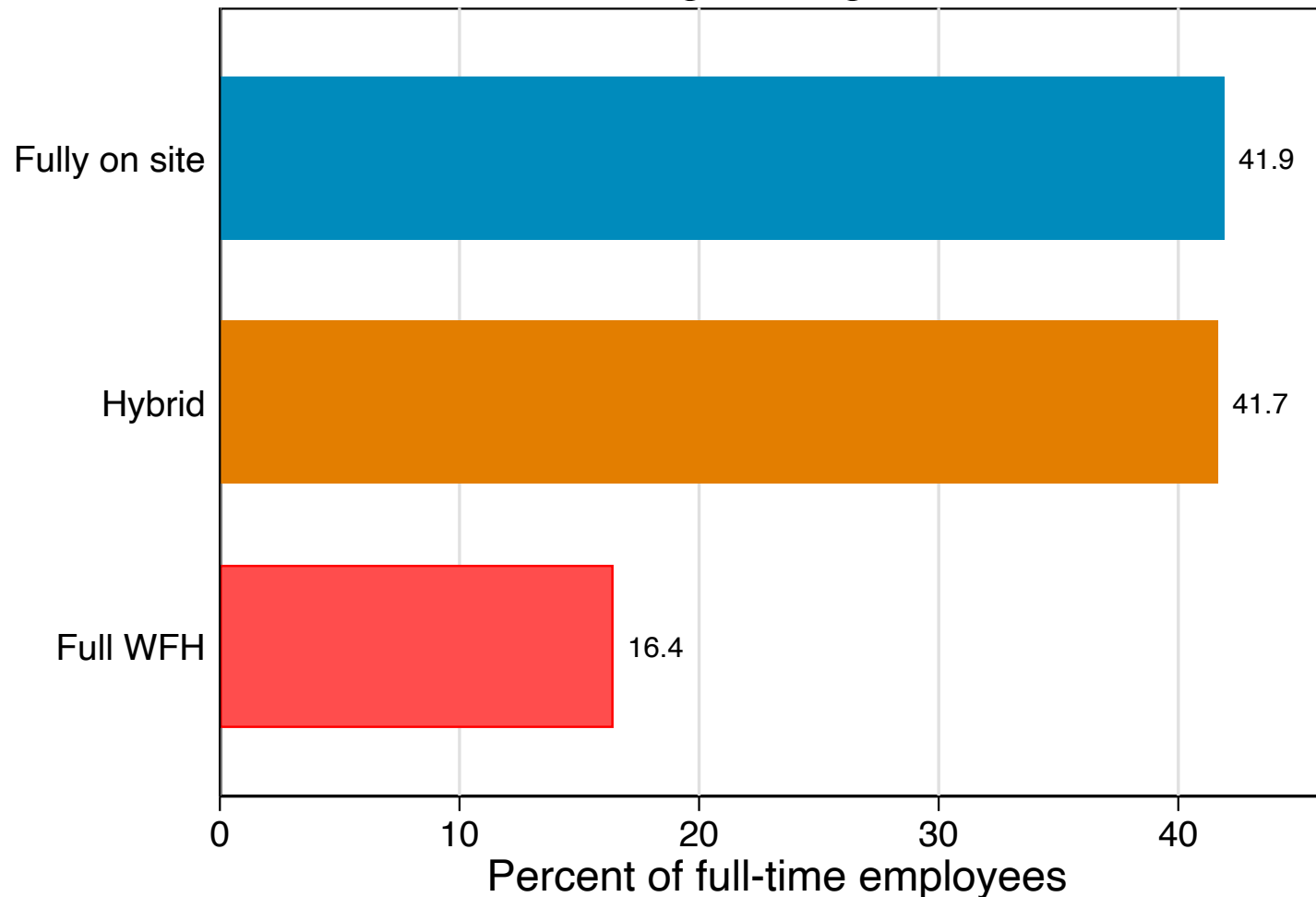
Sample: Data are from the July to December 2022 SWAA waves. The sample includes all wage and salary employees who pass the attention-check questions. We exclude mining due to insufficient observations and agriculture to focus on non-farm jobs. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match Current Population Survey on age, sex, education, and earnings.

