



Professor Nicholas Bloom, Stanford University

18 May 2023

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IFS Annual Lecture 2023: Does working from home have a future?



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Does Working From Home Have A Future?

Nick Bloom (Stanford)

IFS Annual Lecture

May 18th 2023



Start by two sets of thanks



I worked at the IFS from 1996-2001

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Chancellor Jeremy Hunt: Office working should be default

2 hours ago · Comments



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Flexible working is the norm for many since the pandemic

Top Stories

- Harry and Meghan in 'near catastrophic car chase'
30 minutes ago
- LIVE** Harry's statement blames 'highly aggressive paparazzi'
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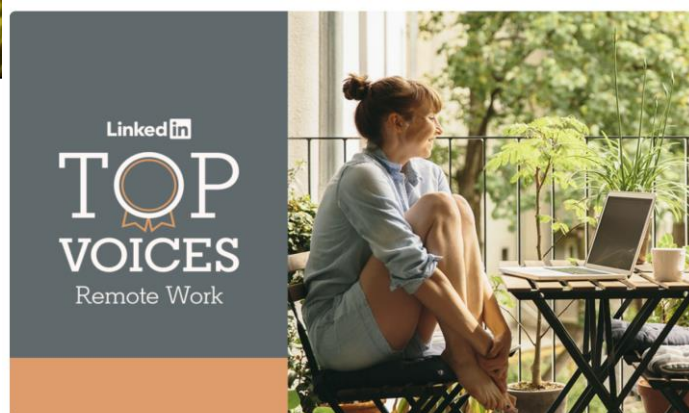
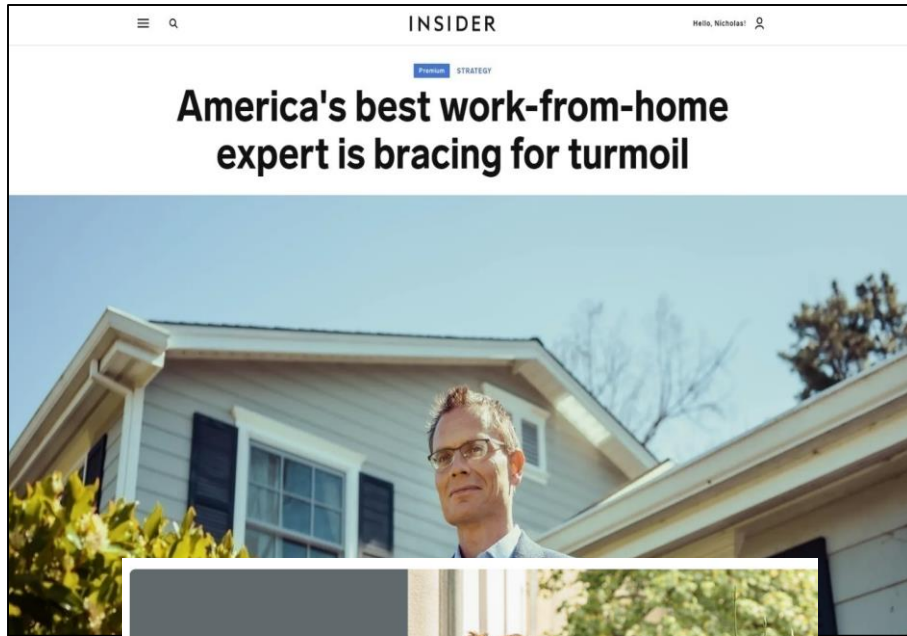
Features



Matt Willis: I'm nervous about my kids seeing my drug past

Background and Data on Working From Home

- Research on WFH starting in 2004
- Monthly surveys of 10,000 working age adults and 5,000 firms
- Discussions and consulting with 100s of organizations globally

A graphic for Bloomberg 50 featuring Nicholas Bloom. It includes the Bloomberg logo, the number "50", and a portrait of Bloom. Below the portrait is a "READ MORE" button.

Bloomberg

50

Nicholas Bloom

- He's emerged as a go-to academic for insight into remote work, meeting this year to share research with more than 100 institutions, including the International Monetary Fund, Wall Street banks and tech startups.

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Going to cover three sections

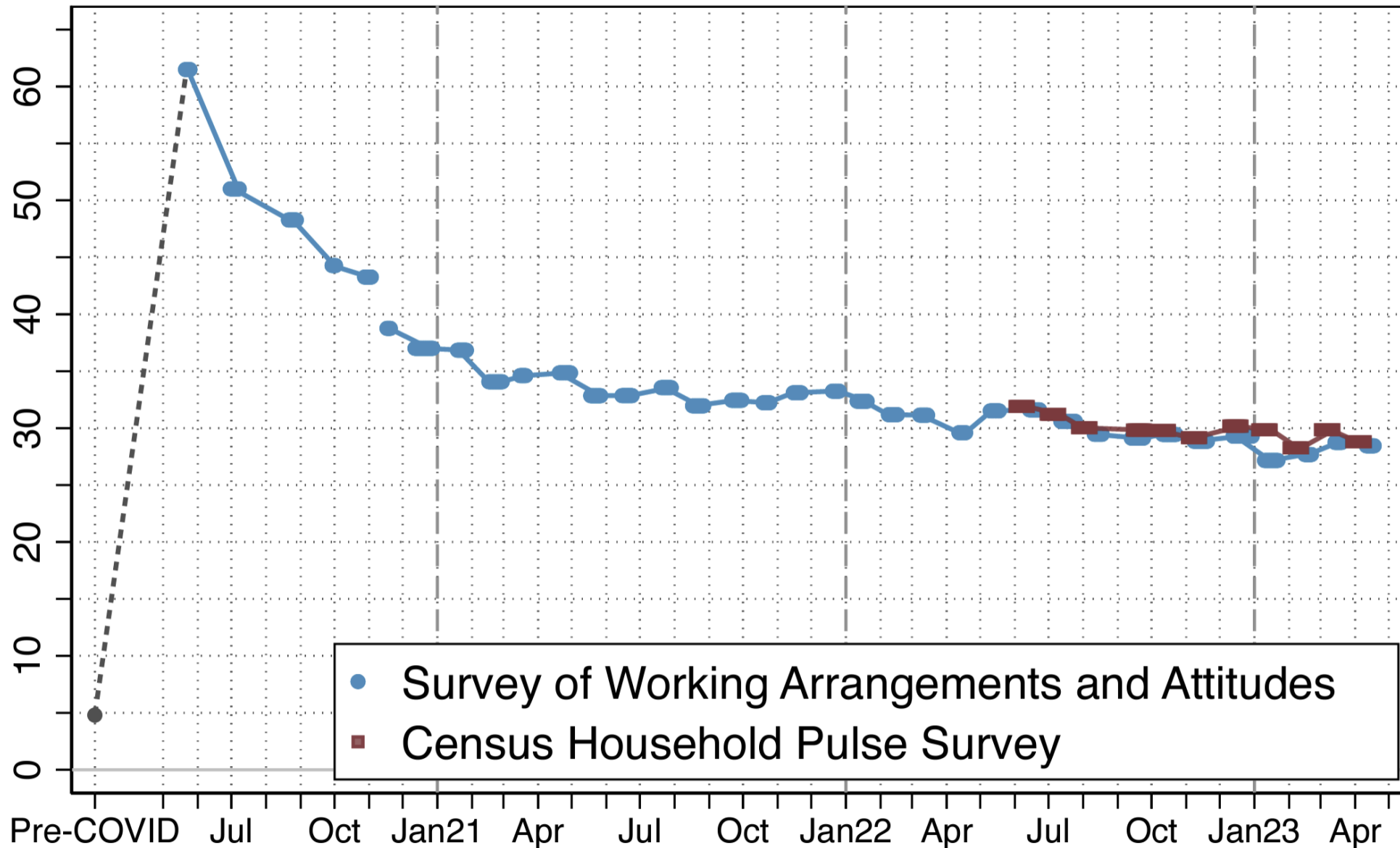
>>>> Current state of working from home

>>>> Thoughts on managing hybrid-WFH

>>>> Five impacts on the economy

WFH is stabilizing at about 25% of days: a 5-fold jump vs 2019

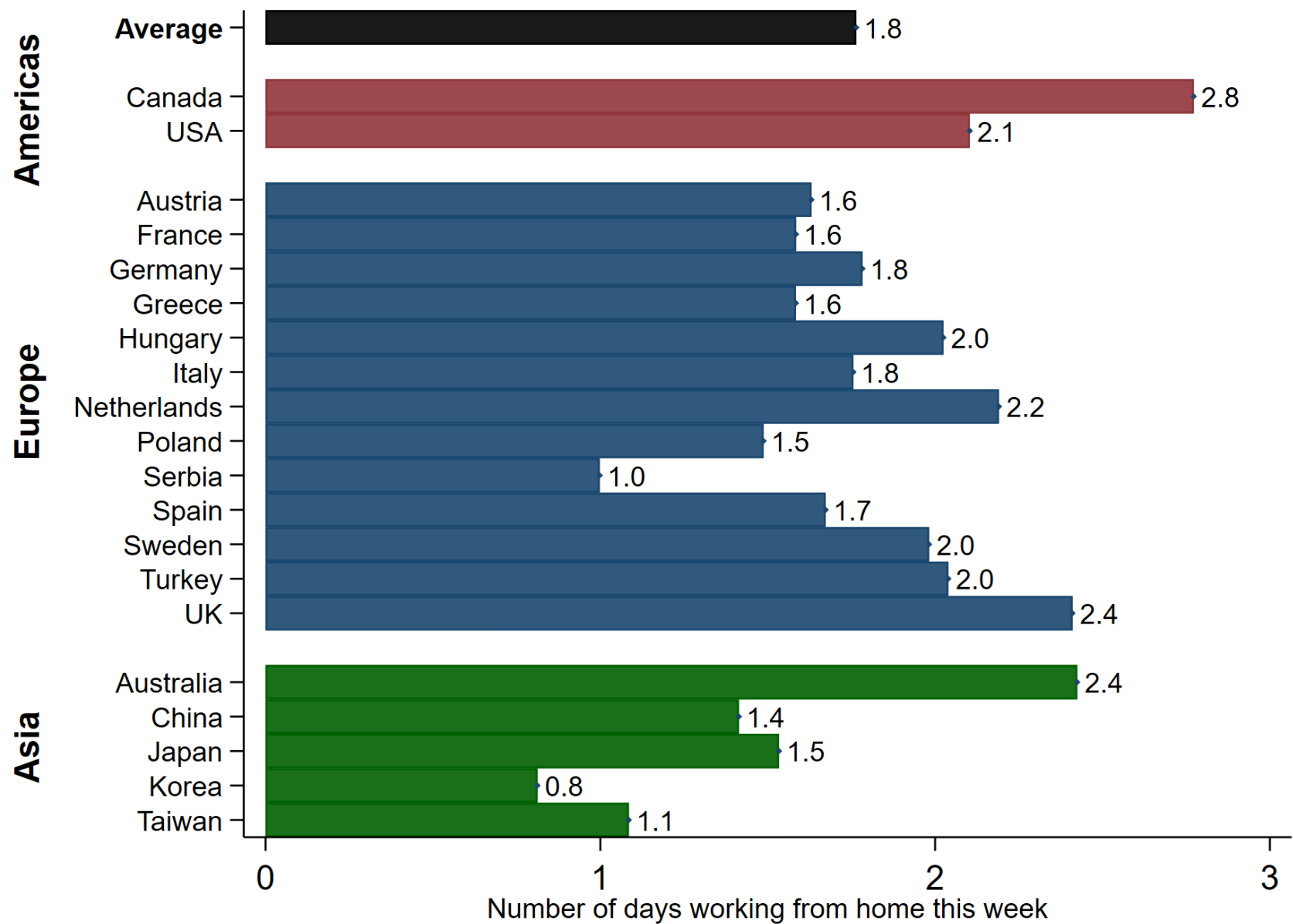
US full days worked from home, %



Source: N=131,225(SWAA)
N=364,540(HHP). SWAA data from survey responses weighted to match the US population. Pre-covid data from the American Time Use Survey. CHPS respondents weighted to match the US population aged 20 to 64 in households with incomes above \$25,000.

Survey of Workplace Attitudes and Arrangements (Barrero, Bloom and Davis 2021)
<https://wfhresearch.com/>

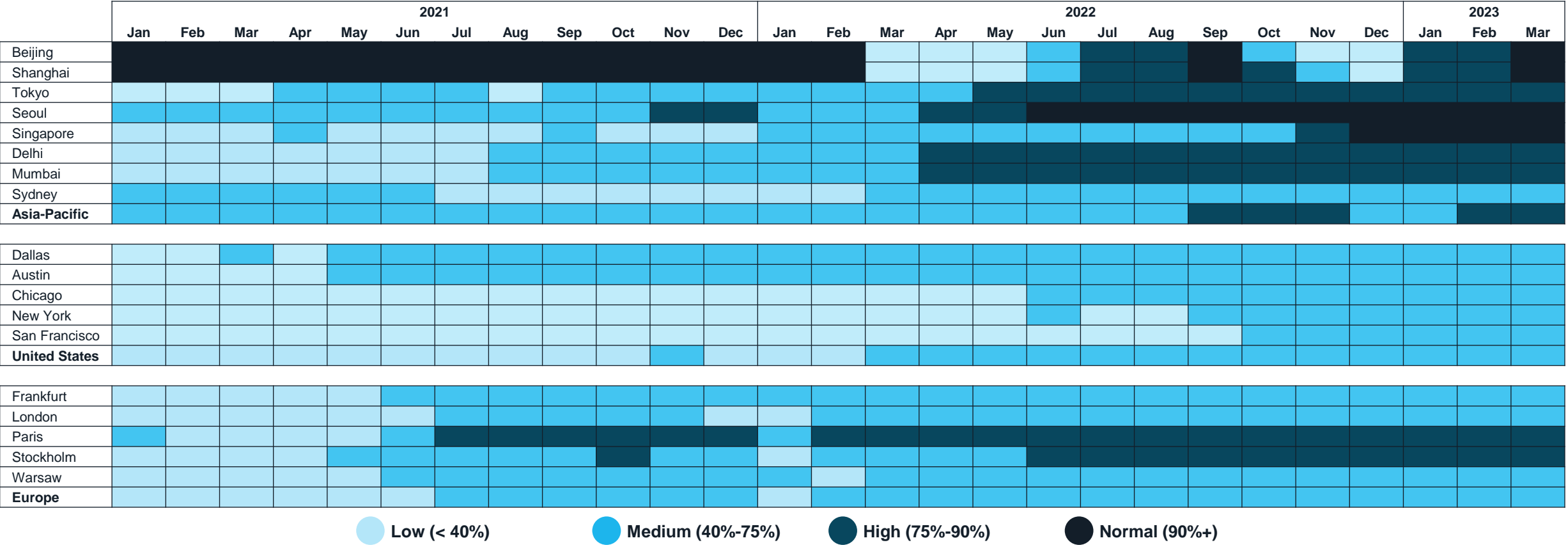
Globally (graduates): North America and UK highest, then Northern Europe and Australia, with Southern Europe lower and Asia lowest



Source: Responses to the question “How many full paid days are you working from home this week?”. Only for university educated respondents that have worked for pay in the week of the interview.

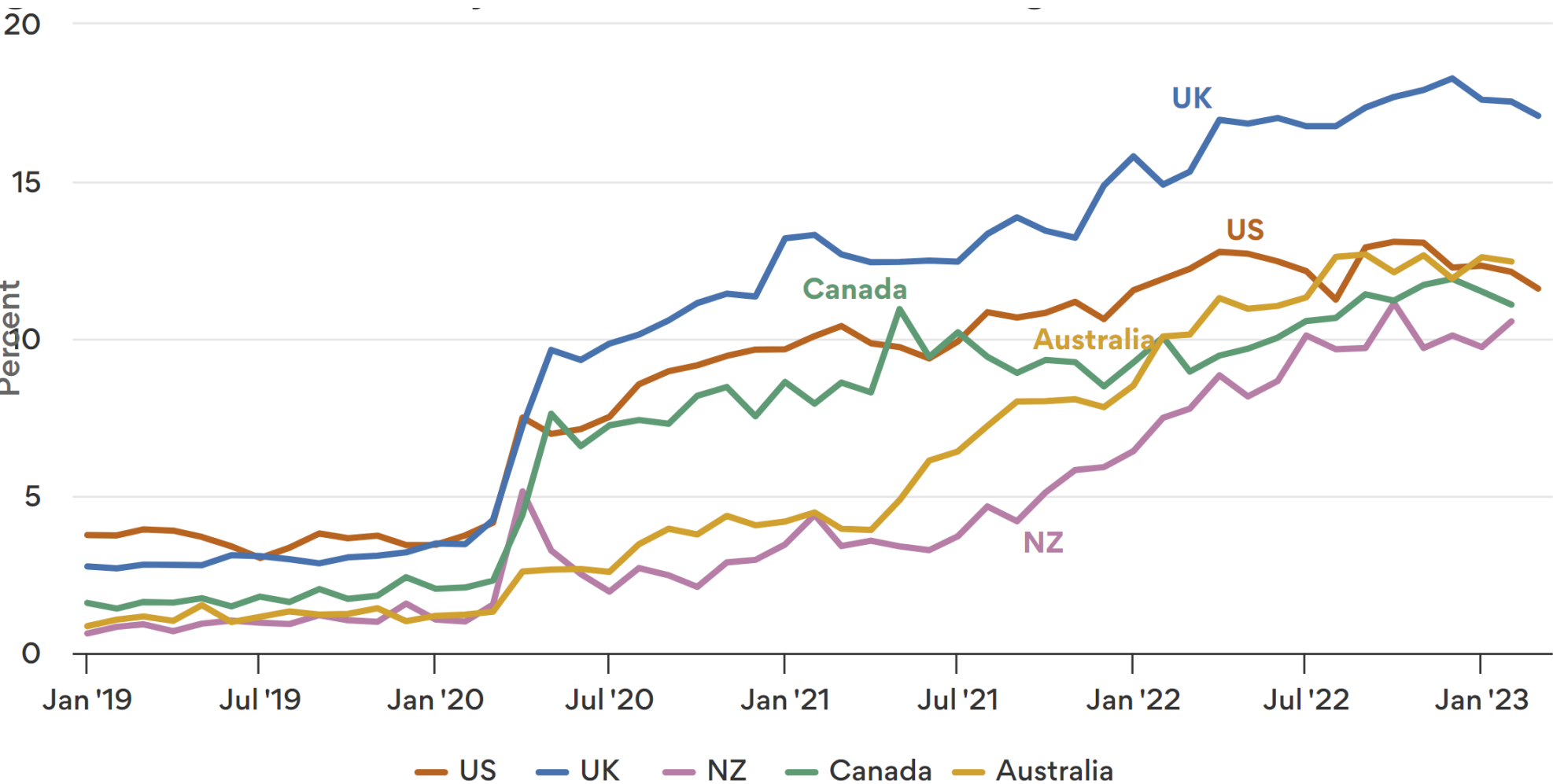
Sample of N=30,169 Global WFH respondents, surveyed in August 2021 and February 2022. Source: “Working from home around the world” by Cevat Aksoy, Jose Barrero, Nick Bloom, Steve Davis, Mathias Dolls and Pablo Zarate. <https://wfhresearch.com/gswadata/>

Similar Global Pattern in *Return to Office* – US and UK Lowest, Europe and Australia Middle, and Asia Highest



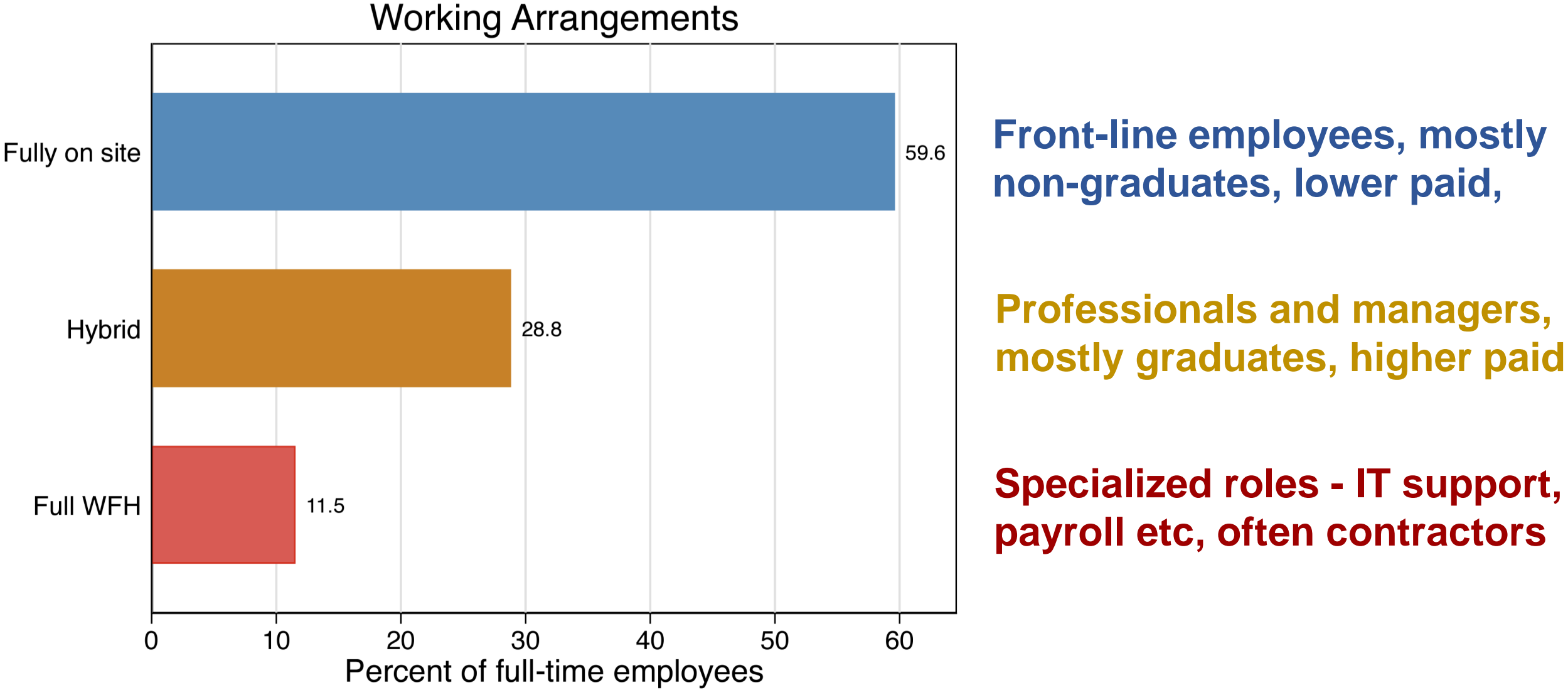
English Speaking Countries Job-Postings Data

