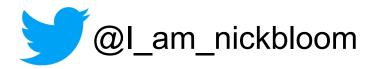
What is the future and impact of WFH?

Nick Bloom (Stanford)

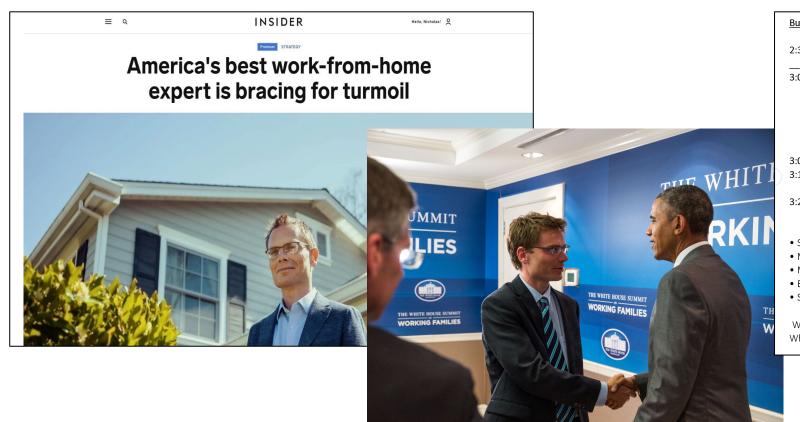
March 2022





My Data on Working From Home Research on WFH starting in 2004

- Ongoing surveys of 5,000 US working age adults per month
- Ongoing surveys of 1,000 US firms per month
- Discussions and consulting with 100+ organizations



Business Council Thursday, March 25 – Hybrid Return to Work Agenda (Eastern Time)

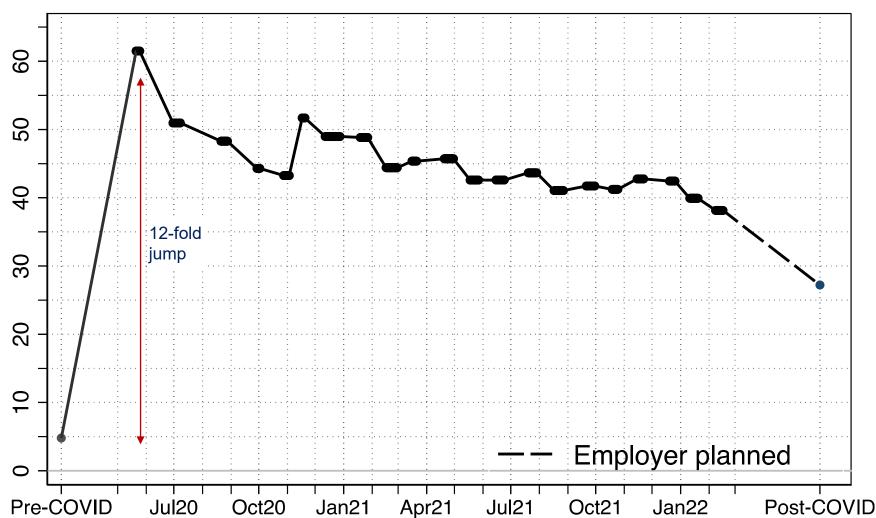
2:30 -2:50pmET. Speakers sign onto call briefly to check A/V (or arrange alternate time)

3:00 pm Satya opens the call, introduces new members and then introduces speaker (slides & speaker on screen)

- Adena Friedman, NASDAQ
- Nate Sleeper, Clayton, Dubilier & Rice
- Maurice Smith, Health Care Service Organization
- 3:03 Nicholas Bloom, Stanford, presents Return to Work data (10 min)
- 3:13 CEO Q & A (10 min)(live using raise hand function)
- Satya, Microsoft kicks off the CEO discussion by presenting data and then asks each CEO to answer three questions about the future of their hybrid back to work plans: (4 mins each, 5 speakers =20 mins)
- Satya Nadella, Microsoft (Technology) Data & Presentation (3:23-3:29pm)
- Mary Barra, GM (Manufacturing) (3:29-3:33pm)
- Mary Dillon, Ulta Beauty (Retail) (3:33-3:37)
- Brian Moynihan, Bank of America (Financial Services)(joining 3:30pm)(3:37-3:41)
- Sasan Goodarzi, Intuit (Technology)(3:41-4:45 pm)