N = 27,472

For Graduates Fully On-Site and Hybrid are the Most Common Working Patterns



Working Arrangements



Source: Responses to the questions:

- *For each day last week, did you work a full day (6 or more hours), and if so where?*

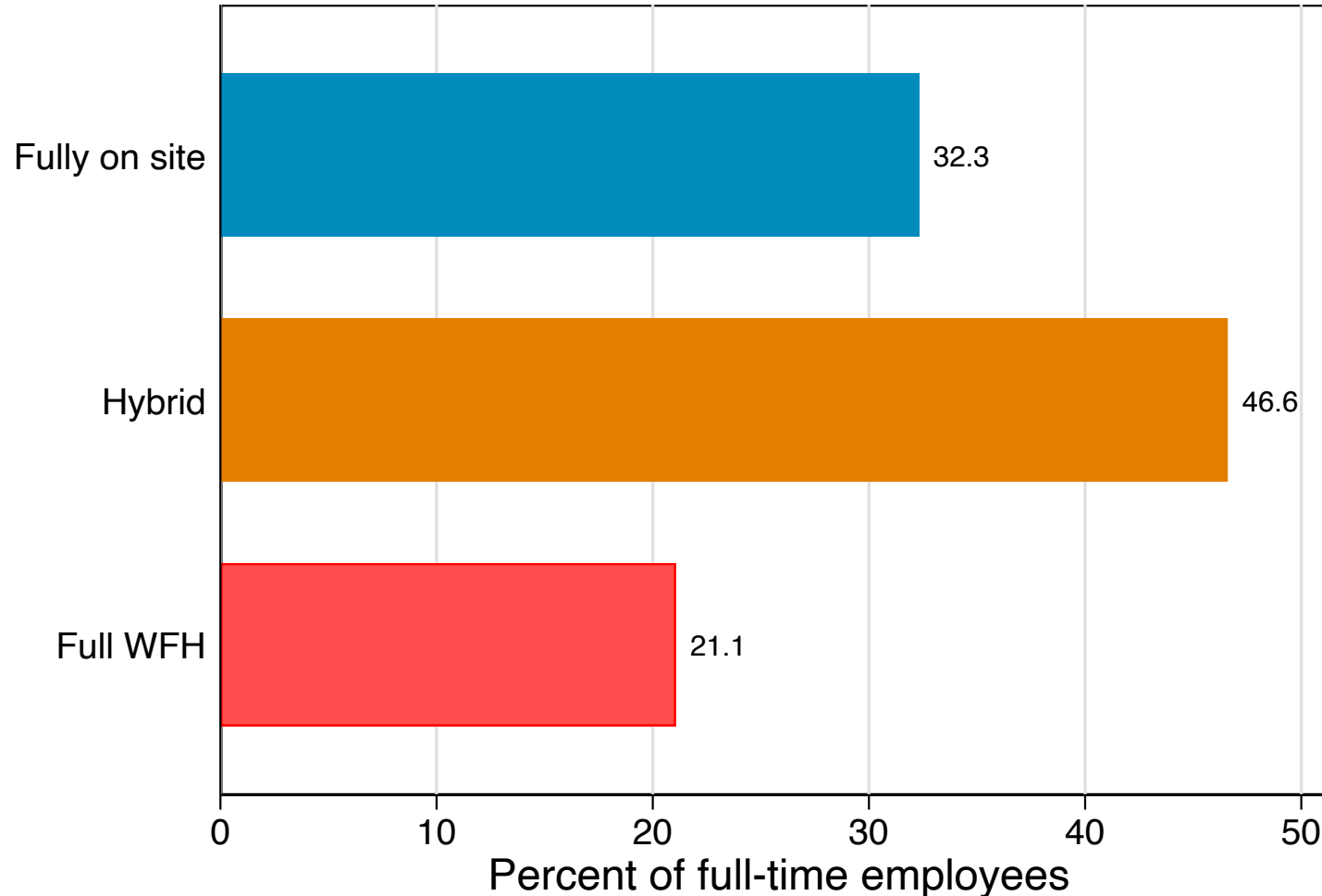
Notes: For each wave, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees with at least a 4-year college degree who either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey's reference week. Then we show the percentage for each group. The sample covers the September to December 2022 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