Percent of job-postings offering hybrid or remote work



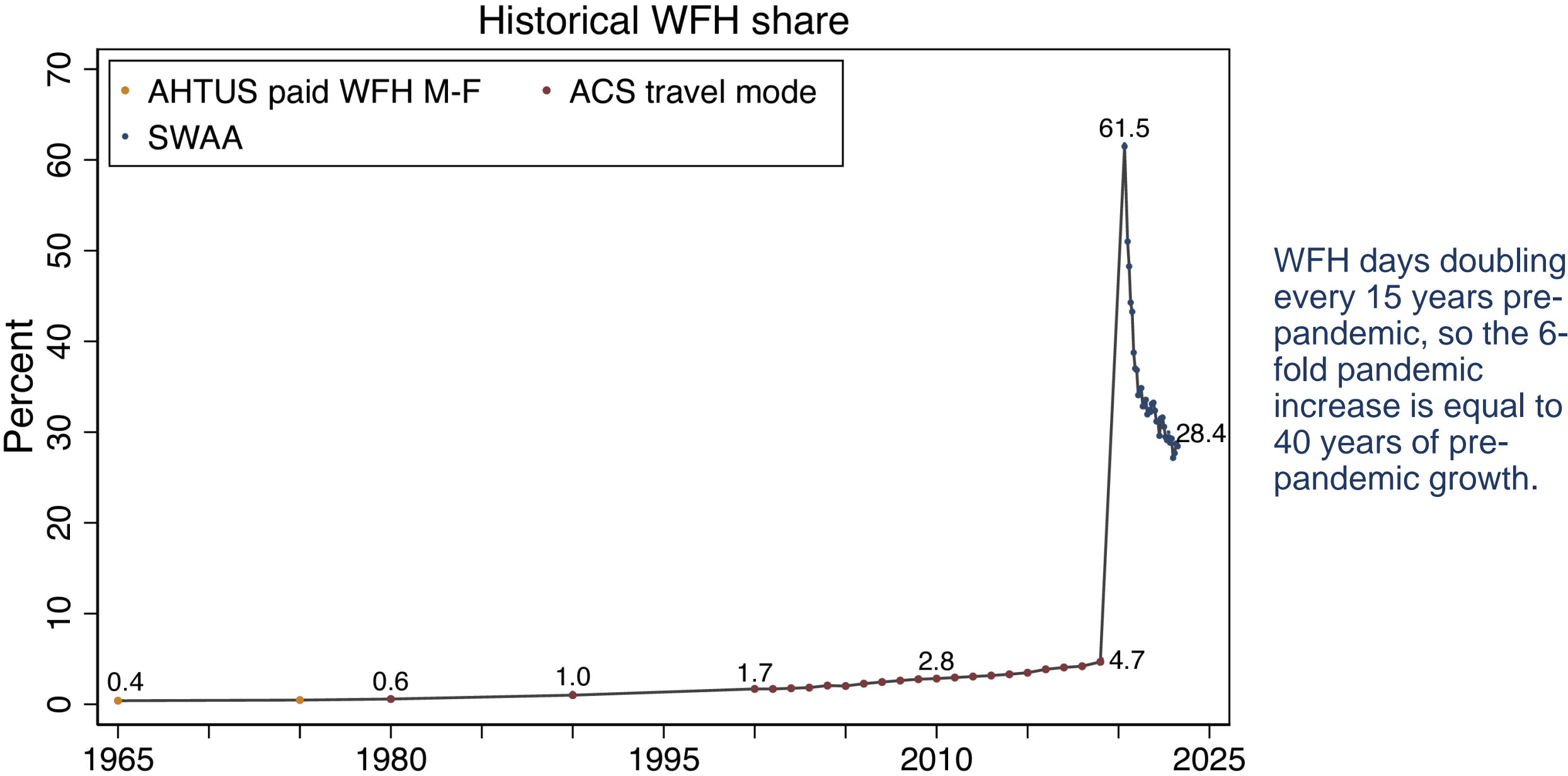
Notes: Share of vacancy postings that say a job allows one or more days remote working per week, covering fully remote and hybrid. Natural language processing of all online jobs in the US, around 43 million in 2022 from Lightcast. From the research paper “Remote work across jobs, companies and space” by Stephen Hansen, Peter Lambert, Nicholas Bloom, Steven Davis, Raffaella Sadun and Bledi Taska. Data from www.wfhmap.com

Employees are split into three groups – most firms have some of all



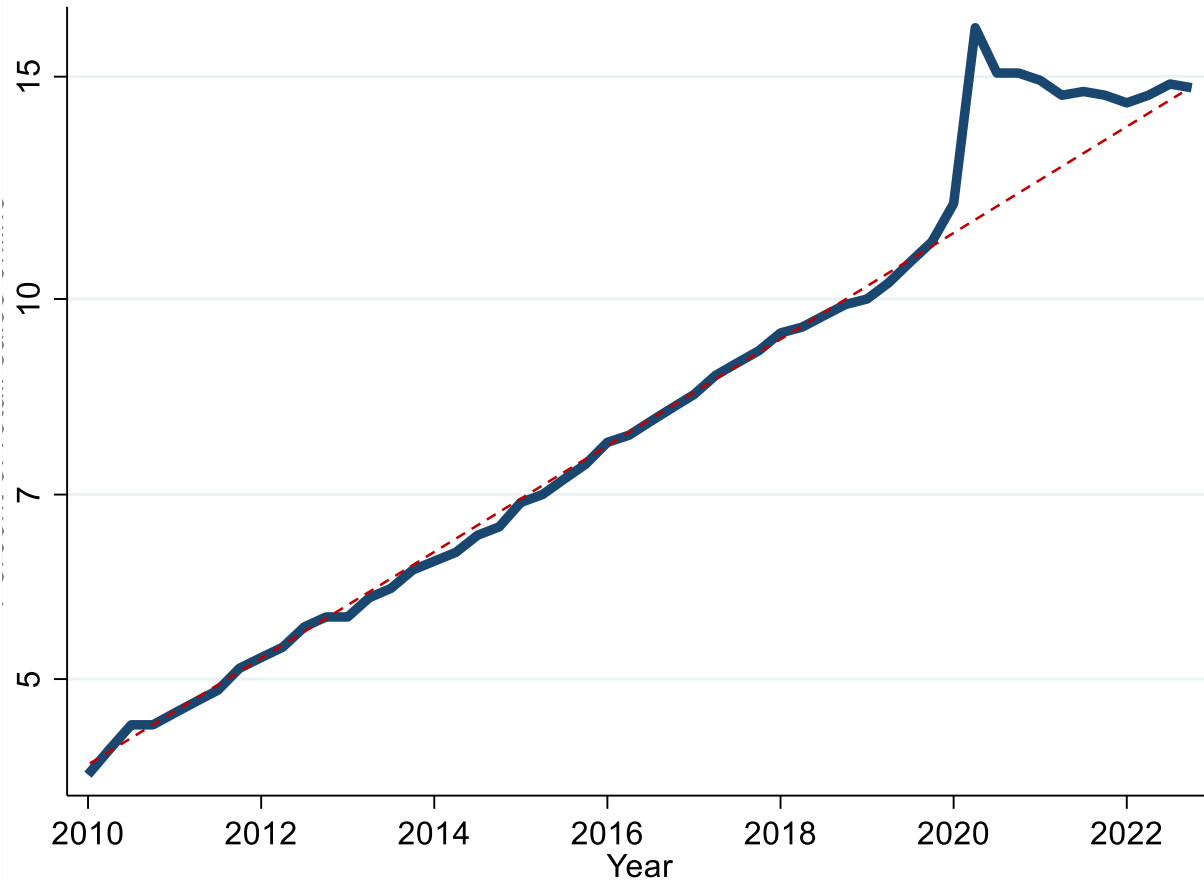
Source: The sample covers the January 2023 to April 2023 waves of the SWAA. Details on <https://wfhresearch.com/>

The graph back to 1965 shows the size of the pandemic-era WFH jump

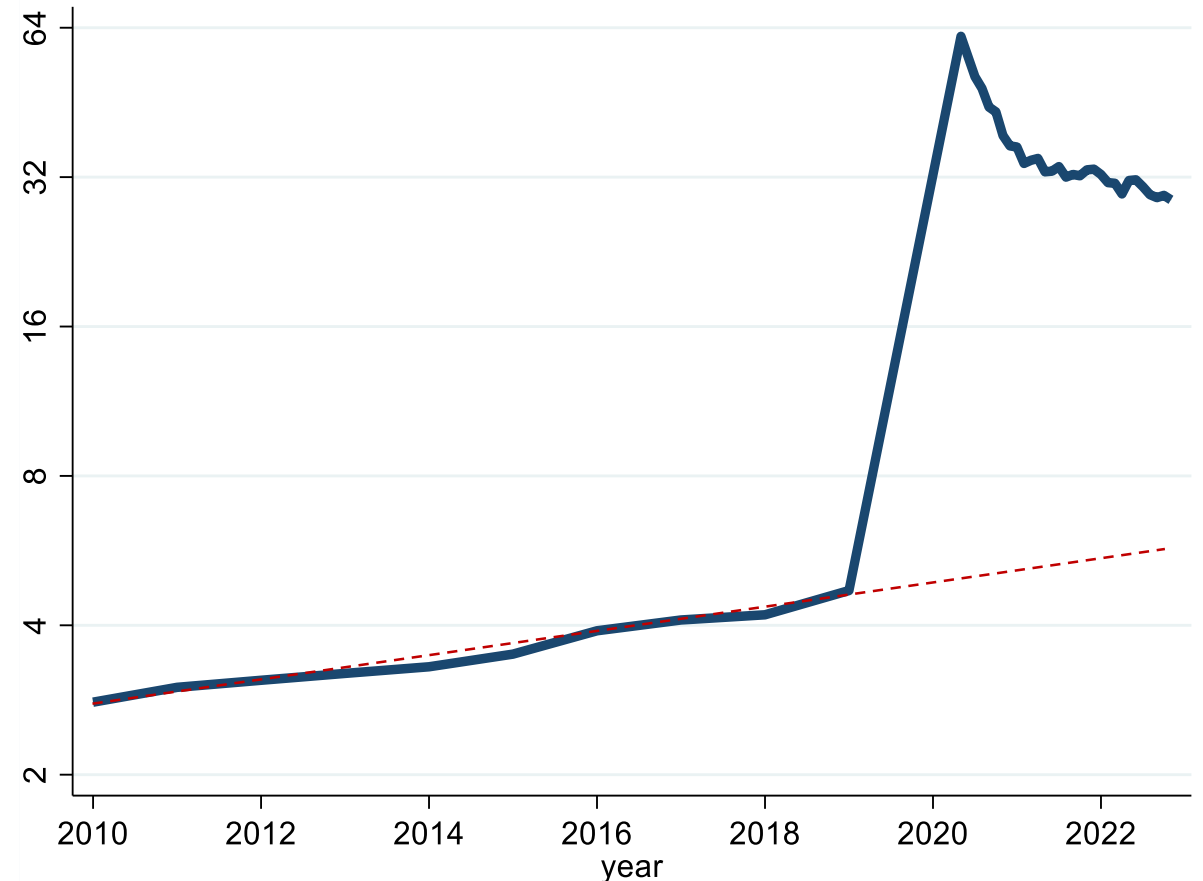


This rise in WFH is permanent - online shopping is back to its pre-trend, but WFH has stabilized at about 5x its pre-pandemic value

Share of retail spending online, %



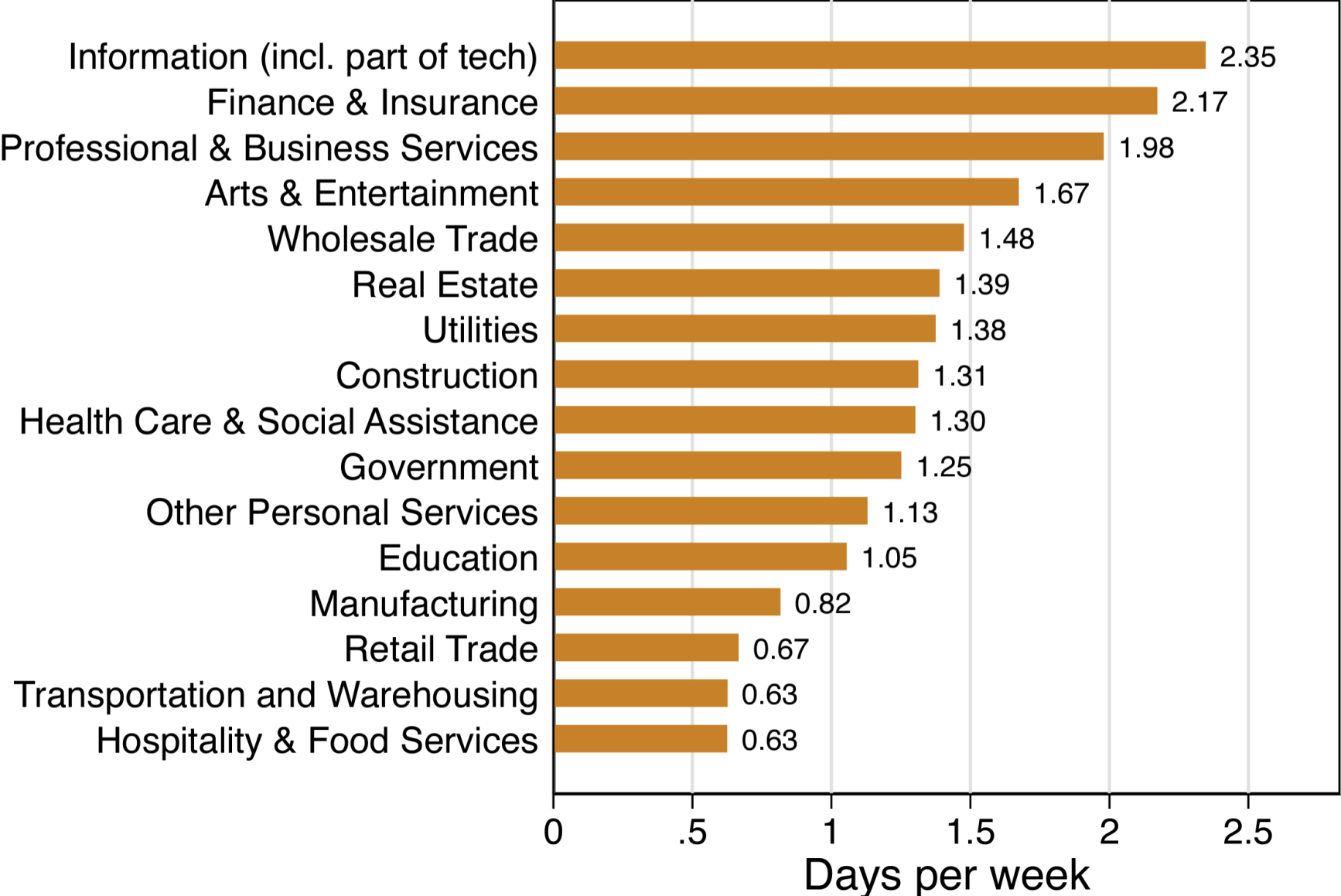
Share of days worked from home, %



Source: Retail data from the Census Bureau, quarterly seasonally adjusted <https://fred.stlouisfed.org/series/ECOMPCTSA> to 2022Q4. WFH data from the Survey of Workplace Arrangements and Attitudes www.wfhresearch.com Both data cover the United States.

WFH particularly high in tech and (to a lesser extent) finance

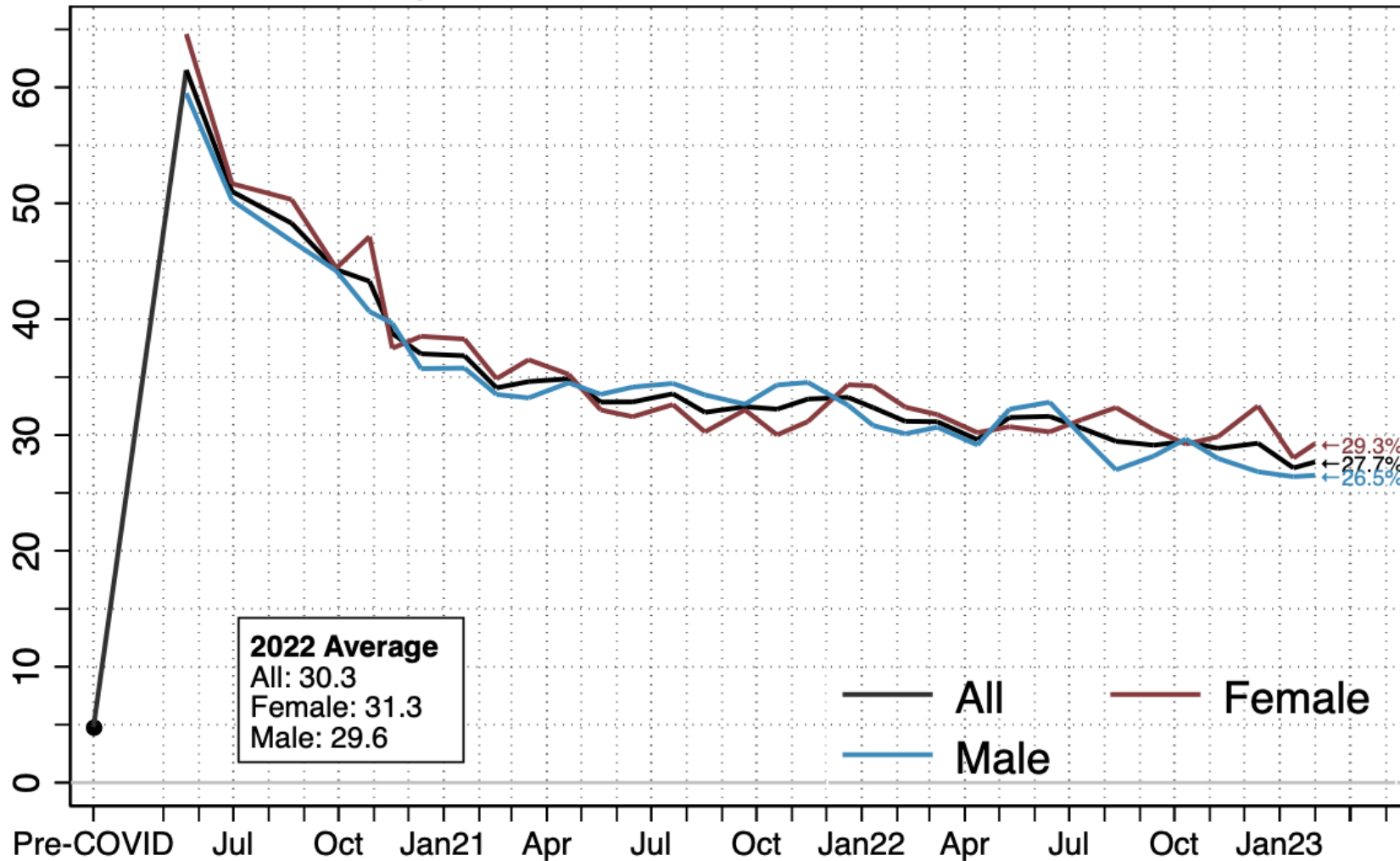
Current WFH: all wage and salary employees by industry



Notes: Survey of Workplace Attitudes and Arrangements www.wfhresearch.com Sample from November 2022 to April 2023

WFH levels similar by gender (both are converging to 25%)

Percentage of paid full days worked from home



*Pre-COVID estimate taken from the 2017-2018 American Time Use Survey
SWAA data from May 2020 to February 2023

Source: Responses to the questions:

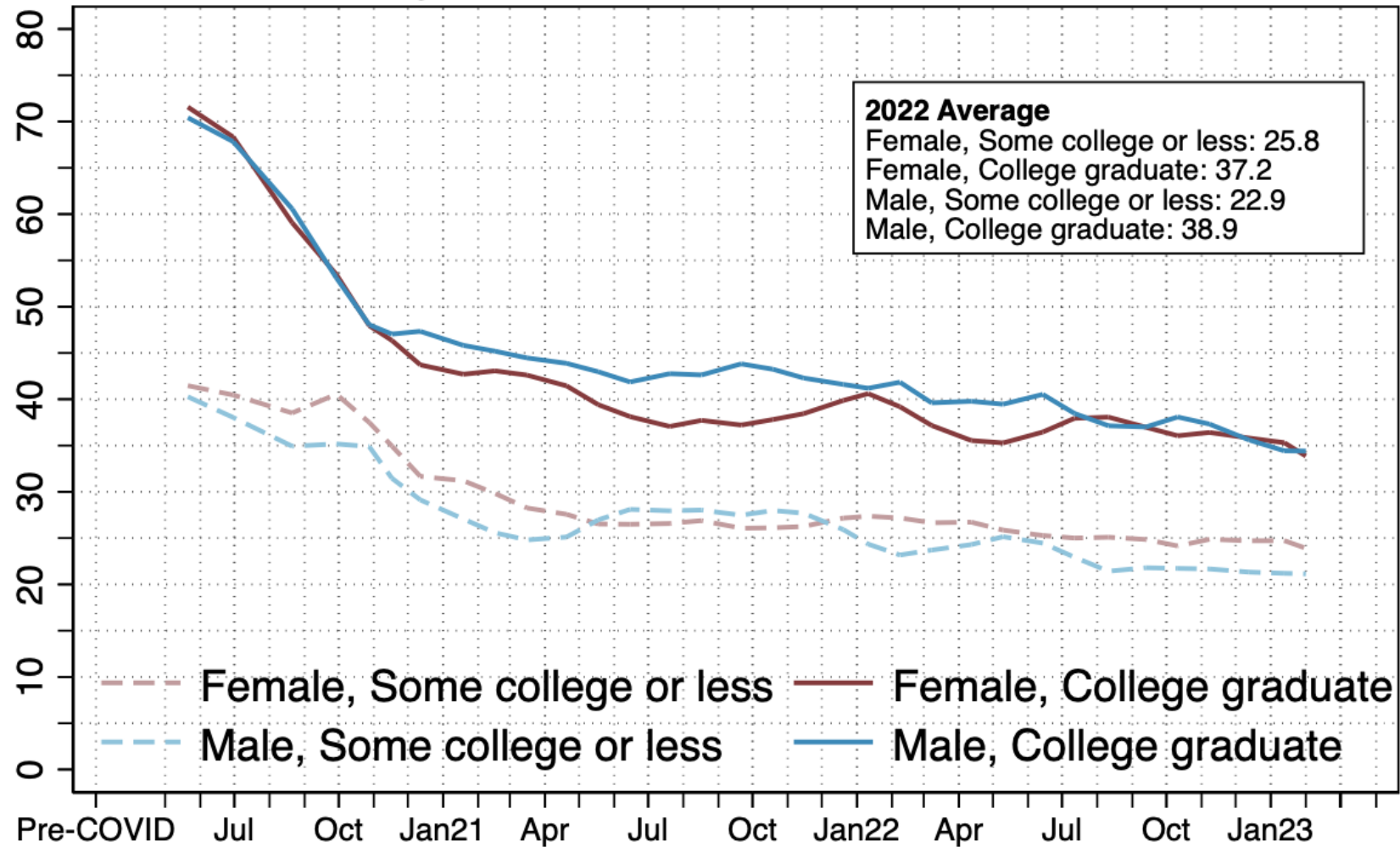
- **Currently (this week)** what is your work status?
- For each day **last week**, did you work a full day (6 or more hours), and if so where?