What policy changes are you making? What process changes are you making? NOT WITH IS Sticking: from 5% (pre-COVID) to 25% (post-COVID)

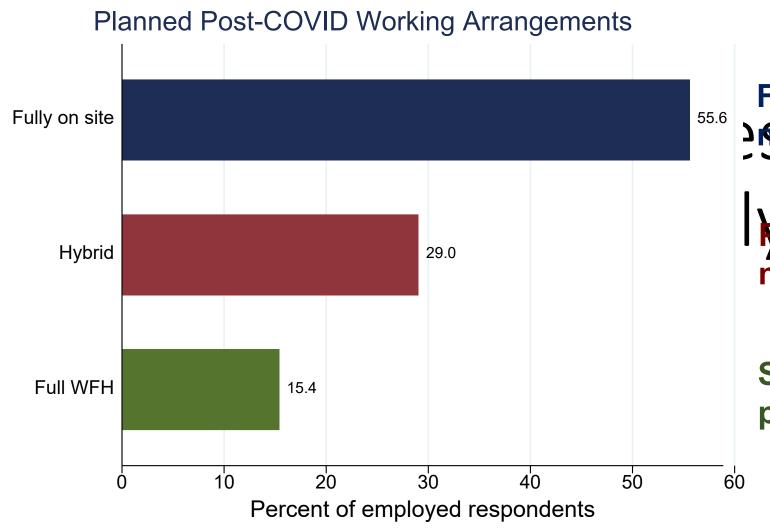
of days Full days worked from home, %



WFH days were doubling every 12 years pre-pandemic.

In March 2020 they increased 12-fold – equal to 50 years of pre-pandemic growth.

Source: Data from 61,238 survey responses May 20 to Feb 22 weighted to match the US population. Pre-covid data from the American Time Use Survey. Post-COVID from 4,759 Feb 2022 responses. Details on https://wfhresearch.com/