N = 11,901

For Employees that can WFH the Most Common Practice is Hybrid



Working Arrangements



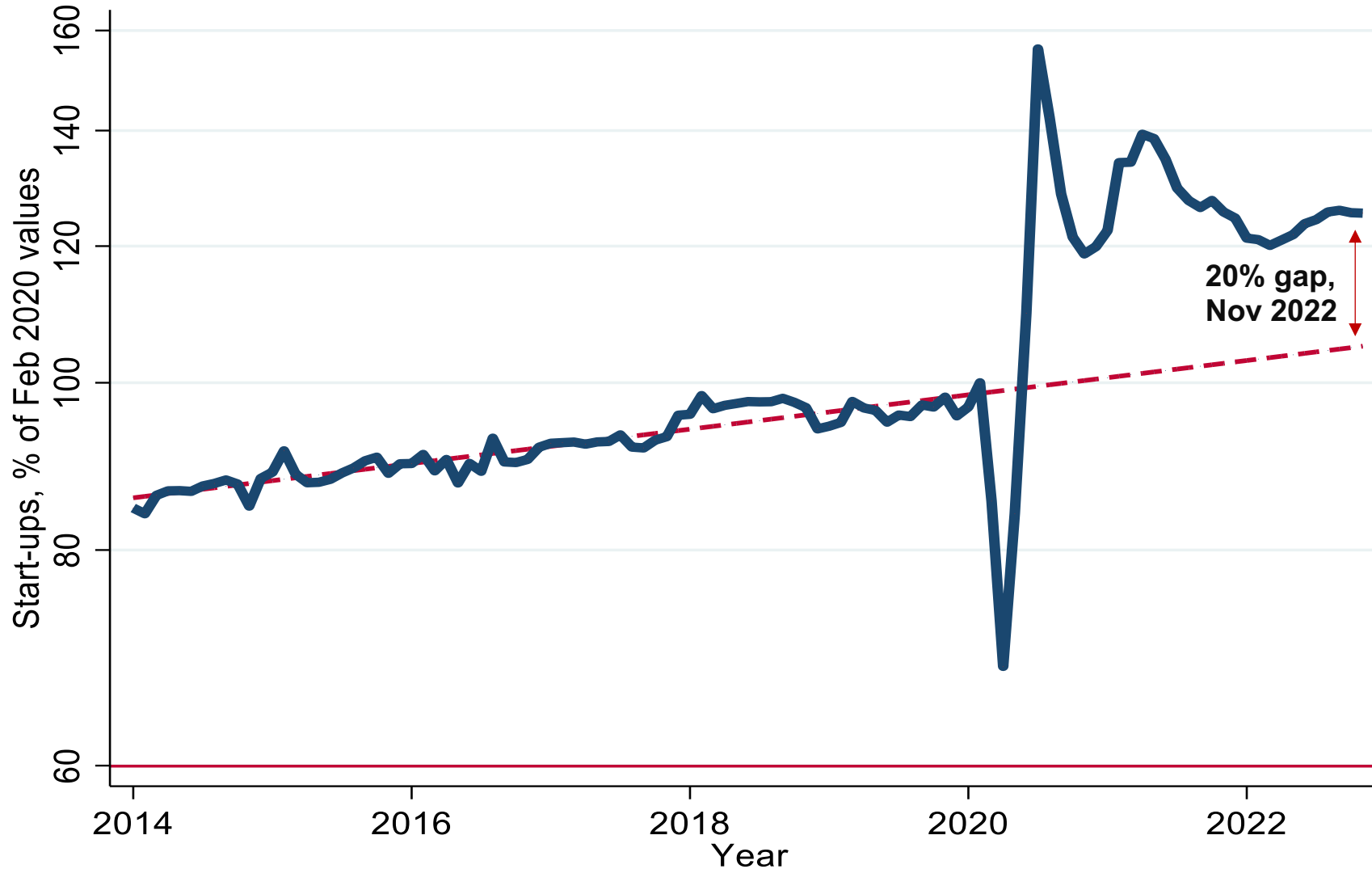
Source: Responses to the questions:

- *For each day last week, did you work a full day (6 or more hours), and if so where?*

Notes: For each wave, we compute the percent of full-time (i.e. work 5+ days/week) wage and salary employees who are able to work from home and either i) worked all their days on business premises; ii) worked some days on business premises and some days at home; or iii) worked all all days at home during the survey's reference week. Then we show the percentage for each group. We infer that somebody is able to work from home if they currently do so 1+ days per week, or did so at some point since the start of COVID. The sample covers the September to December 2022 waves of the SWAA. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

N = 14,784

Start-up rates surged during the pandemic, possibly related to the shift to working from home



Source: US Census Bureau: Business Applications with a high-propensity of turning into payroll businesses. 3-month moving average (except from 2020/2-2020/9 due to the rapid impact of the pandemic).