Notes: For each wave, we compute the percent of paid full days worked from home in the SWAA. 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. 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.

N = 119,797

The big WFH gap is in education: university grads have $\approx 2\times$ non-grads

Percentage of paid full days worked from home



SWAA data from May 2020 to February 2023
Smoothed with a 3 month centered moving average

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?*

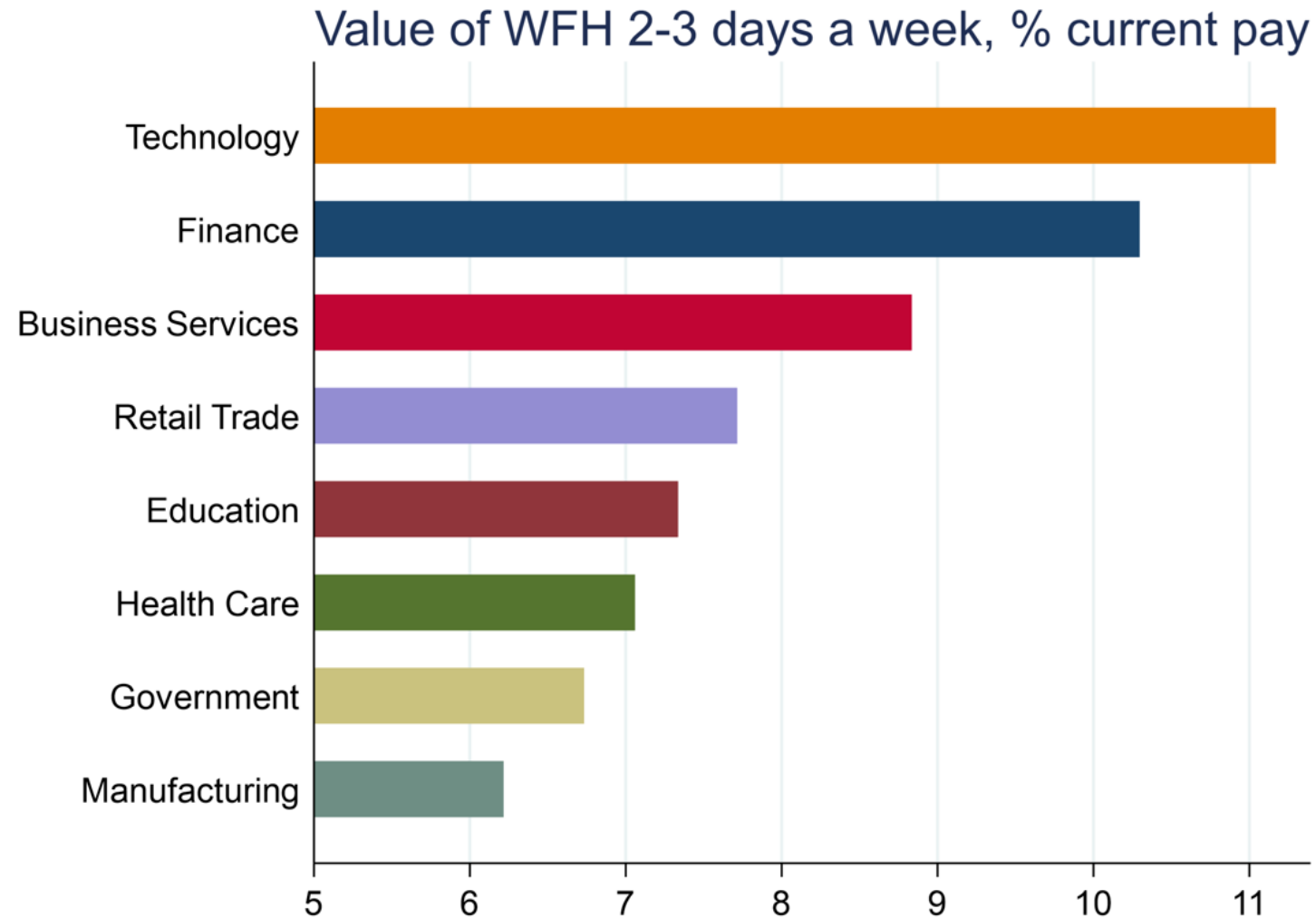
Notes: For each wave, we compute the percent of paid full days worked from home in the SWAA. The horizontal-axis location shows when the survey was in the field. We re-weight the sample of US residents aged 20 to 64 earning \$10,000 or more in 2019 or 2021 to match CPS shares by age-sex-education-earnings cells.

N = 119,797

Four key benefits of Hybrid why this is popular for professionals

- 1. Employees are happier**
- 2. Productivity is increased (if well organized)**
- 3. Supports diversity, equity and inclusion**
- 4. Saves space (maybe)**

Happier: Employees value hybrid-WFH as about an 8% pay increase



Source: Data from 17,087 responses through 2021, reweighted to match US population. Industries with 1000+ respondents. Details on <https://wfhresearch.com/>

Results for a recent RCT on 1612 engineers, marketing and finance professionals found WFH reduced quit rates 35%

Hybrid WFH lowered employee quit rates by 35%

Tweets

Tweets & replies

Media



Nick Bloom @I_Am_NickBloom · Jul 25

New RCT on 1612 employees, finding hybrid [#WFH](#)

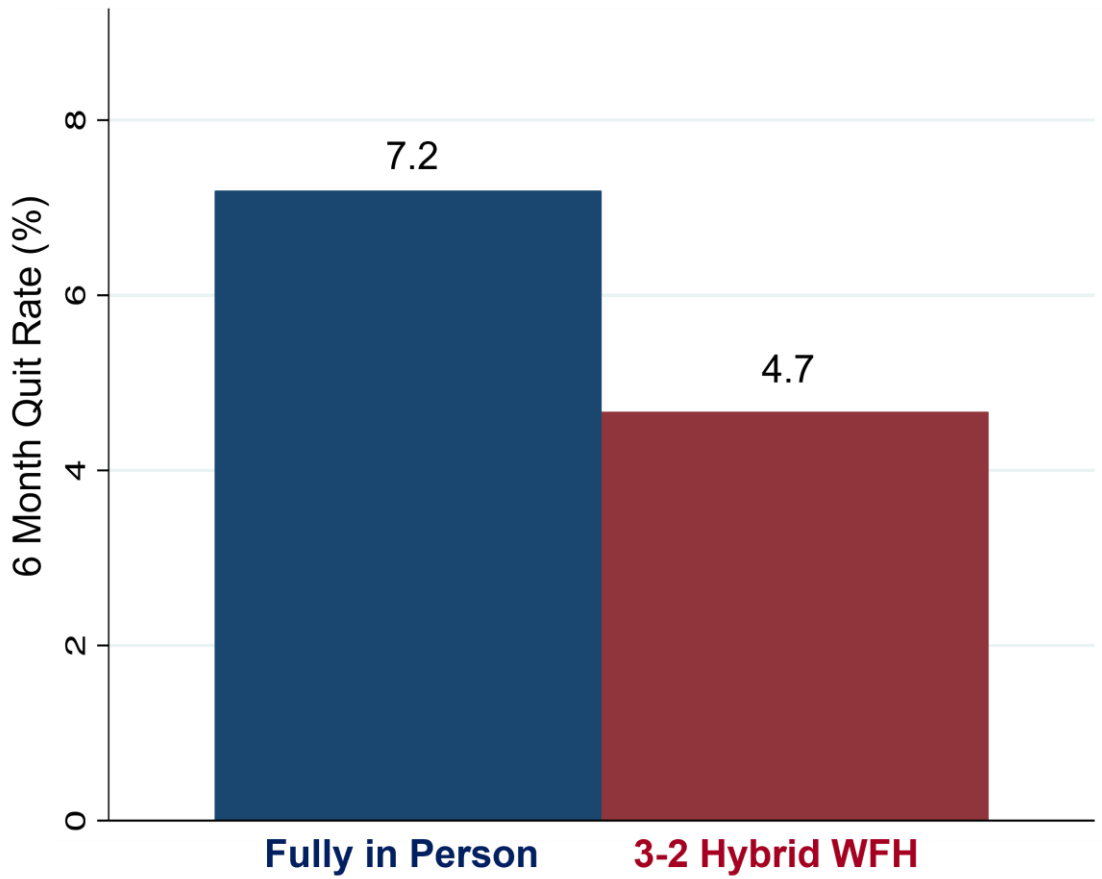
1) Reduced quit rates by 1/3

2) Shifted hours from WFH days to office days & weekends

3) Increased messaging and video calls (even in the office)

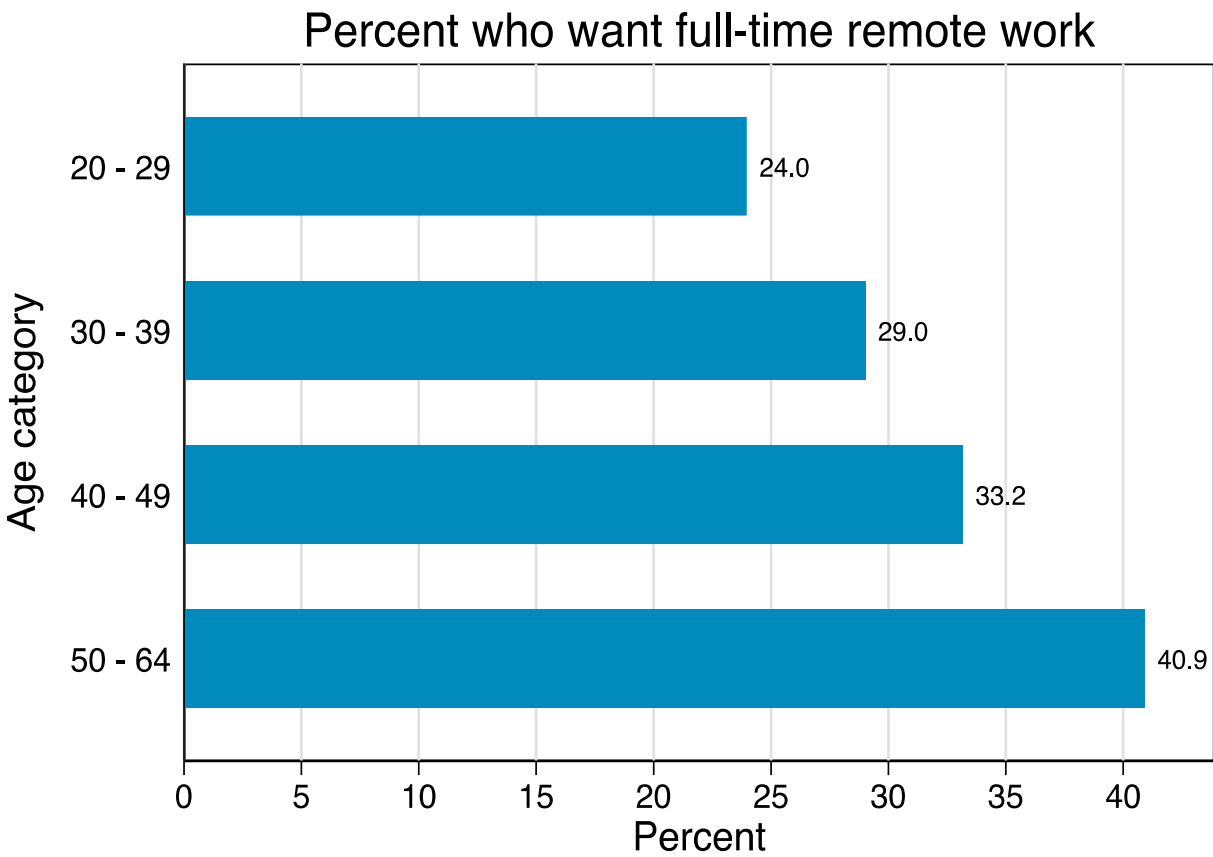
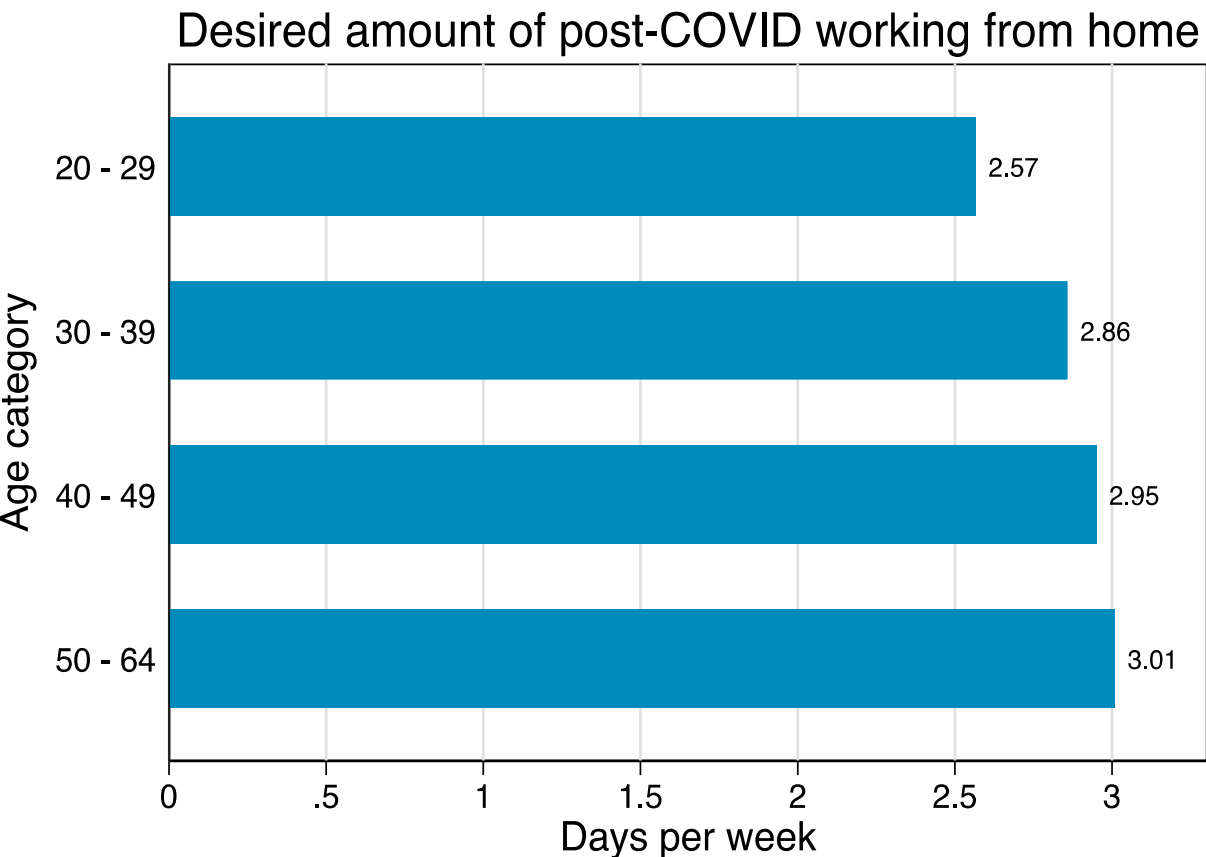
4) Generated a small productivity increase

Paper: bit.ly/3J4rL5l



Source: Attrition rates for 1612 engineers, marketing and finance professionals of Trip.com who were randomized between September 2021 and February 2022 by even and odd birthdays into control (5-days a week in the office) and treatment (Mon, Tue and Thur in the office; Weds and Fri working from home). Difference statistically significant at the 5% level. Details in Bloom, Han and Liang (2022) “How Hybrid Work from Home Works Out”.

Note, most employees do not want to WFH every day



Responses to the question: *As the pandemic ends*, how often would you *like to* have paid workdays at home?

Sample: Data are from the April to June 2022 SWAA waves from www.wfhresearch.com. The sample includes respondents who have work-from-home experience during the pandemic and pass the attention-check questions. 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 = 8,788 (both figures)**

Productivity: For professionals *fully remote* typically lowers productivity (but cuts costs) while *organized hybrid* raises productivity a little (1% to 3%)

Fully Remote

Organized Hybrid (e.g WFH Mon & Fri)

Work from Home and Productivity: Evidence from Personnel and Analytics Data on Information Technology Professionals

Michael Gibbs

University of Chicago and

Friederike Mehl

University of Essex and

Christoph Siebert

University of Essex

We study employees during the working period at a large Indian company. We find that productivity increases by 8%–19%. We find that the important source of productivity gains is shrank consideration of business units, but not from having suggestions key to

We are grateful to several people who helped us collect the data. We thank the Tata Group for providing the data. We thank the Tata Group for providing the data.

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Article

Virtual communication curbs creative idea generation

<https://doi.org/10.1038/s41586-022-04643-y>

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Check for updates

Melanie S. Brucke^{1,2} & Jonathan Levav³

COVID-19 accelerated a decade-long shift to remote work by normalizing working from home

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In the wake of the COVID-19 pandemic, millions of employees were mandated to work from home indefinitely and virtually using videoconferencing technologies. This unprecedented full-time remote employment demonstrated the viability of working at a large scale, further legitimizing the growing work movement of the last decade. In a 2021 survey, 78% of US workers reported a personal preference for working from home, a day a week, and 40% of employees indicated they would opt for required full-time in-person work. In response, leading firms across various sectors, including Google, Microsoft, JP Morgan Chase, and Amazon, increased the flexibility of their post-pandemic work from home policies, and research estimates that 20% of all US workdays dictated remotely once the pandemic ended.

We explore how this shift towards remote work affected workplace tasks. In particular, collaborative idea generation is the heart of scientific and commercial progress^{1,2}. From symposiums to Lennan and McCartney collaborations has some of the most important ideas in human history. Until these collaborations have largely required the same physical space because the existing communication technologies (such as email and phone calls) limited the extent of information available to communicators and reduced the synchronicity of idea exchange (media richness theory, social presence theory, synchronicity theory)^{3–5}. However, recent advances in networked communication technologies (such as videoconferencing and display resolution have ushered in a synchronous, a

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nature human behaviour

ARTICLES

<https://doi.org/10.1038/s41562-022-01916-4>

Check for updates

The effects of remote work on collaboration among information workers

Longji Yang^{1,2}, David Holtz^{3,4}, Sonia Jaffe⁵, Siddharth Suri⁶, Shilpi Sinha⁷, Jeffrey Weston⁸, Connor Joyce⁹, Neha Shah¹, Kevin Sherman¹⁰, Brent Hecht¹¹ and Jaime Teevan¹²

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.

Before the COVID-19 pandemic, at most 5% of Americans worked from home for more than three days per week¹, whereas it is estimated that, by April 2020, as many as 37% of Americans were working from home (WFH) full-time^{2,3}. Thus, in a matter of weeks, the pandemic caused about one-third of US workers to shift to WFH and nearly every American that was able to work from home did so⁴. Many technology companies, such as Twitter, Facebook, Square, Box, Slack and Quora, have taken this shift one step further by announcing longer term and, in some cases permanent, remote work policies that will enable at least some employees to work remotely, even after the pandemic^{5,6}. More generally, COVID-19 has accelerated the shift away from traditional office work, such that even firms that do not keep full-time remote work policies in place after the pandemic have ended are unlikely to fully return to their pre-COVID-19 work arrangements⁷. Instead, they are likely to switch to some type of hybrid work model, in which employees split their time between remote and office work, or a mixed-mode model, in which firms are comprised of a mixture of full-time remote employees and full-time office employees. For example, some scholars predict a long-run equilibrium in which information workers will work from home approximately 20% of the time⁸. For long-term policy decisions regarding remote, hybrid and mixed-mode work to be well informed, decision makers need to understand how remote work would impact information work in the absence of the effects of COVID-19. To answer this question, we treat Microsoft's company-wide WFH policy during the pandemic as a natural experiment that, subject to the validity of our identifying assumptions, enables us to causally identify the impact of firm-wide remote work on employees' collaboration networks and communication practices.

Previous research has shown that network topology, including the strength of ties, has an important role in the success of both individuals and organizations. For individuals, it is beneficial to have access to new, non-redundant information through connections to different parts of an organization's formal organizational chart and through connections to different parts of an organization's

informal communication network⁹. Furthermore, being a conduit through which such information flows by bridging 'structural holes' in the organization can have additional benefits for individuals¹⁰. For firms, certain network configurations are associated with the production of high-quality creative output¹¹, and there is a competitive advantage to successfully engaging in the practice of 'knowledge transfer', in which experiences from one set of people within an organization are transferred to and used by another set of people within that same organization¹². Conditional on a given network position or configuration, the efficacy with which a given tie can transfer or provide access to novel information depends on its strength. Two people connected by a strong tie can often transfer information more easily (as they are more likely to share a common perspective), to trust one another, to cooperate with one another, and to expend effort to ensure that recently transferred knowledge is well understood and can be utilized^{13,14}. By contrast, weak ties require less time and energy to maintain^{15,16} and are more likely to provide access to new, non-redundant information^{17,18}.

Our results show that the shift to firm-wide remote work caused business groups within Microsoft to become less interconnected. It also reduced the number of ties bridging structural holes in the company's informal collaboration network, and caused individuals to spend less time collaborating with the bridging ties that remained. Furthermore, the shift to firm-wide remote work caused employees to spend a greater share of their collaboration time with their stronger ties, which are better suited to information transfer, and a smaller share of their time with weak ties, which are more likely to provide access to new information.