Front-line employees, mostly

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/

Hybrid (e.g. 3-2) Combines the Benefits of Office and Home

Working In the Office

- 1. Good for creativity
- 2. Good for culture

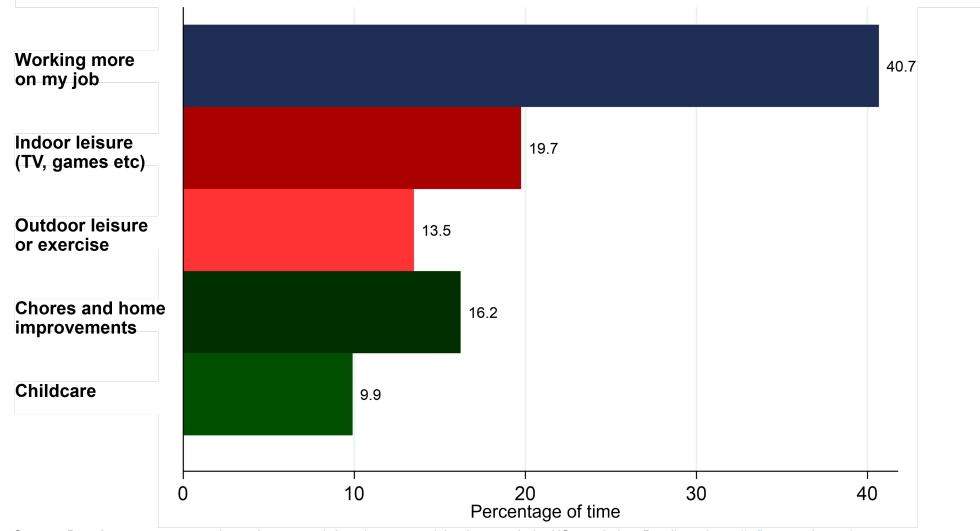
Working From Home

- 1. Quiet
- 2. Saves on Commute

NONCONFIDENTIAL // EXTERNAL

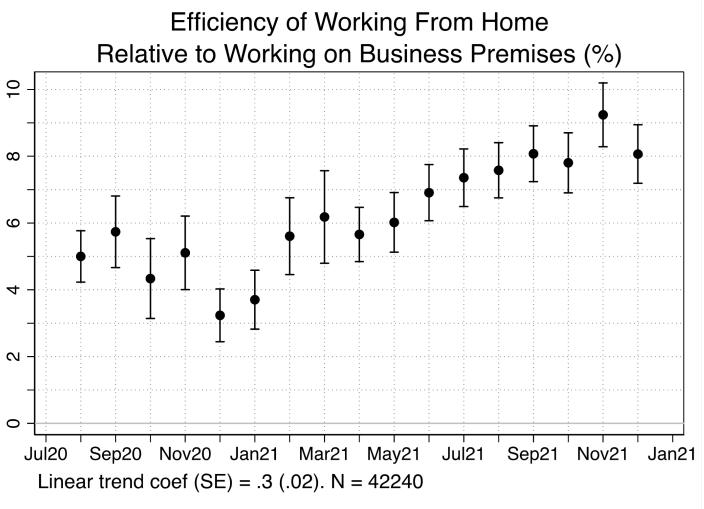
40% (30 minutes) goes into extra work





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

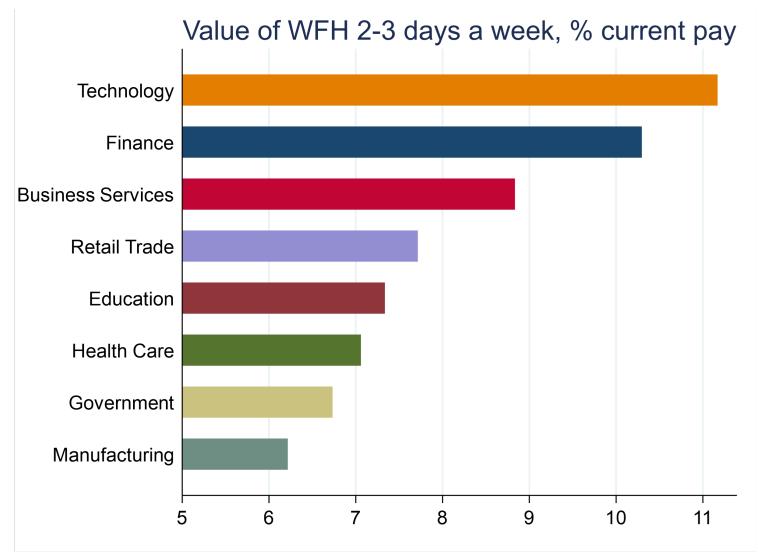
productivity ~5%, and this is growing as firms and employed improve on this



Source: Data from 42,240 US responses in through 2021, reweighted to match the US population. Details on https://wfhresearch.com/

NONCONFIDENTIAL // EXTERNAL

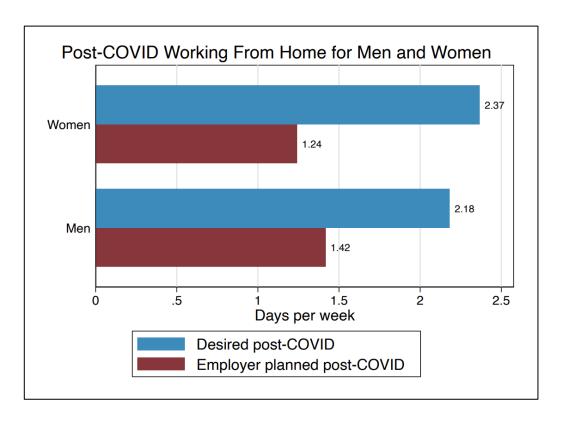
finance)