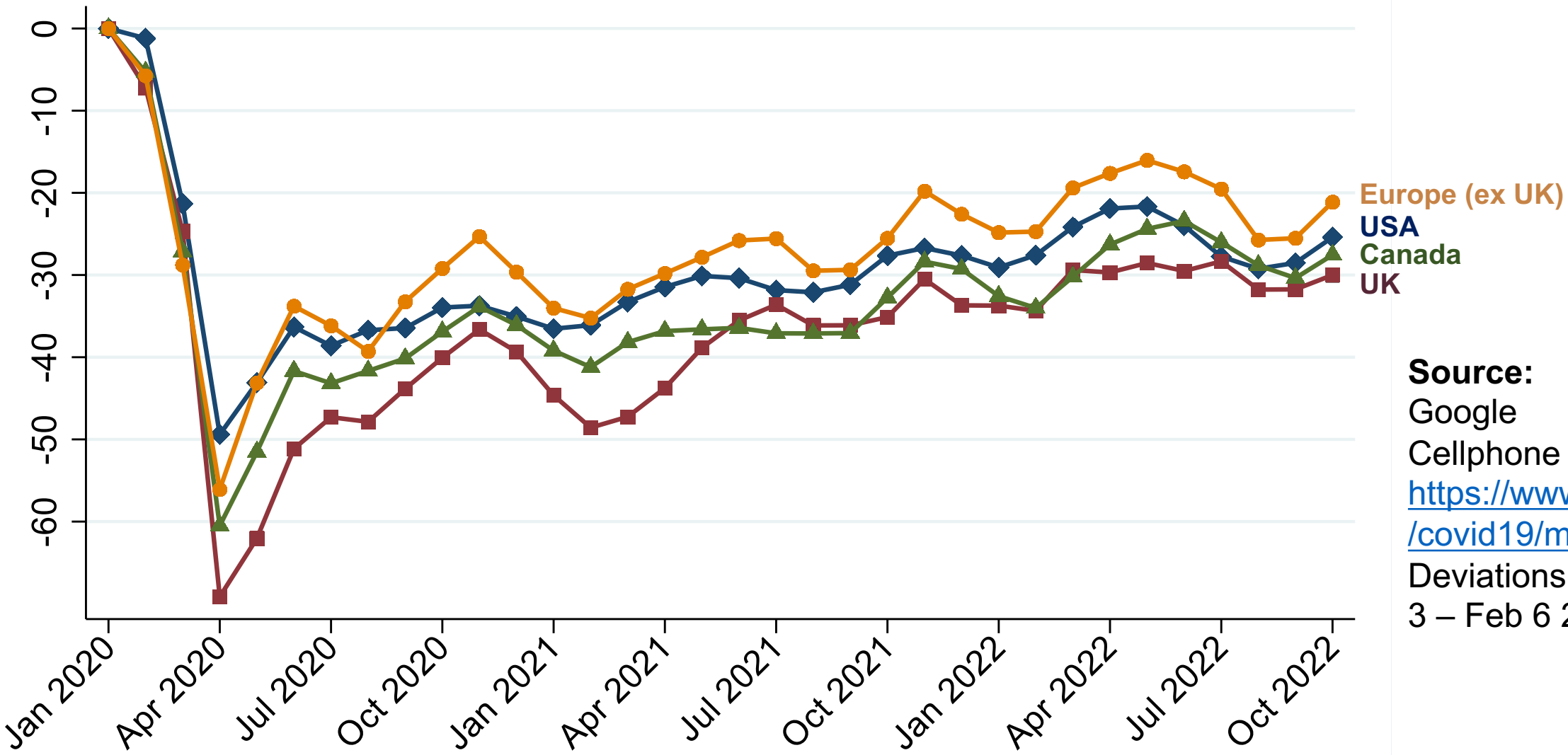
<https://fred.stlouisfed.org/series/BAHBATOTALSAUS>