Previous research has also shown that the performance of workers is affected not only by the structure of the network and the strength of ties, but also by the temporal dynamics of the network. Not only do the benefits of different types of ties vary with their age¹⁹, but people also benefit from changing their network position²⁰, adding new ties^{21,22} and reconnecting with dormant ties²³. We find that the shift to firm-wide remote work may have reduced these benefits by making the collaboration network of

Microsoft Corporation, Redmond, WA, USA; ²Haas School of Business, University of California, Berkeley, CA, USA; ³MIT Initiative on the Digital Economy, Cambridge, MA, USA; ⁴email: longji@microsoft.com

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DOES WORKING FROM HOME WORK? EVIDENCE FROM A CHINESE EXPERIMENT^{*}

NICHOLAS BLOOM
JAMES LIANG
JOHN ROBERTS
ZHICHUN JENNY YING

A rising share of employees now regularly engage in working from home (WFH), but there are concerns this can lead to "shirking from home." We report the results of a WFH experiment at Ctrip, a 16,000-employee, NASDAQ-listed Chinese travel agency. Call center employees who volunteered to WFH were randomly assigned either to work from home or in the office for nine months. Home working led to a 13% performance increase, of which 9% was from working more minutes per shift (fewer breaks and sick days) and 4% from more calls per minute (attributed to a quieter and more convenient working environment). Home workers also reported improved work satisfaction, and their attrition rate halved, but the success of the experiment allowed the office. Interestingly, from WFH alone and selection effect JEL Codes: D24

Working from home is better for United States

"We thank a logistical support from the Sabrina Pabiani and our four helpful commenters. Network for Infrastructure funding for this the co-founder of CEO. No other results nor the Stanford University mental design.

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"WORKING" REMOTELY? SELECTION, TREATMENT, AND THE MARKET FOR REMOTE WORK

Natalia Emanuel · Emma Harrington¹

April 9, 2022

Abstract: How does remote work affect productivity and how productive are workers who choose remote jobs? We decompose these effects using data from the call-centers of a US Fortune 500 retailer. The retailer employed both remote and on-site workers prior to Covid-19 and went entirely remote during the lockdown. In a difference-in-difference design around the Covid-19 lockdown, formerly on-site workers became 6–10% more productive after going remote relative to already-remote jobs. However, during the lockdown, workers who originally chose remote jobs answered 18–21% fewer calls than those who originally chose on-site ones, indicating adverse selection into remote work. Our results suggest that adverse selection made remote work the exception rather than the rule in call-center jobs prior to the pandemic. We discuss implications of the Covid-19 lockdown for adverse selection and the consequent future of remote work.

¹Contact: Princeton University, 20 Washington Rd., Princeton, NJ 08544, emma.harrington@gmail.com. We thank Nathan Hendren, Claudia Goldin, Lawrence Katz, Edward Glaeser, Louis Kaplow, Amanda Pallais, Elie Tamer, Jeff Liebman, and participants at Harvard's Public Finance and Labor Economics Workshop, ifo's Digital Transformation and Innovation Seminar, and the AREUEA/ASSA conference for helpful comments. We are grateful to our colleagues, Lisa Abraham and Jenna Anders, as well as Alex Albright, Alexander Bartik, Dev Patel, Ashesh Rambachan, Ljiljana Risticovska, and Hannah Shaffer. This project would not have been possible without the curiosity and commitment to research of our colleagues at the firms who shared data: Lauren and Trevor. We are grateful for financial support from the National Science Foundation [Natalia] and the Lab for Economic Applications and Policy. The findings and conclusions expressed are solely those of the authors and do not reflect the opinions or policy of the organizations that supported this work.

NBER WORKING PAPER SERIES

HOW HYBRID WORKING FROM HOME WORKS OUT

Nicholas Bloom
Ruobing Han
James Liang

Working Paper 30292
<http://www.nber.org/papers/w30292>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
July 2022; Revised January 2023

Work-From-Anywhere: The Productivity Effects of Geographic Flexibility

Prithwraj (Raj) Choudhury,¹ Gerns Foroughi,² and Barbara Larson³

Journal discussion
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Nicholas Bloom, Ruobing Han, and James Liang
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An emerging form of remote work allows employees to *work-from-anywhere*, so that the worker can choose to live in a preferred geographic location. While traditional work-from-home (WFH) programs offer the worker temporal flexibility, work-from-anywhere (WFA) programs offer both temporal and geographic flexibility. WFA should be viewed as a nonpecuniary benefit likely to be preferred by workers who would derive greater utility by moving from their current geographic location to their preferred location. We study the effects of WFA on productivity at the United States Patent and Trademark Office (USPTO) and exploit a natural experiment in which the implementation of WFA was driven by negotiations between managers and the patent examiners' union, leading to exogeneity in the timing of individual examiners' transition from a work-from-home to a work-from-anywhere program. This transition resulted in a 4.4 percent increase in output without affecting the incidence of rework. We also report results related to a plausible mechanism: an increase in observable effort as the worker transitions from a WFH to a WFA program. We employ illustrative field interviews, micro-data on locations, and machine learning analysis to shed further light on geographic flexibility, and summarize worker, firm, and economy-wide implications of provisioning WFA.

Running Head: Work-From-Anywhere: Productivity Effects

Keywords: geographic flexibility; work-from-anywhere; remote work; telecommuting; worker mobility

Acknowledgements: The authors are thankful to Iain Cockburn, Srikanth Kannan, Jies Meuris, Chris Rider, Tim Simcoe, and participants and reviewers at Boston University, Harvard Business School, INSEAD Mobility Conference, Stanford GSB OR Department, Temple University, University of Wisconsin-Madison, and Wharton People and Organizations Conference for comments on a prior draft.

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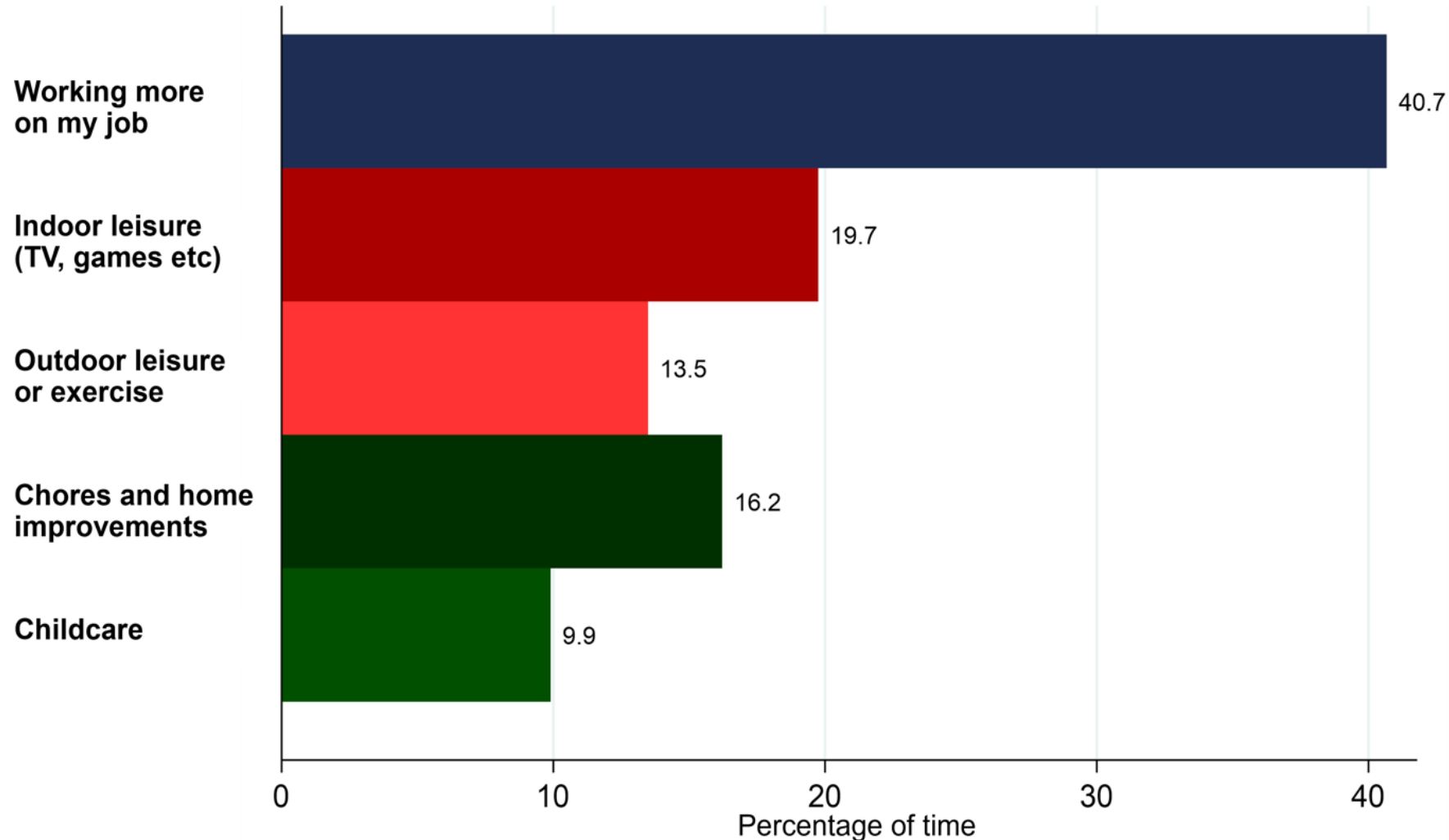
¹Gerns Foroughi, doctoral candidate, Harvard Business School, Boston, MA 02163 (email: gforoughi@hbs.edu).

²Barbara Larson, Executive Professor of Management, D'Amore-McKim School of Business, Northeastern University, 360 Huntington Avenue, Boston, MA 02115 (email: blarson@northeastern.edu).

The two drivers of higher organized hybrid WFH productivity are: (i) quiet for concentration “deep” work, and (ii) time saved commuting



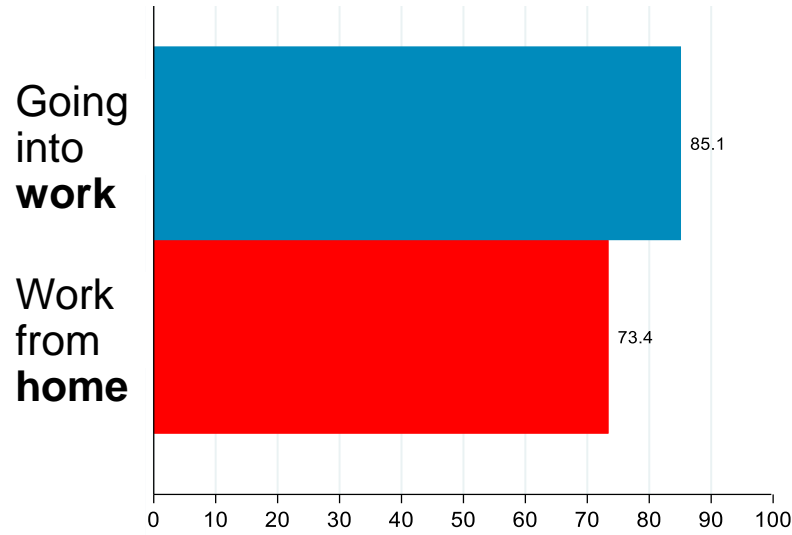
How did you use the commuting time you saved by working from home, percent



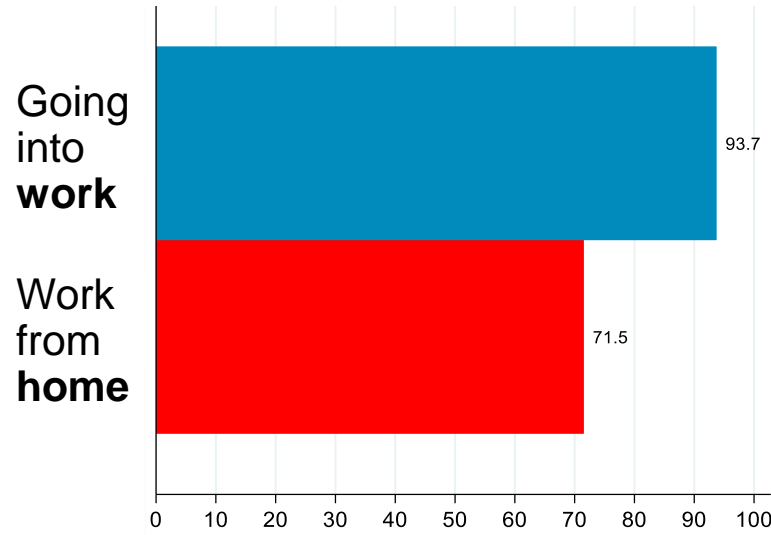
Source: Data from 32,461 respondents who can work from home, reweighted to match the US population. Details on <https://wfhresearch.com/>

WFH employees save 9 minutes a day on less personal grooming

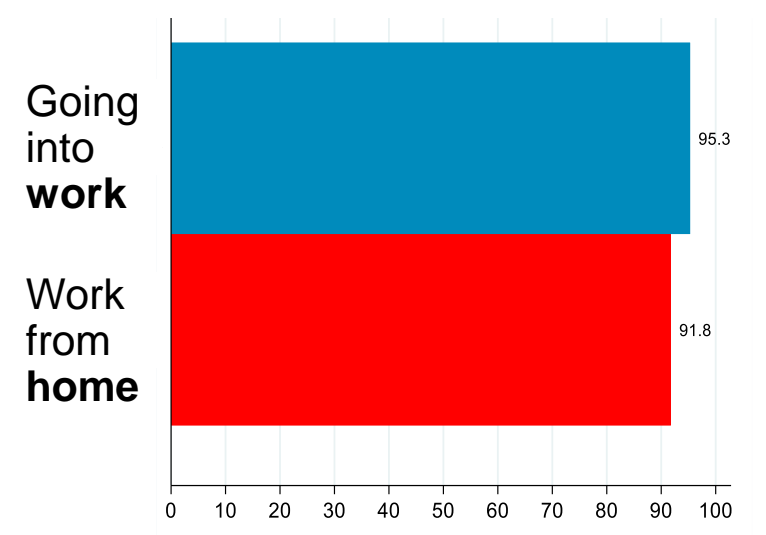
Percent who **shower or bathe** when:



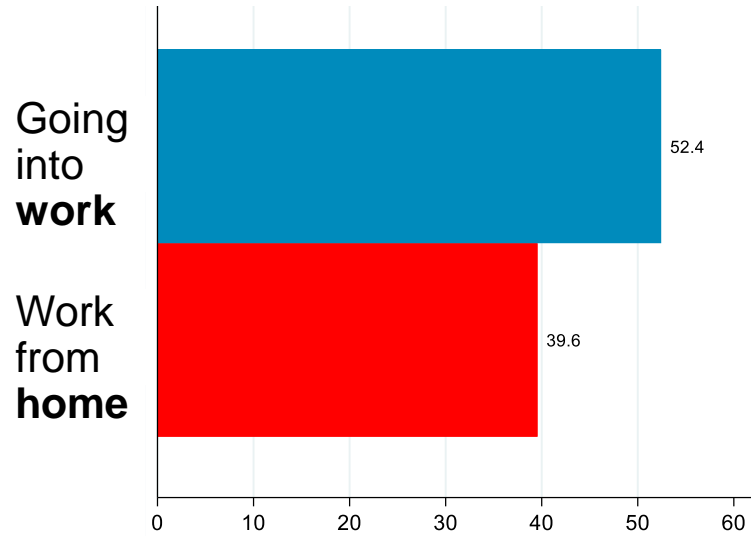
Percent who **wear fresh clothes** when:



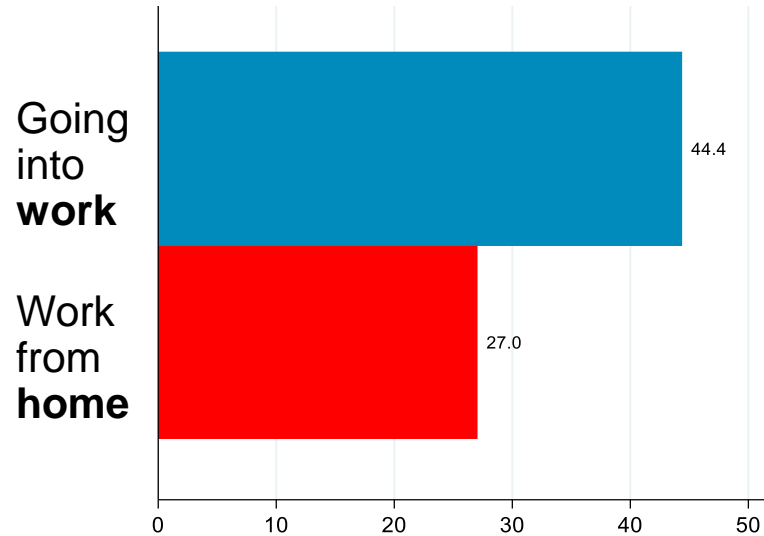
Percent who **brush their teeth** when:



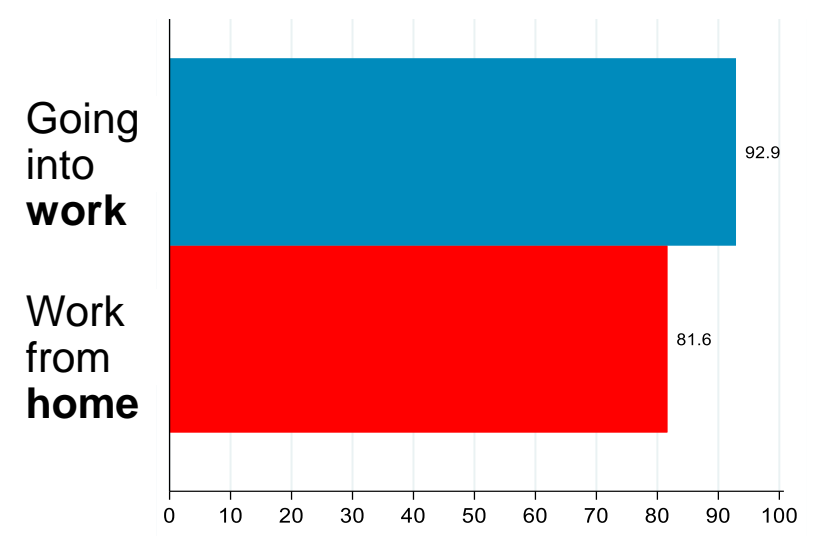
Percent who **shave** when:



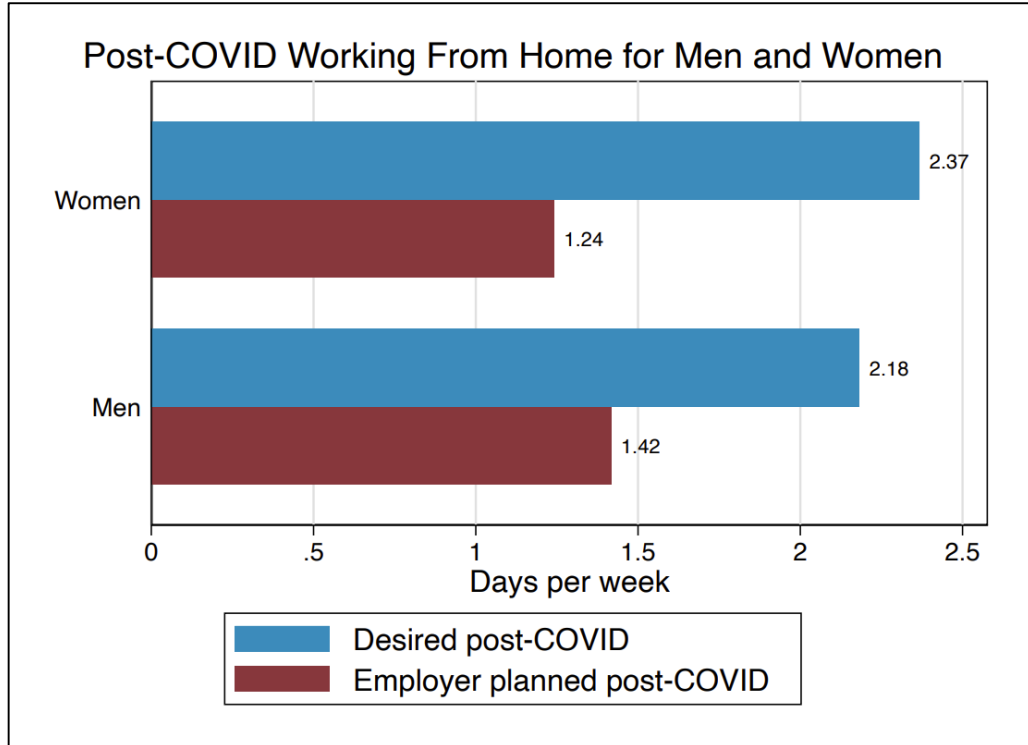
Percent who **put on makeup** when:



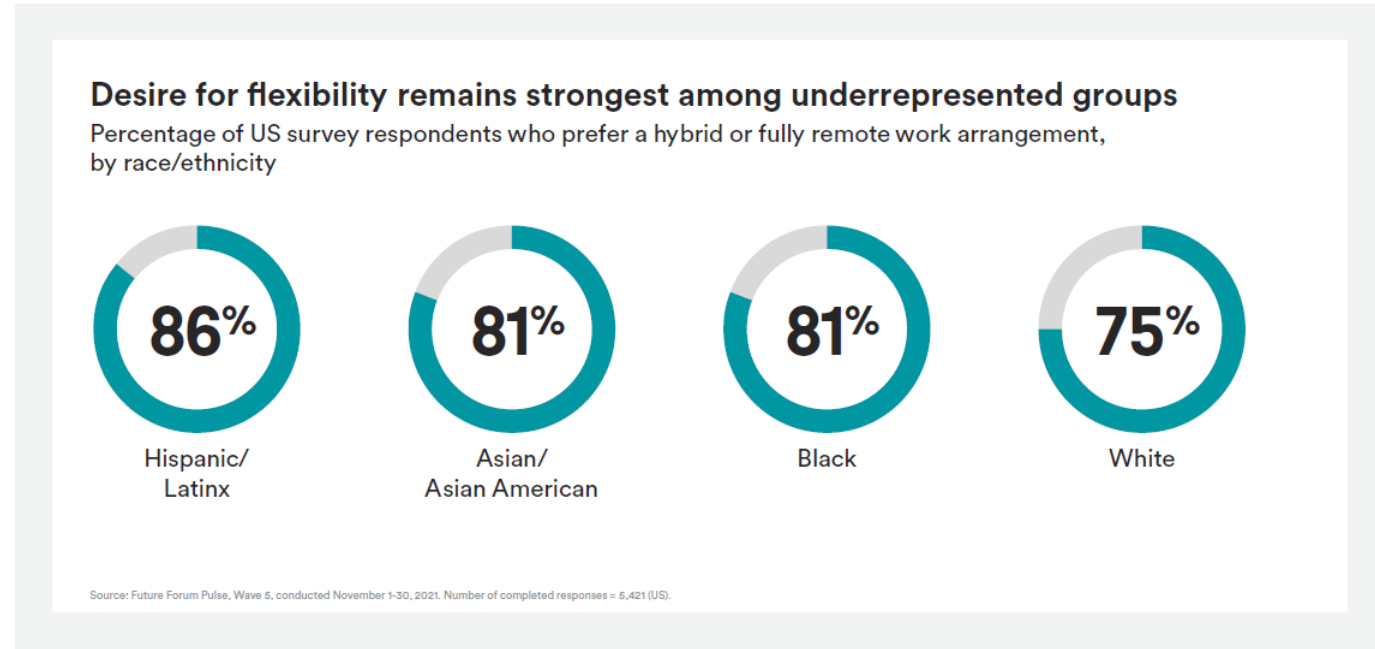
Percent who **use deodorant** when:



Diversity: Data suggests Hybrid-WFH can help support diversity in various dimensions (race, gender, age, politics and religion)



Source: Data from 10,000 US responses in through 2021, reweighted to match the US population. Details on <https://wfhresearch.com/>



Source: Survey of 10737 knowledge workers in US, Australia, France, Germany, Japan and the US conducted November 1-30, 2021. Details on <https://futureforum.com/>

Space saving: So far not that much..... I'll come back to this later...