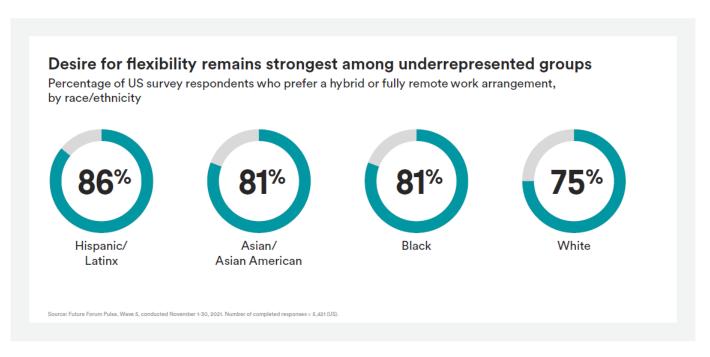


Source: Data from 17,087 responses through 2021, reweighted to match US population. Industries with 1000+ respondents. Details on https://wfhresearch.com/

NONCONFIDENTIAL // EXTERNAL

supporting diversity

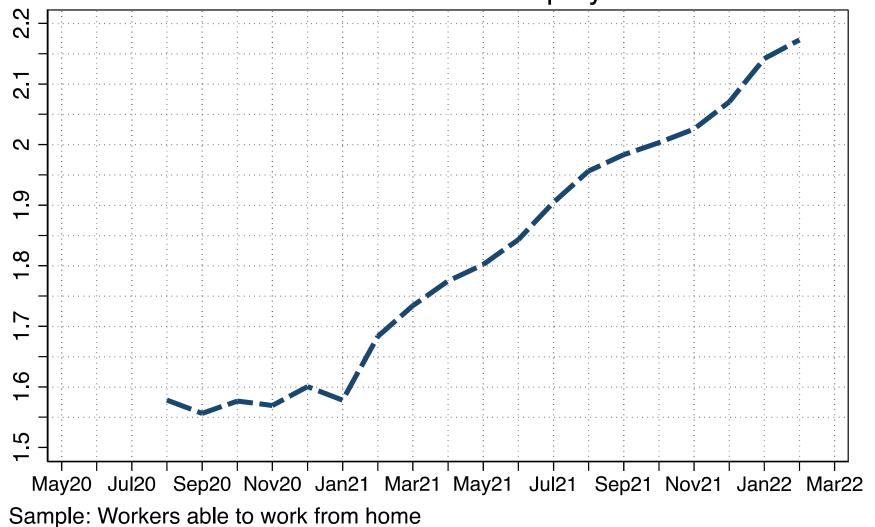




Source: Data from 10,000 US responses in through 2021, reweighted to match the US population. Details on https://wfhresearch.com/

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

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



Mar22 N = 46,345 (able to work from home)

increasing 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: Data are from all SWAA waves, covering July 2020 to 2022. February The sample includes all respondents who reported their employer's plans for post-COVID WFH and who have work-from-home experience during the pandemic (thus able to work home). We from exclude respondents who report having no employer.

The Big Challenge of Hybrid WFH for Management

Choice of:

- How many days
- Which days

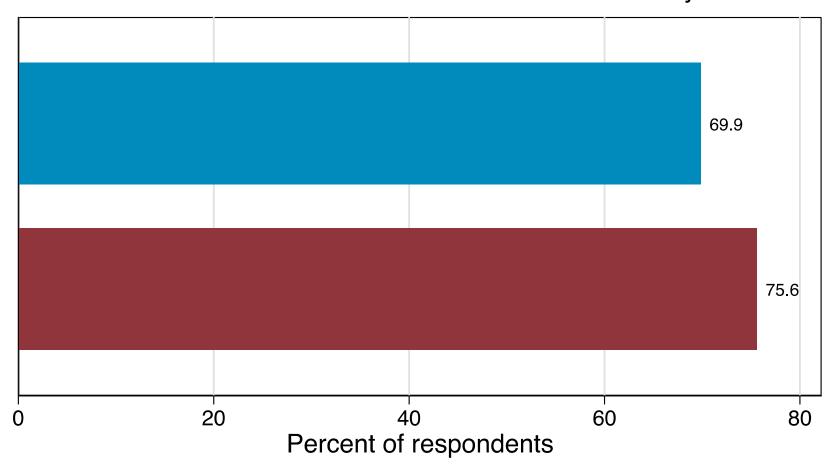


Choice vs coordination issue is tricky — employees want

Share of workers who would like to:

Choose their own WFH days

Coordinate with coworkers on worksite days



Responses to the questions:

- Which of the following would you prefer?
 - Being able to choose which days you work from home (if any)
 - Your employer sets a policy that determines who works from home on which days
- Would you like your co-workers to come into work on the same days as you?