US, UK and Canada highest levels of WFH, Europe (ex UK) slightly lower



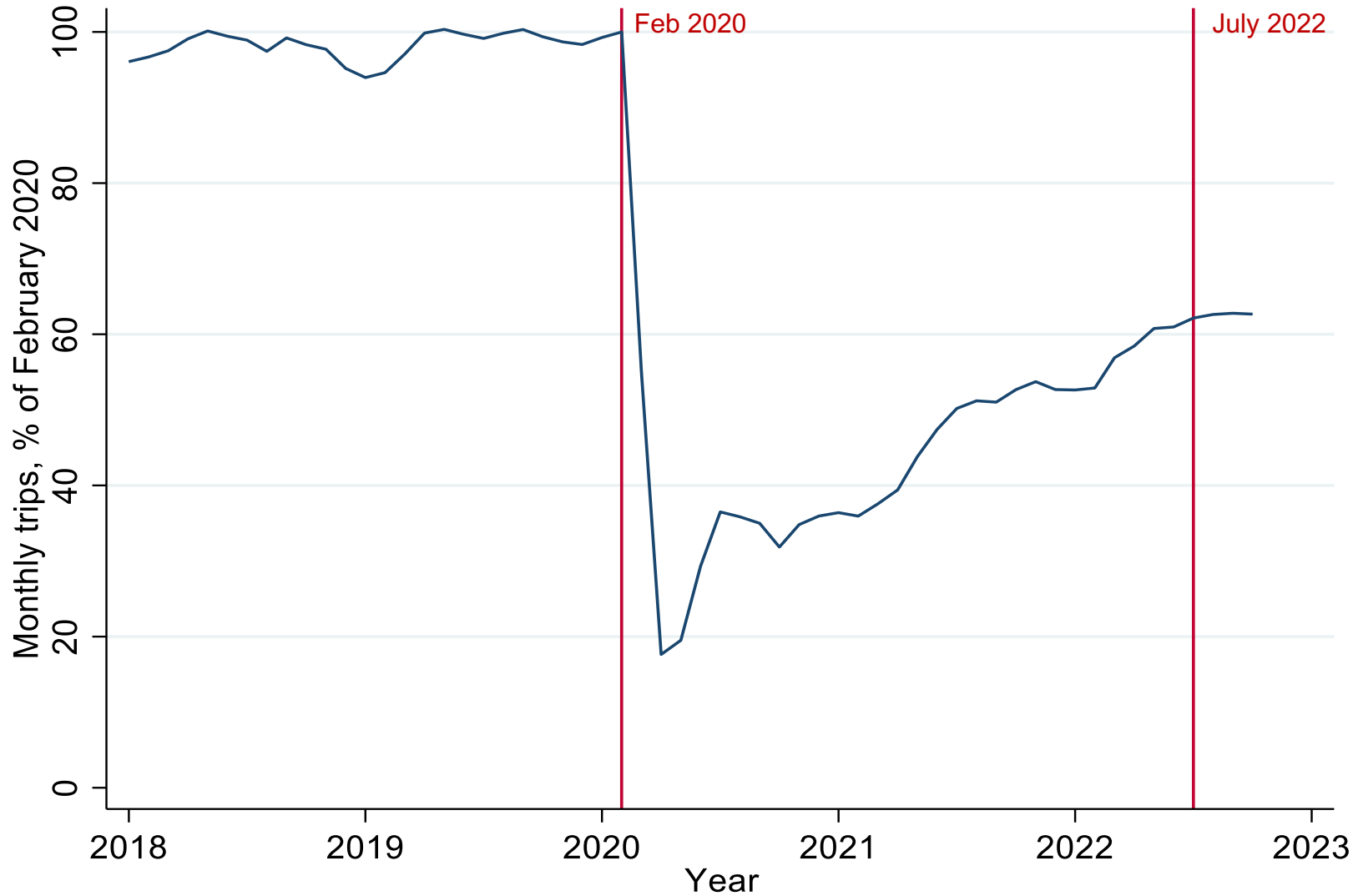
Workplace Trips (so the drop is a measure of WFH)

Google cellphone workplace mobility in % deviation from Jan 2020



Source: Data from Google Workplace Cellphone Mobility Data <https://www.google.com/covid19/mobility/>
Deviations from the Jan 3 – Feb 6 2020.