Going to cover three sections

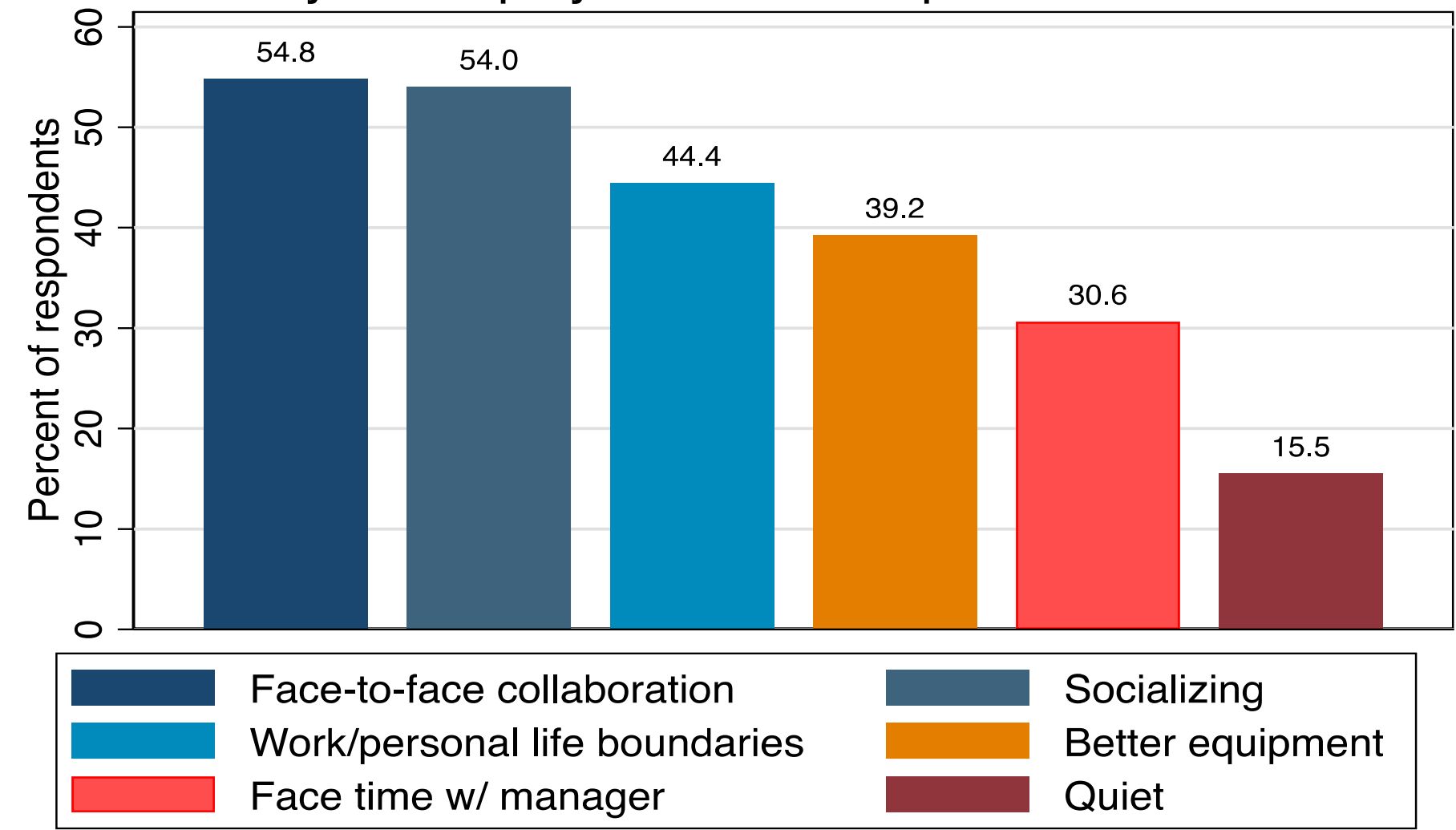
>>>> Current state of working from home

>>>> Current state of managing hybrid-WFH

>>>> Five impacts on the economy

Coordination matters - the benefit of the office is being with colleagues

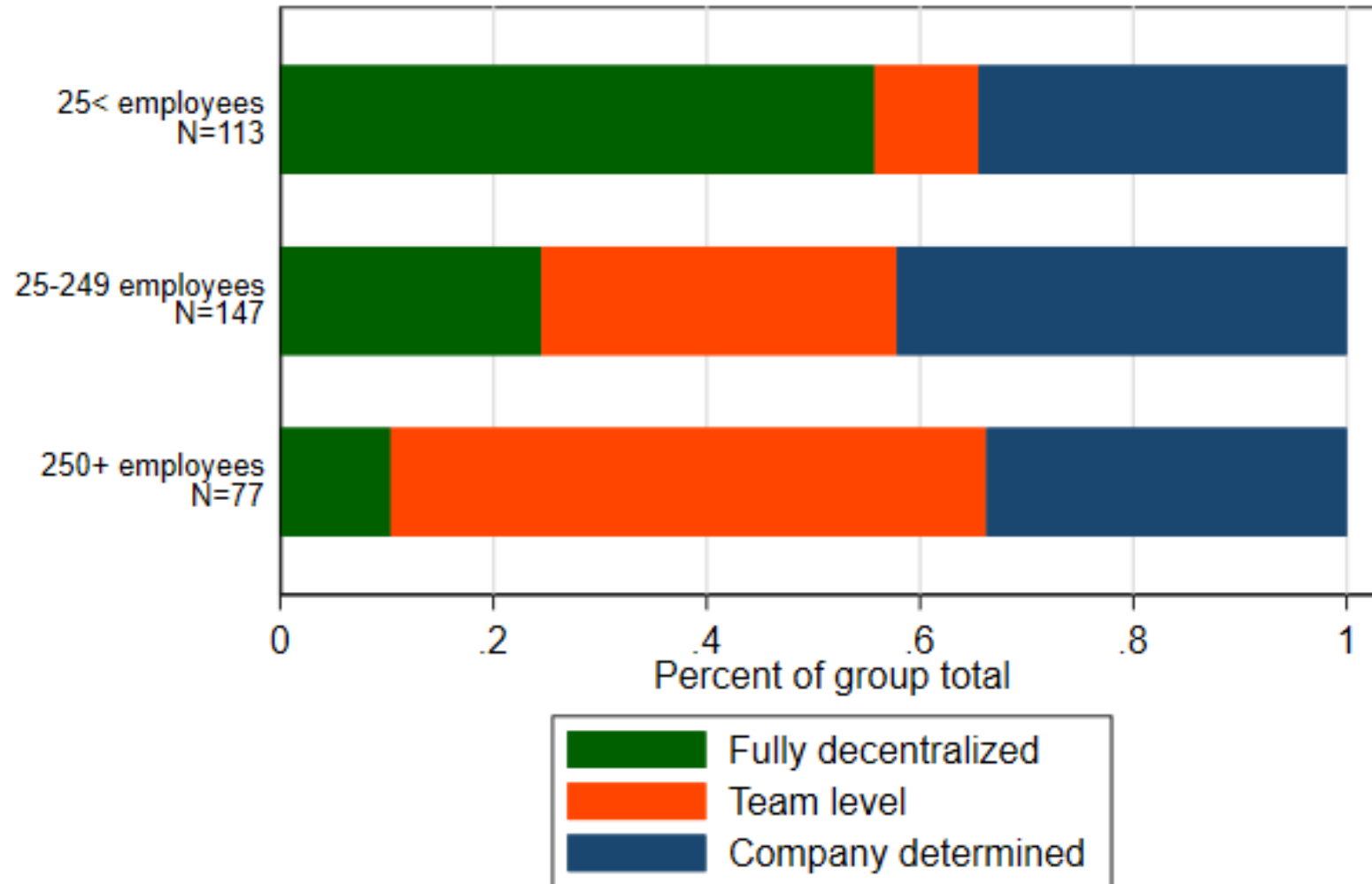
What are the top 3 benefits of working on your employer's business premises?



Notes: The sample includes respondents to the February 2022 SWAA who passed the attention check questions and worked from home at some point since the start of the COVID-19 pandemic. The SWAA samples US residents aged 20 to 64 who earned \$10,000 or more in 2019. **N = 2,973.**

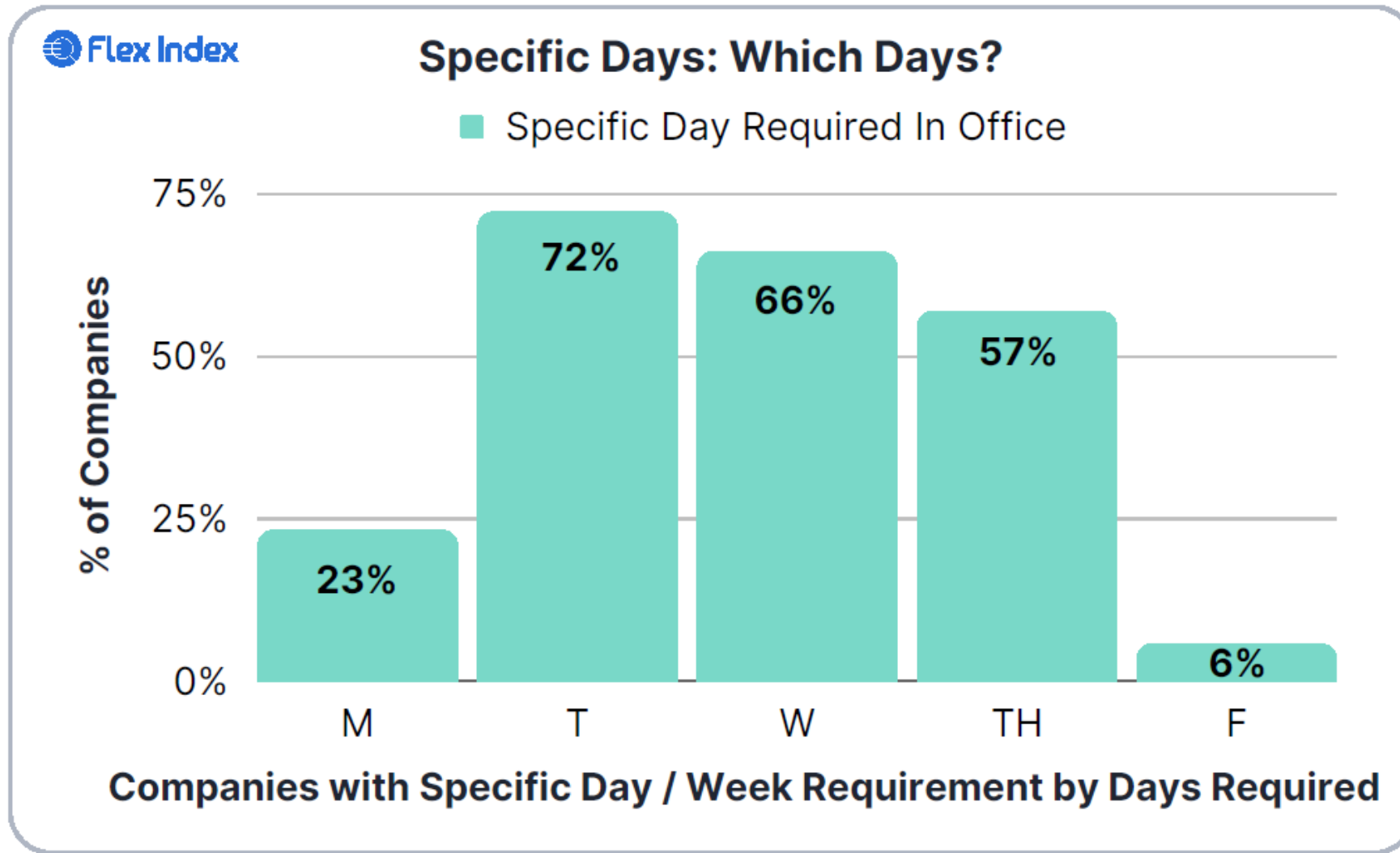
So large firms mostly planning team or company coordinated hybrid

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



Source: Survey of Business Uncertainty conducted by the Federal Reserve Bank of Atlanta, Stanford University, and the University of Chicago Booth School of Business.

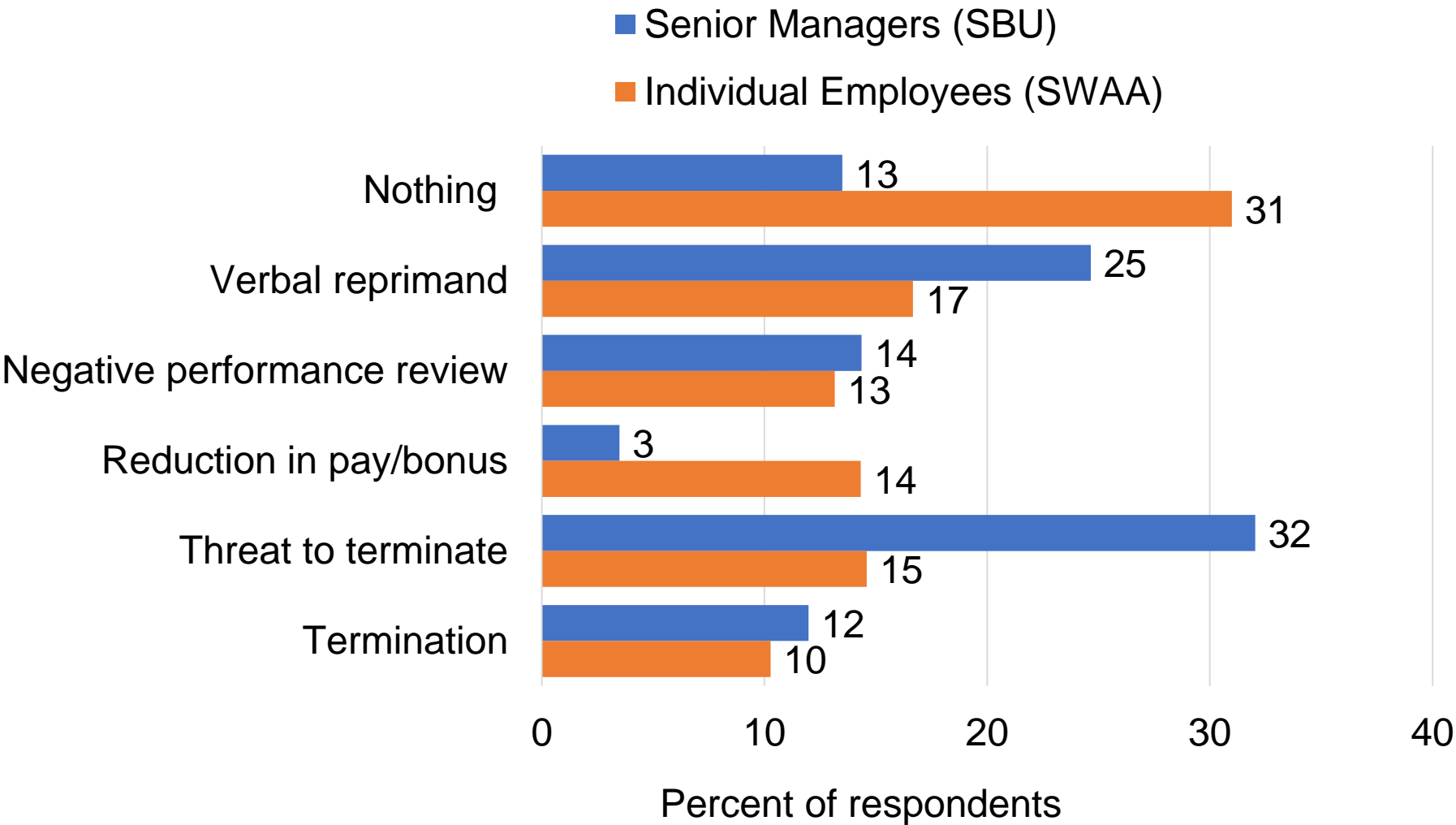
If you pick WFH days I would suggest Monday and Friday...



Source: [Flex Index](https://flex.scoopforwork.com) (flex.scoopforwork.com) employee surveys and publicly available data on companies with a specific day / week office requirement. N = 229 companies. The Flex Index is presented by [Scoop](https://scoopforwork.com) (scoopforwork.com).

...but worth noting enforcement is not always easy

What happens when employees stay home on office days

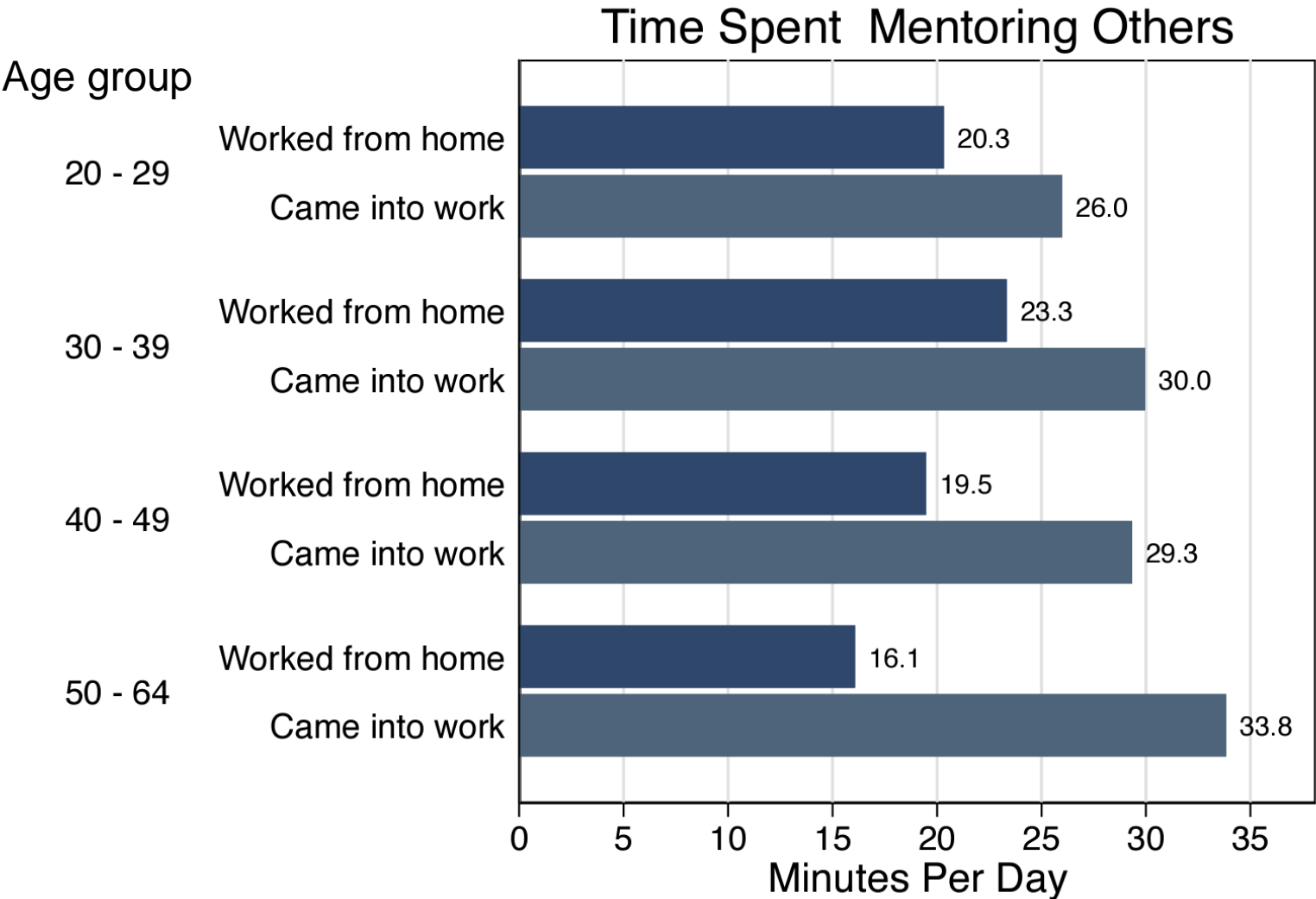


Notes: SWAA participants asked “How has your employer responded to employees who work on business premises fewer days than requested?” over June to September 2022 re-weighted to match US working population 20 to 64. N= 17,875. www.wfhresearch.com SBU participants asked “Currently, how does your firm deal with employees who work fewer days on business premises than required by company policy?” in September 2022 reweighted to match US firms. N= 335. www.atlantafed.org/SBU

So, how Leaders Can Make the Most of Hybrid WFH

- 1) Coordinate your team to come in on the same 2 or 3 days each week (eg T, W & Th)
- 2) Promote in person meetings, events, coffee, training, lunches on those office days
- 3) Suggest cross-office zoom meetings and reading, writing, data etc on home days
- 4) Treat anchor day attendance like 2019 in person attendance – exemptions only for emergencies like a sick child, burst water pipe or illness.
- 5) For new hires (< 1 or 2 years) add an extra day in the office for mentoring

Indeed, appears more mentoring happens on in person days



Responses to the question: How many *minutes of your working day* did you spend on each of the following activities *last Monday/Tuesday/Wednesday/Thursday/Friday?*

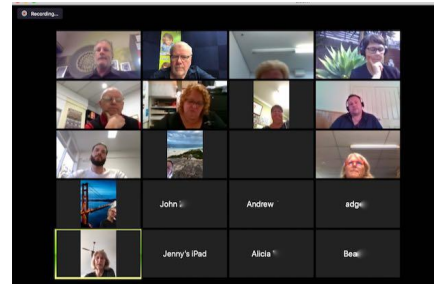
Notes: We randomized respondents across days of the week. Each figure shows the average number of minutes for the activity in question among respondents who either worked from home or worked on business premises. The sample includes persons who were asked about Monday thru Friday, who are able to work from home, and participated in the March 2023 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 = 2,418**

Three other tips for managing a hybrid office

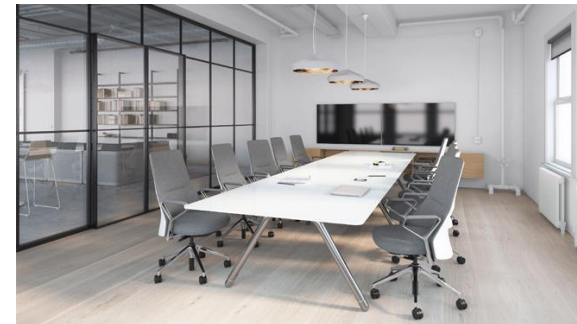
1) Performance reviews

[illegible]

2) Cameras on



3) Offices designed for socializing



A photograph of a modern office interior. In the foreground, a man with a beard and glasses, wearing a pink polo shirt, is seated at a white desk, working on a silver iMac. To his right, another man in a blue shirt is seated at a similar desk, also working. In the background, a woman with curly hair is seated at a desk. The office features large windows with black frames, wooden paneling on the walls and desks, and various office equipment like monitors, keyboards, and a printer. A small potted plant sits on the desk in the foreground.