Public transit journeys are stabilizing about one third below pre-pandemic, consistent with the rise in days WFH

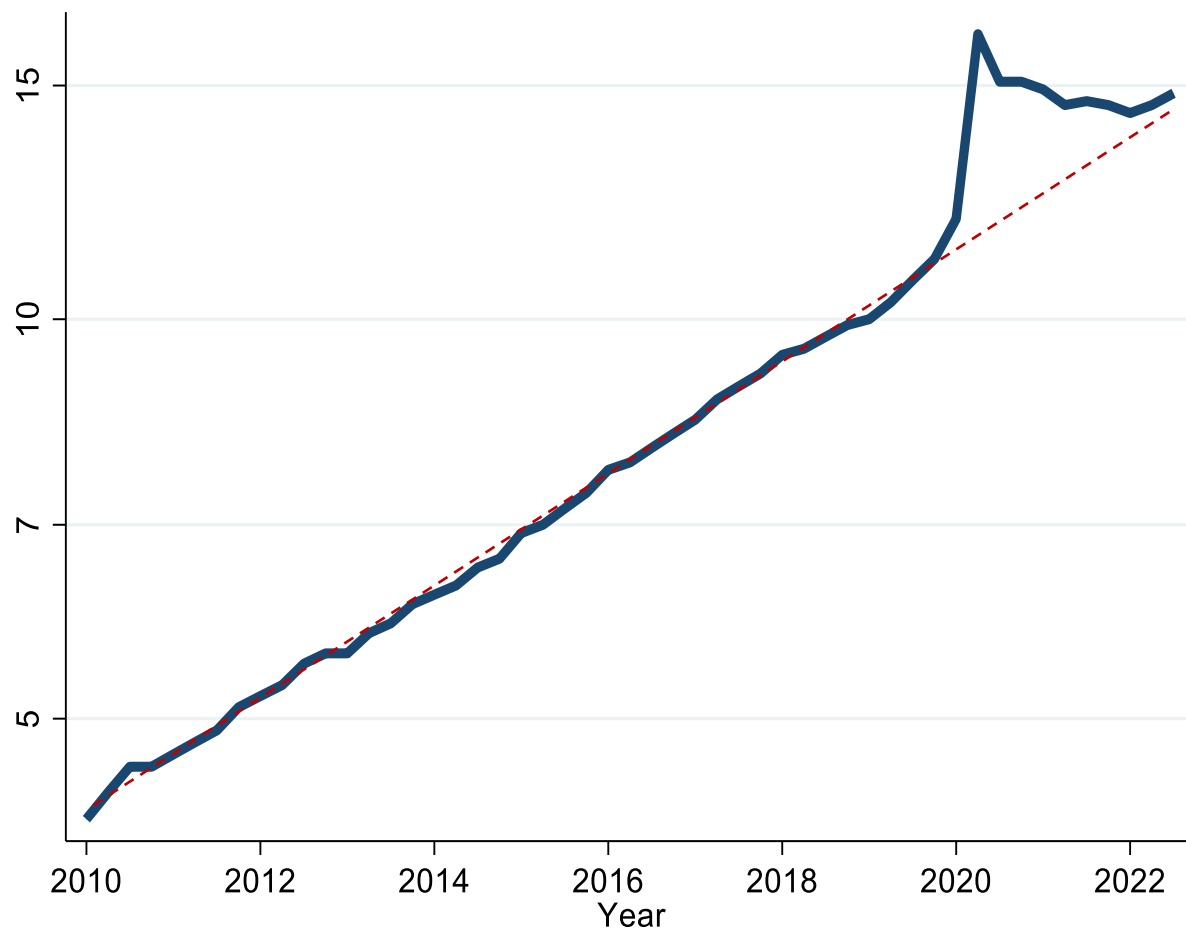


Notes: US Passenger trips in the National Transit Database, covering around 800,000 passenger trips per month in February 2020. Data de-seasonalized and on a 3-month moving average (except from 2020/2-2020/9 due to the rapid impact of the pandemic). <https://www.transit.dot.gov/ntd>

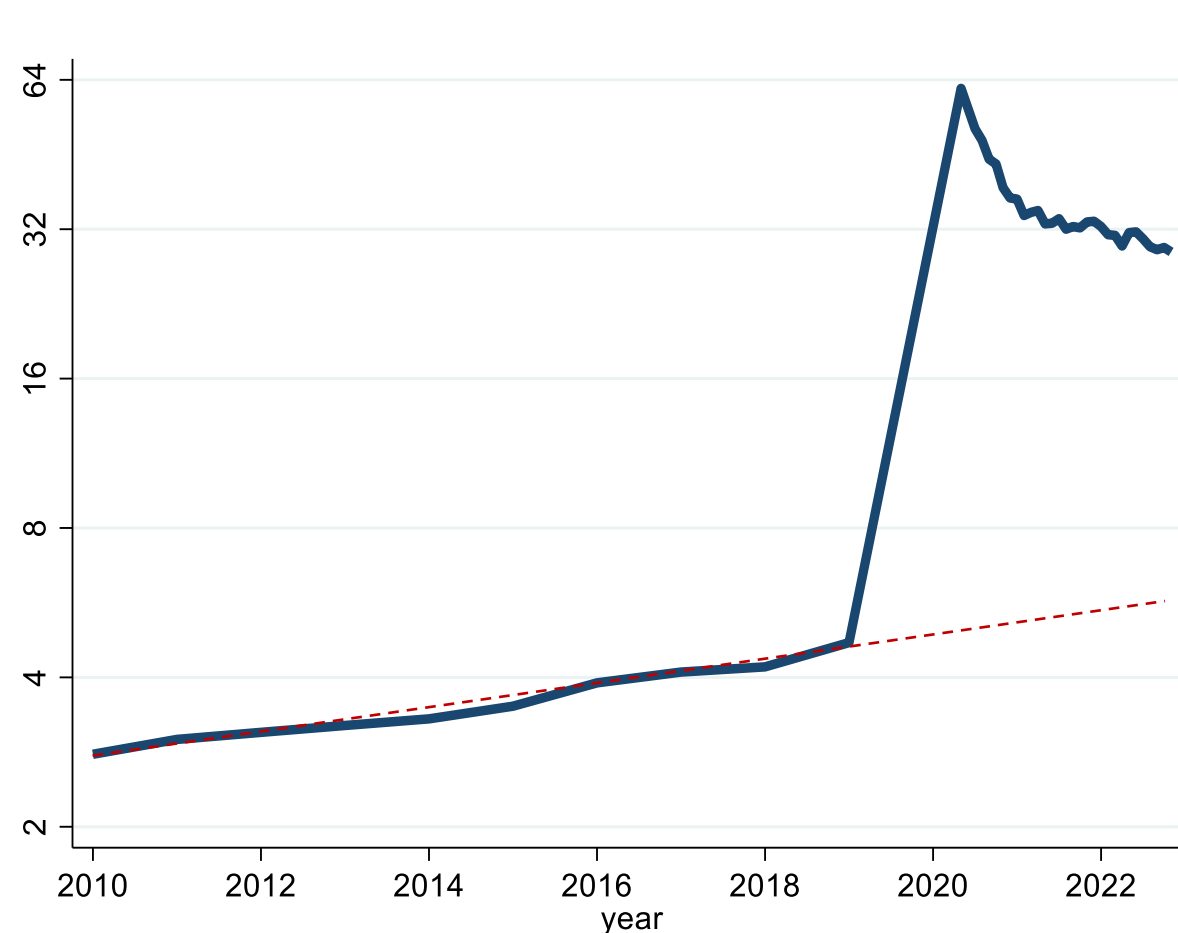
Maybe the best way to show WFH will stick: online shopping is back to its pre-pandemic trend, but working from home has stabilized at 20% above pre-trend



Share of retail spending online, %



Share of days worked from home, %



Source: Retail data from the Census Bureau, quarterly seasonally adjusted <https://fred.stlouisfed.org/series/ECOMPCTSA>. WFH data from the Survey of Workplace Arrangements and Attitudes www.wfhresearch.com Both data cover the United States.

References



- Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. “Why working from home will stick,” National Bureau of Economic Research Working Paper 28731.