- | | Out | Nov | Dez | 4Tri | Jan | Fev | Mar | 1Tri |
|-----------------|-------|-------|-------|-------|-------|------|------|-------|
| Total Segmentos | 61,53 | 83,64 | 79,17 | 73,25 | 52,27 | 0,00 | 0,00 | 34,37 |
| Total PF | 70,15 | 76,99 | 75,13 | 68,82 | 42,11 | 0,00 | 0,00 | 26,86 |
| Preferencial | 58,09 | 86,85 | 86,87 | 76,92 | 15,16 | 0,00 | 0,00 | 13,43 |
| | | | | | 18,78 | 0,00 | 0,00 | 18,12 |
| | | | | | 37,11 | 0,00 | 0,00 | 25,07 |
| | | | | | 75,99 | 0,00 | 0,00 | 51,89 |
| | | | | | 47,40 | 0,00 | 0,00 | 41,84 |
| | | | | | 26,08 | 0,00 | 0,00 | 23,13 |

SEMENTO	PESO	META	REAL	%	PONTOS	OPORT.
Cientes					0,00	0,0
Incr. Base Ativa	0	28	146	150,0	0,00	0,0
Incr. Clientes c/ Ofer...	0	153	0	0,0	0,00	0,0
Abertura Contas PF	0	120	24	11,3	0,00	0,0
Abertura Contas Busine...	0	6	0	0,0	0,00	0,0
Aquisição Com Of. Bási...	0	136	0	0,0	0,00	0,0
Conversão Of. Básica	0	313	1	0,0	0,00	0,0
Vendas					0,00	0,0
Super Auto	0	5	2	40,0	0,00	0,0
Seguro Vida	0	47	26	55,3	0,00	0,0
Seguro Residencial	0	25	8	32,0	0,00	0,0
Seguro Auto	0	6	1	16,7	0,00	0,0
Seguro Vida Master	0	2	0	0,0	0,00	0,0
Cartões	0	140	75	53,6	0,00	0,0
CP Protegido	0	295	70	23,7	0,00	0,0
Capitalização	0	58	6	10,3	0,00	0,0
Novas Cobranças Ativas	0	4	2	50,0	0,00	0,0
Títulos Liquidados	0	5.301	1.815	34,2	0,00	0,0
Captações - Captação Líquida					0,00	0,0
Captação Alvo	0	1.371	1.072	78,2	0,00	0,0
Previdência Foco PF	0	184	599	325,6	0,00	0,0
Captação Demais	0	766	-3.001	-391,8	0,00	0,0
Depósito à Vista / Float					0,00	0,0
DAV / Float	0	100	1.708	999,0	0,00	0,0
Empréstimos - Incr. Saldo Médio					0,00	0,0
Empréstimos Alvo PF	0	543	-118	-21,7	0,00	0,0

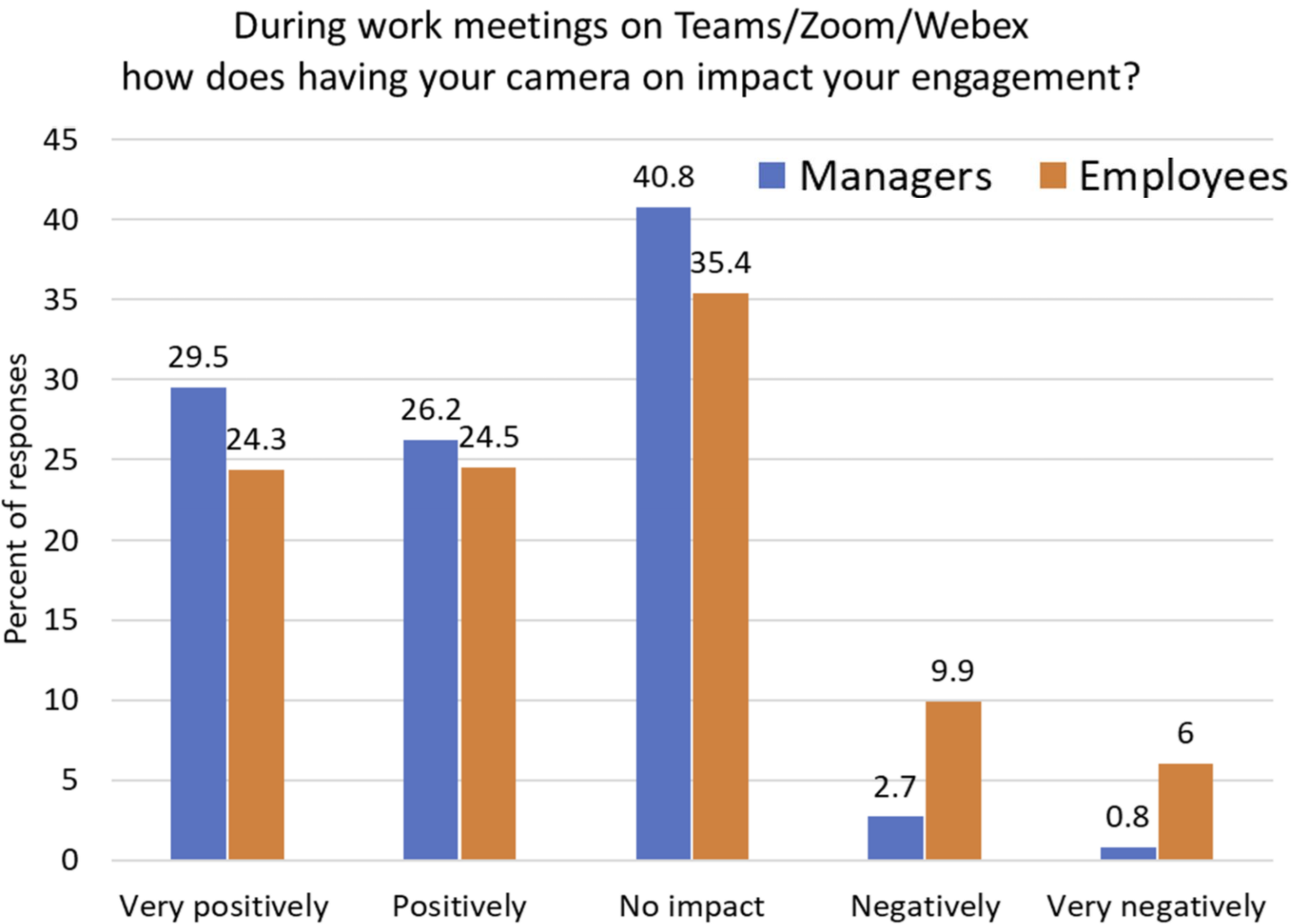
TOTAL SEGMENTOS 52,27
 PERÍODO Jan Feb Mar 1Tri
 Tri: 10% Jan: 27%

Voltar Imprimir

Ponderação Atualização Analisar Cara a Cara Histórico Métricas Voltar Imprimir

SUPER RANKING

(B) Encourage cameras on in video zoom meetings



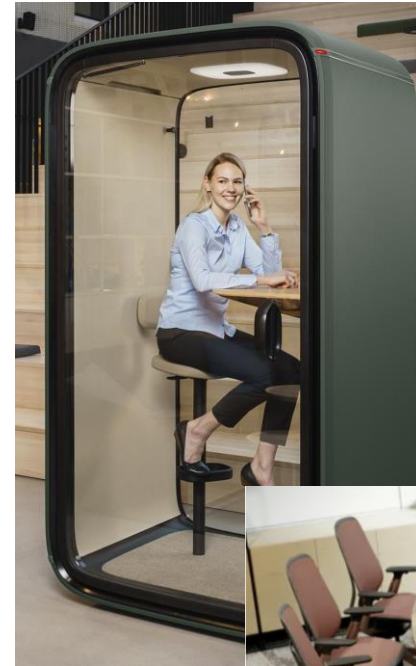
Notes: Respondents to the January 2023 SWAA and April SBU who worked during the previous week or who worked from home at some point since the start of the COVID-19 pandemic. We re-weight the SWAA sample to match the Current Population Survey on age, sex, education, and earnings. **N(SWAA) = 4,240 N(SBU)=337**

(C) More meeting rooms, Teams/Zoom rooms and lounge seating, less cubicles and small offices

Massed offices and desks are **out**



Video-cubicles, meeting rooms and virtual conference rooms are **in**



Going to cover three sections

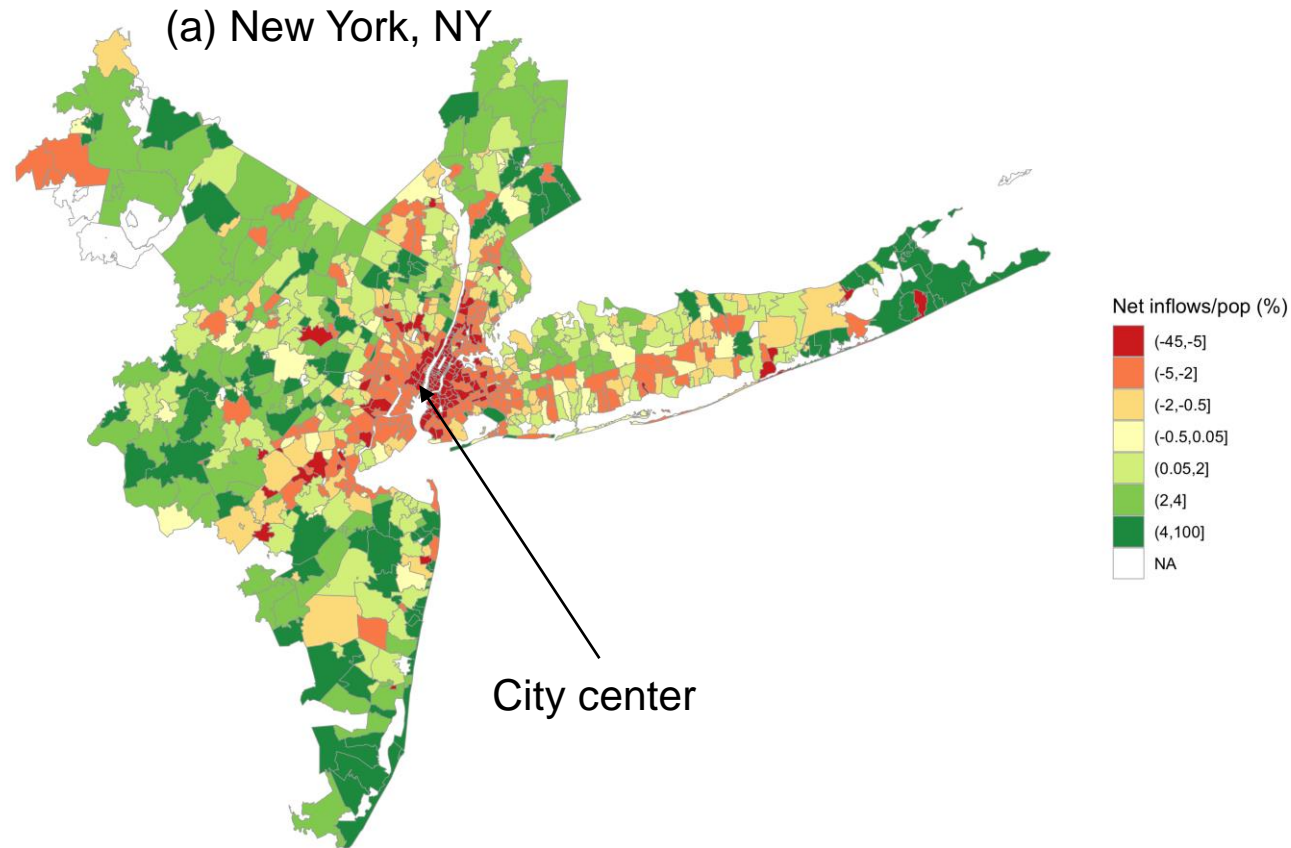
>>>> Current state of working from home

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1) The “Donut Effect” – people have left city centers

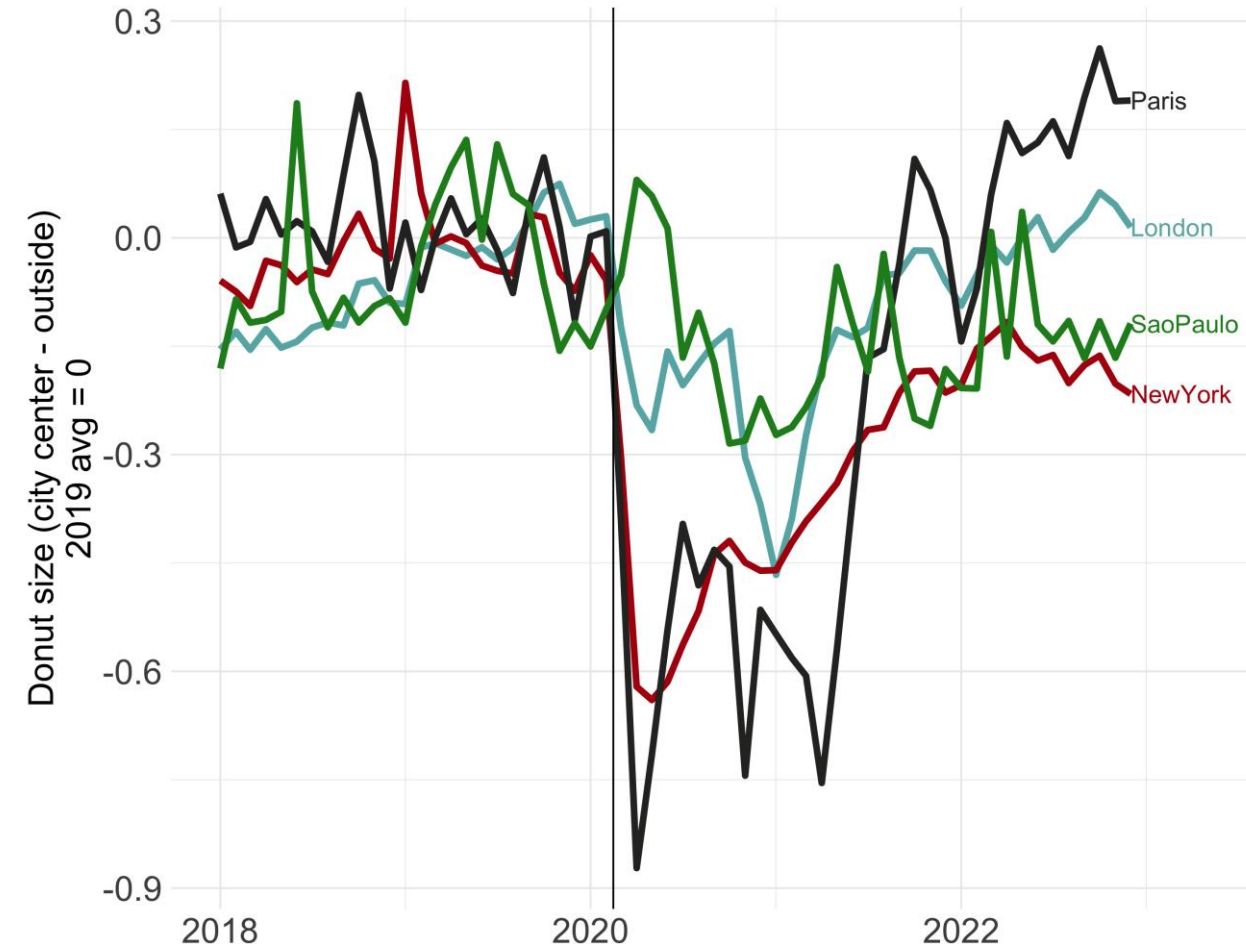
Cumulative net flows Feb 2020 - November 2022 as % of population



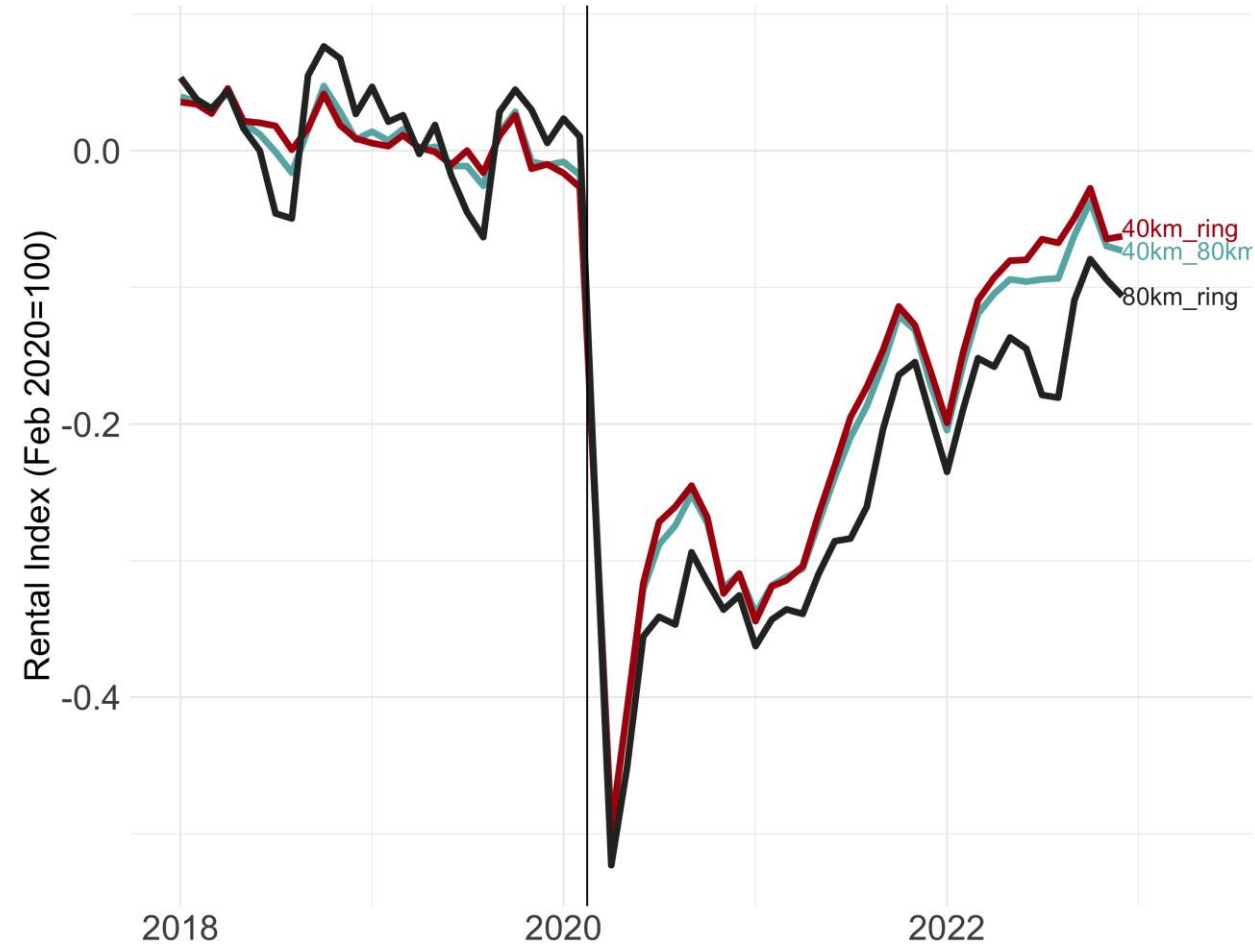
Source: Arjun Ramani and Nicholas Bloom “The Donut Effect”, NBER Working Paper 2021 (updated 2023) using US Postal Service Change of Address Data
<https://nbloom.people.stanford.edu/sites/g/files/sbiybj4746/f/w28876.pdf>

“Donut Effect” is shifting spending from city centers to the suburbs

Spending in city centers minus suburbs, 4 cities

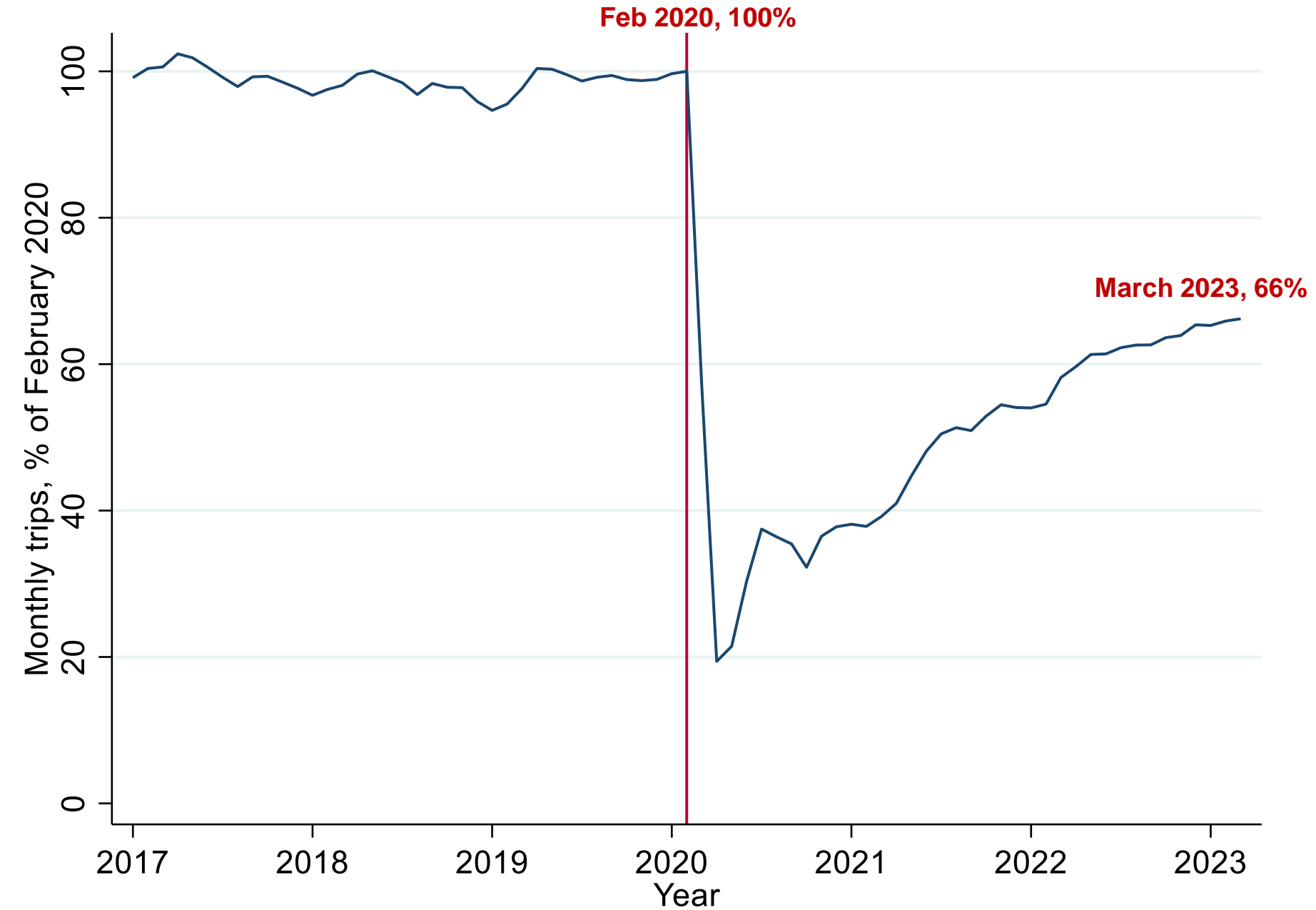


Spending in city centers minus suburbs, 40 city average



Notes: Current Mastercard data covers 48 global cities; donut represents monthly transaction value plotted as a difference in growth from the 2019 average (Central Business District – Suburbs). CBDs defined by pulling coordinates of “city hall”/“city center” from Google Maps.

2) Public transport journeys have plummeted → 1/3 down



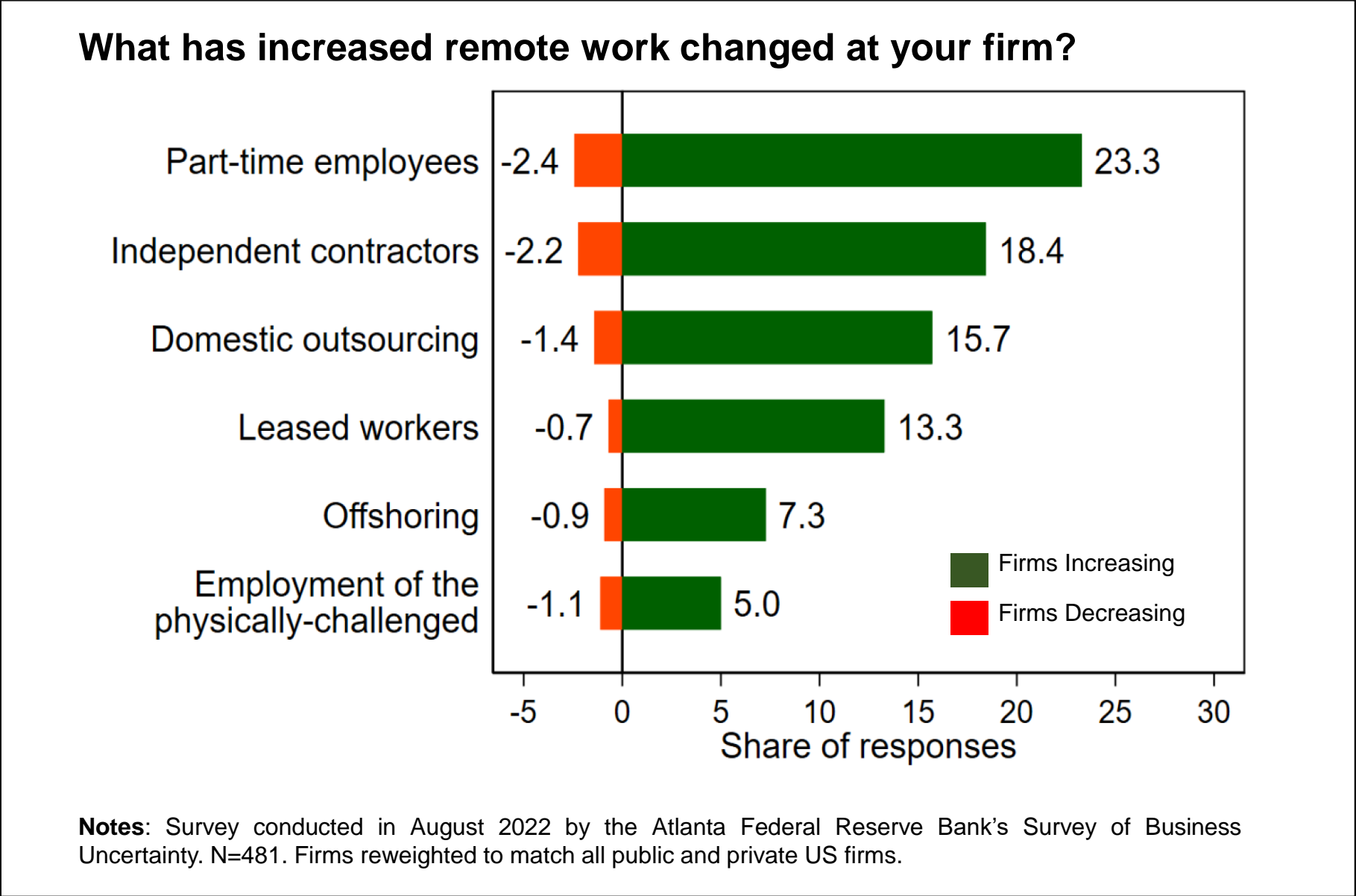
Notes: US Passenger trips in the National Transit Database, covering around 8m passenger trips per month in February 2020. Data de-seasonalized and on a 3-month moving average (except from 2020/2-2020/9 due to the rapid impact of the pandemic).
<https://www.transit.dot.gov/ntd>

3) Start-up rates are surging - WFH provides a cheaper way to start a new company (no rent, do this on the side of your main WFH job....)

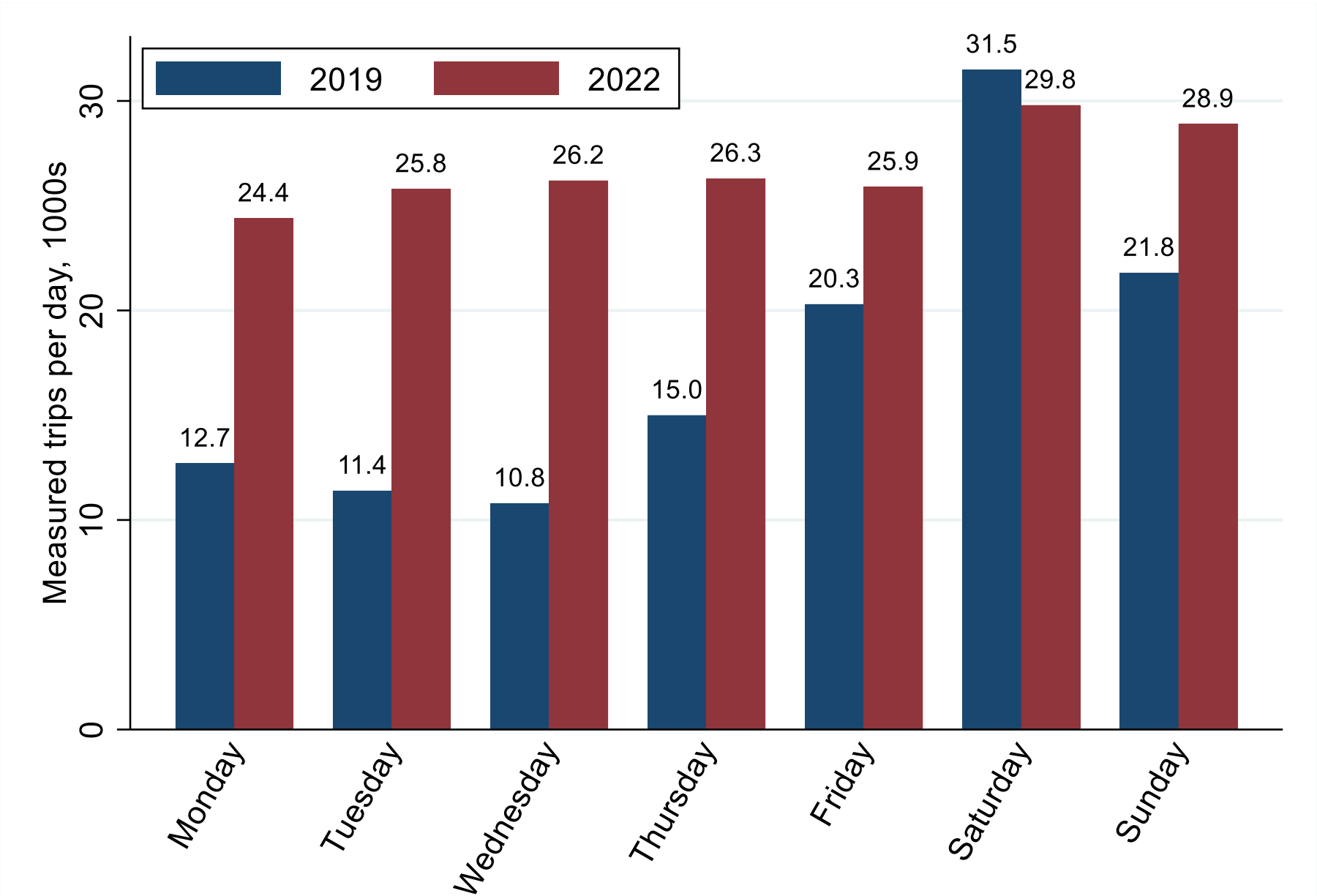


Source: US Census Bureau: Business Applications with a high-propensity of turning into payroll businesses. 3-month moving average (except from 2020/2-2020/9 due to the rapid impact of the pandemic). <https://fred.stlouisfed.org/series/AHBATOTALSAUS>

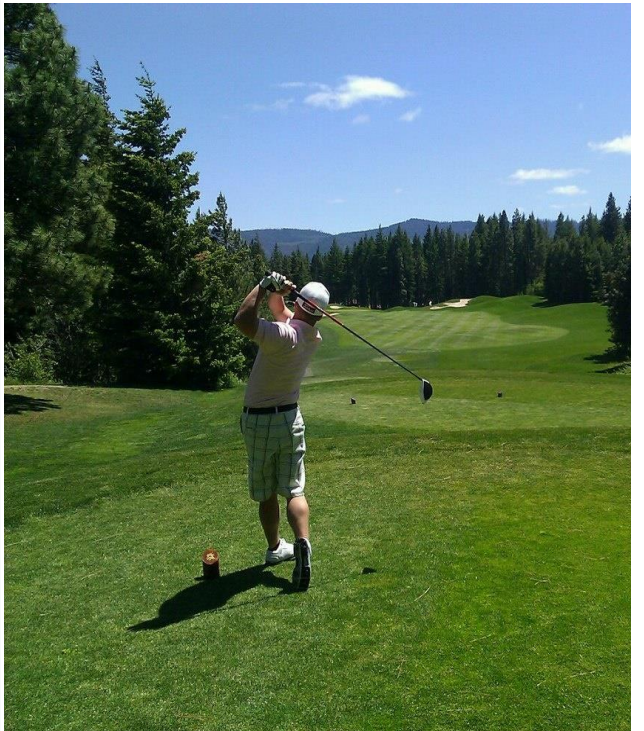
4) Firms increasing outsourcing/offshoring of IT, HR and finance to access talent, save costs and free up space



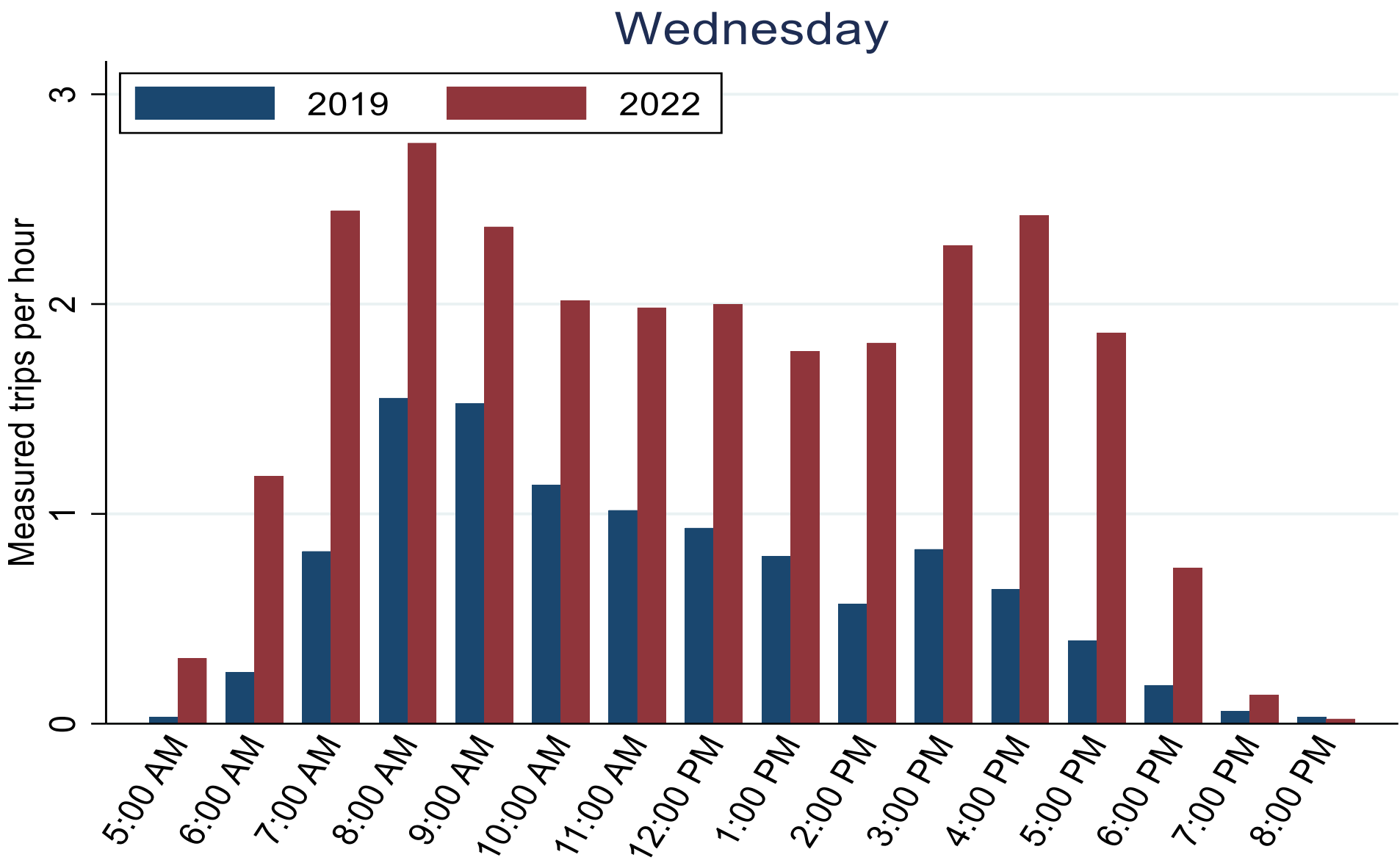
5) Golf has increased 52% since 2019, almost all on weekdays...



Note: Data for August 2019 and August 2022 for a sample of trips. Those included are trips in the INRIX database, which includes trips in vehicles with GPS and phones with location tracking turned-on. The trip needs to be to one of the 3,400 satellite identified gold courses and to have lasted more than two hours. We estimate we sample about 5% of total golf trips.



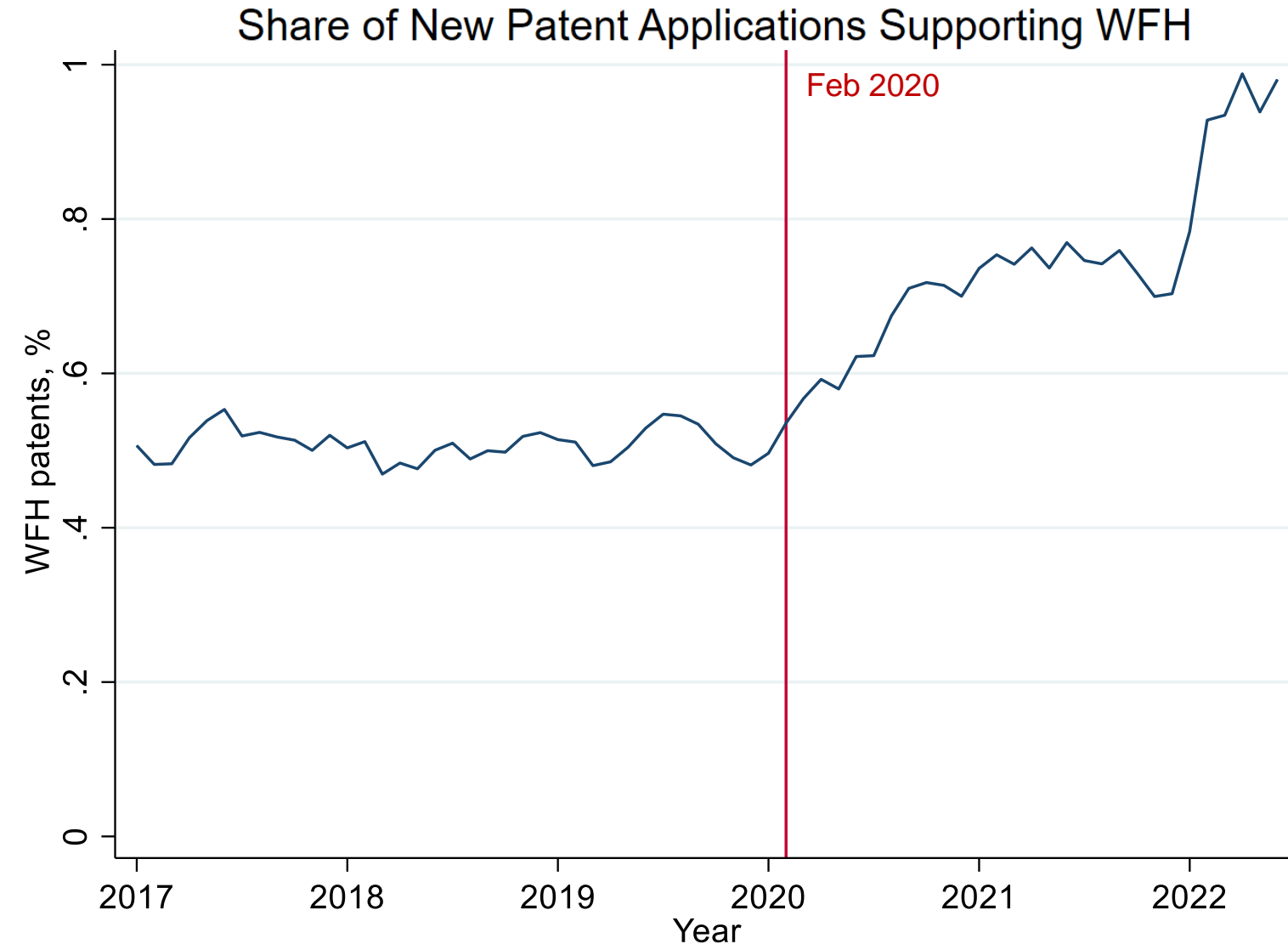
...the weekday increase happened throughout the day - for example a 178% increase at 3pm on Wednesday



Note: Data for August 2019 and August 2022 for a sample of trips. Those included are trips in the INRIX database, which includes trips in vehicles with GPS and phones with location tracking turned-on. The trip needs to be to one of the 3,400 satellite identified gold courses and to have lasted more than two hours. We estimate we sample about 5% of total golf trips.



Longer run technology will continue to build WFH momentum

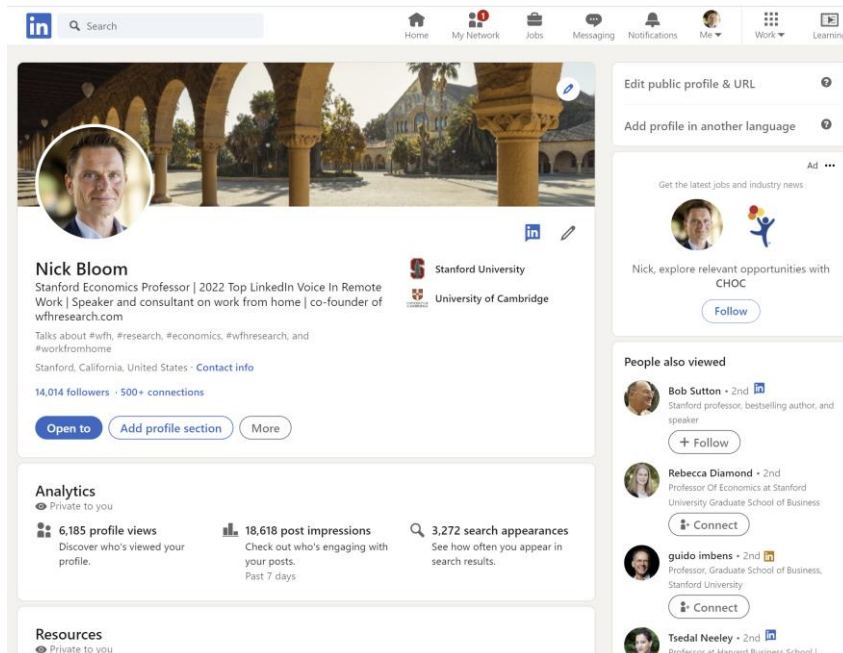


- New WFH technologies are being rapidly developed as the market for WFH products has increased 5x
- For example, scheduling software, better AV, virtual reality and holograms
- Should make WFH more appealing and space scheduling easier

Source: US Patent and Trademark Office new patent application files. Details in Bloom, Nicholas, Steven J. Davis, and Yulia Zhestkova. 2021. "[COVID-19 Shifted Patent Applications toward Technologies that Support Working from Home](#)."

Conclusions

1. WFH is here to stay – typically 2 days a week for the average office worker
2. Key to succeed is coordinate so employees in together to work socially
3. Offices are being designed to focus on social working together



To sign up for monthly results updates please click [here](#).
Download our [time series data on the extent of working from home](#).

Back-Up

Surge in start-ups post pandemic – four firms I am working with:

<https://radious.pro/>

<https://kadence.co/>

<https://www.takescoop.com/>

<https://ro.am/>

<http://projectpair.org/>

We offer close-to-home, collaborative spaces.

Work together
in person;

And get some
work-life separation;

With no/low
commute;

In unique spaces,
distributed across town.

radious

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Backyard Oasis: Private Office with Shared Outdoor Meeting Space



[More photos](#)



Shared Accessory Dwelling Unit (ADU) in Portland hosted by Becky

1 workstation • 1 meeting space • 1 bathroom

[Ask host a question](#)



Come experience our thoughtfully crafted eco-industrial detached studio. The studio has great day light with two large French doors that open up to a shared covered deck and expands the space for meetings, a working lunch or taking a mental break.

Start date

mm/dd/yyyy

End date

mm/dd/yyyy

Number of people

5

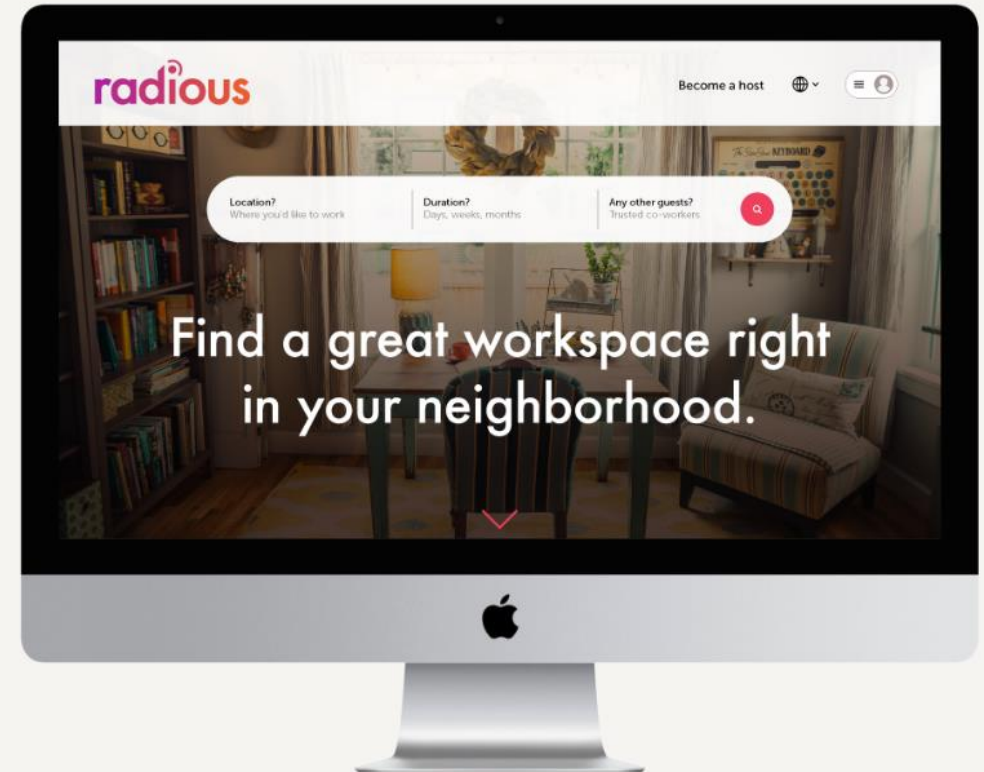
[Check availability](#)



Actual Radspace in SE Portland

A B2B SaaS model for on-demand workspaces

1. **Companies** prepay via subscription;
2. **Employees** book spaces for free;
3. **Homeowners** earn cash;
4. **Radius** keeps 25%.



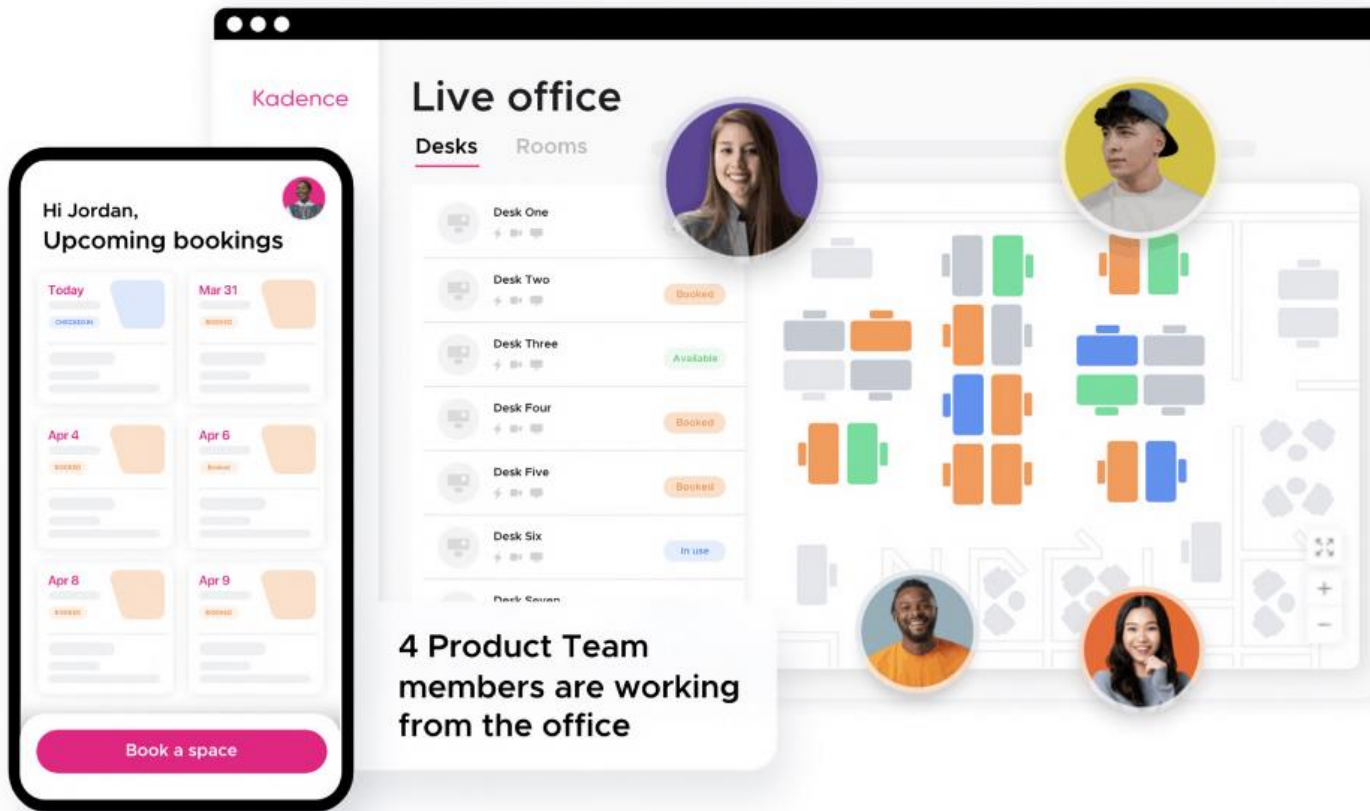


*"Hybrid work represents the biggest shift to how we work in our generation - it will require a new operating model, spanning **people, places, and processes.**"*

- Satya Nadella, CEO - Microsoft

Supercharging employee's hybrid experience

Coordinate with colleagues, reserve flexible spaces, organize events and discover the perfect hybrid rhythm



**WHERE
YOU WANT**

**WHO
YOU WANT**

**WHEN
YOU WANT**



**Aaron Levie
Box**

"I'm confident that quantum mechanics is far easier to understand than trying to figure out how teams will manage their schedules in a hybrid workplace."



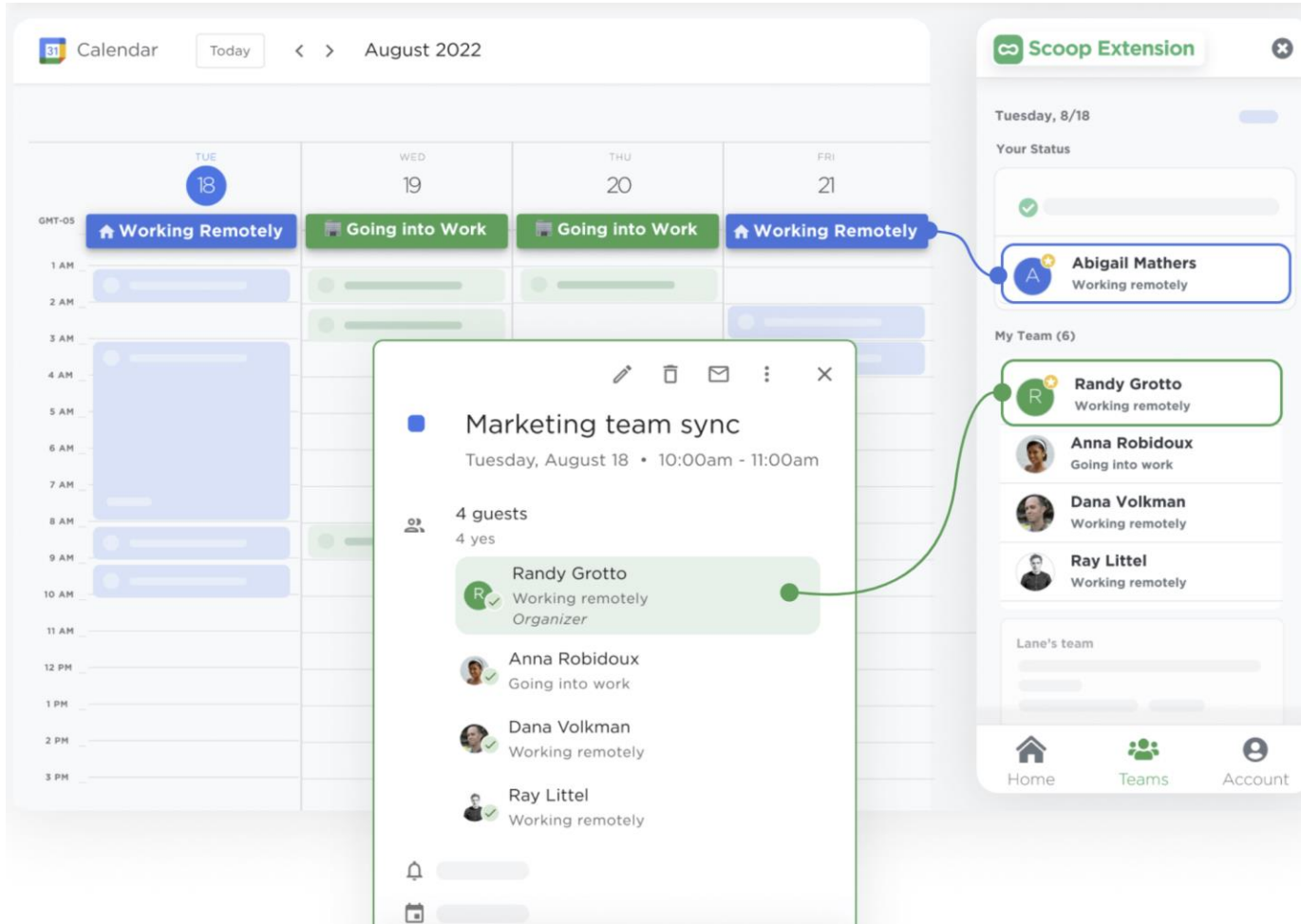
Make every trip to the office count.

Never go into the office, find out your teammates aren't there, and spend the day stuck on Zoom. Team Sync is free to use.



Abigail Mathers
Going to Work

The screenshot displays the Team Sync interface. At the top, there's a 'Calendar' header with 'Today' and 'August 2022'. Below this, a 'Homepage Review Meeting' is scheduled for Monday, August 18th. The calendar shows a grid of days from Monday to Thursday. A 'Coworker statuses' pop-up is visible, showing 'Tuesday 19/22' with a list of coworkers: @An, @Brad, @Kyle, @Shawn (Going into work) and @Antwan, @Celesta, @Kimberly (Working remotely). Another pop-up shows 'Monday, 8/18' with a list of favorite co-workers: Abigail Mathers, Cate Jones, and Chris Carson. A sidebar on the right shows a list of team members, including Abigail Mathers.



Hybrid without the heavy lift

Say goodbye to the back and forth of figuring out who's working where. With automated routines and one-click work status updates, teams stay in the loop without all the noise.

 [Add to Chrome for Free](#)

[Learn more about Team Sync and Google Calendar](#) →

Roam is Your Whole Company in one HQ

There's a lot of debate about the future of work, and while nobody knows what the future holds, we do know with absolute certainty: It will never be the same.

Companies like Zoom solved the videoconferencing technology problem, but today things that used to take two people five minutes right now are being scheduled for 60 minute calls next week. There are too many meetings, companies don't feel connected and culture is off, and there are too many software tools that don't work and add up to a large cost.

We need to get back to technology that supports the workflow, not the reverse.

Roam is an all-in-one Cloud HQ designed to bring a whole distributed company together in one headquarters.

Roam makes companies:

- more *productive* with shorter meetings
- more *connected* with a map that gives a feeling of working together without meeting



Tasha ⚡



Saskia



Auditorium 🎧



Marjorie 🌸



John



Kyle



8

Arlene 🌿



8

Darrell

Liz



Philip



Beth 🎧



Joseph

MarOps Room 🎧

+5



Support Bar 📍



Design Studio 🎧



Content Team 🎧



Finance



Marketing



Messages



Stop Video



Mute



Share



Rec



Cal



Chat



Floors



Open



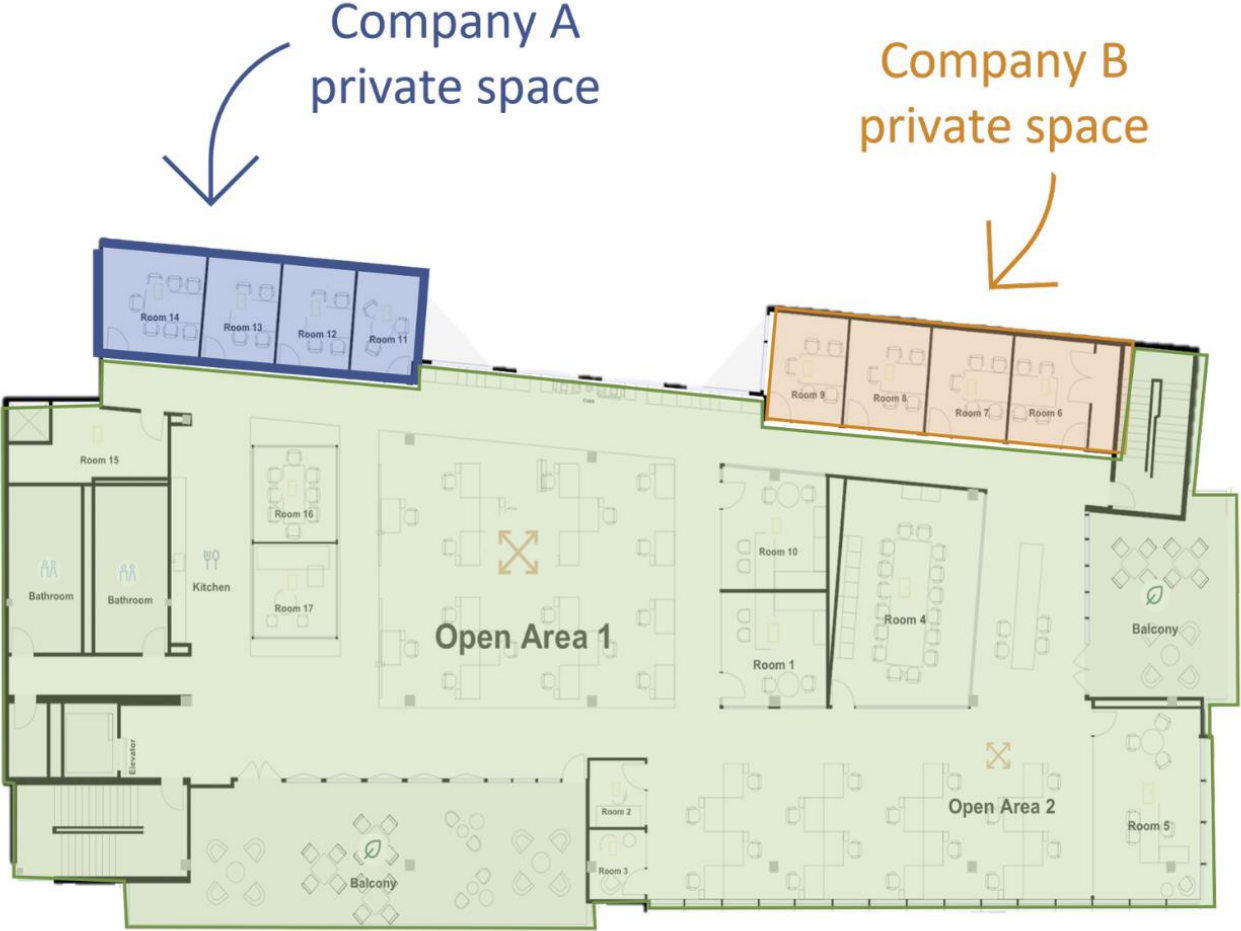
Leave Room



Stanford team piloting the future of hybrid work

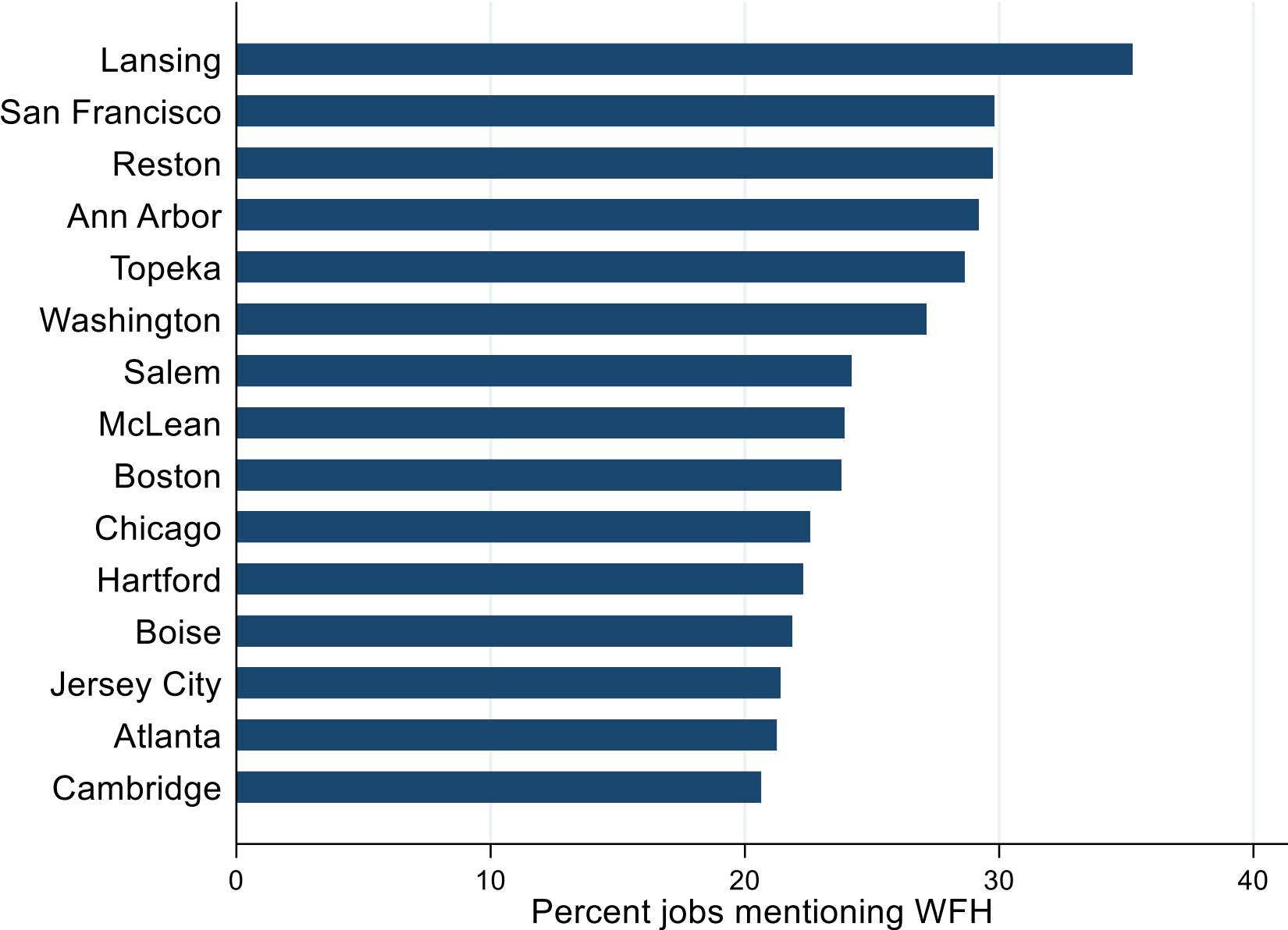
Helping match Bay Area companies to split office space

Example space pairing agreement:



Mid-week turnover
M-W: Company A
Th-F: Company B

WFH highest in large cities and university towns



Notes: Share of vacancy postings offering a job that allows 1+ days remote working per week. From 7 million online US jobs from January and February 2023. Lightcast.

Source www.wfhmap.com