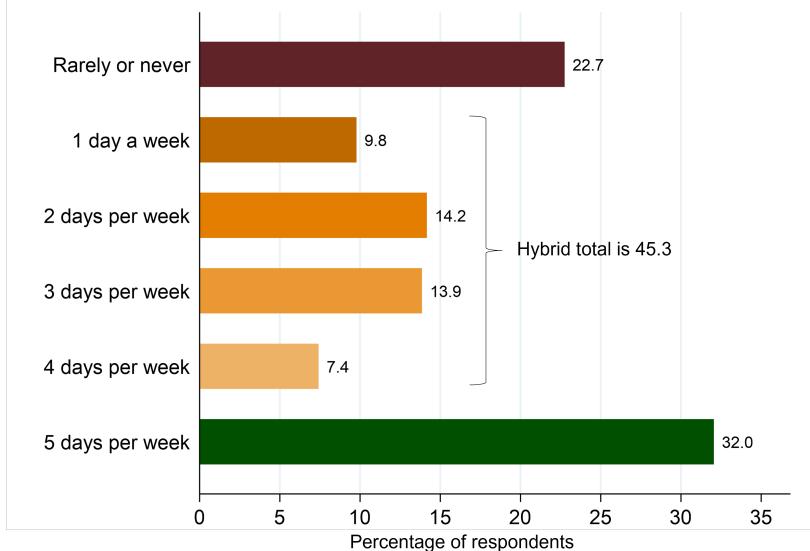
Notes: The sample for the blue bar includes employed respondents from the July and December 2021 SWAA waves who passed the attention check questions (for December respondents) and worked from home at some point since the start of the COVID-19 pandemic. The SWAA samples US residents aged 20 to 64 who earned \$10,000 or more in 2019. N = 3,949 (blue bar).

The sample for the red bar includes employed respondents from the February 2022 SWAA who reported their employer is planning them to work from home 1 or more days per week after the end of the pandemic.

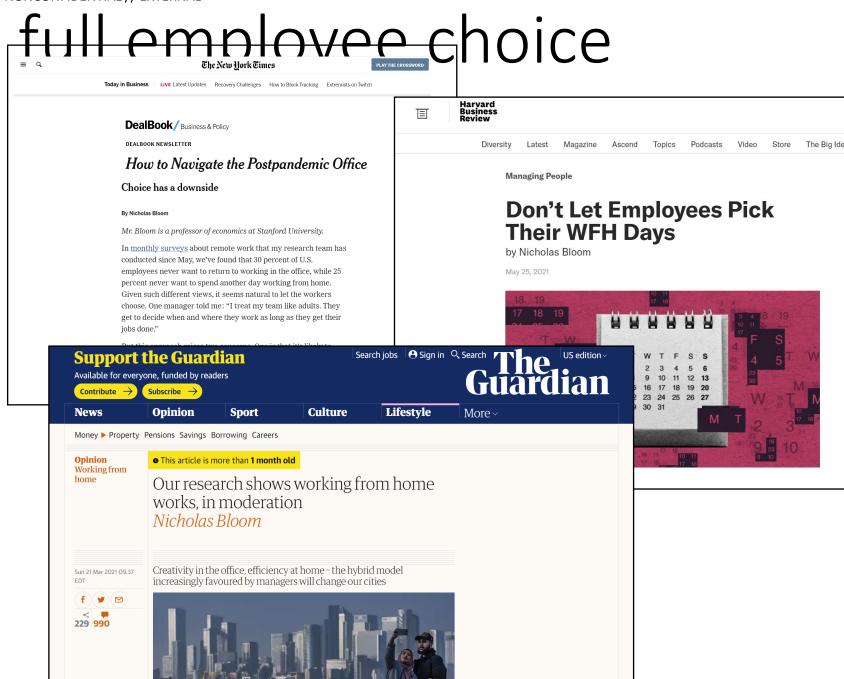
N = 1810 (red bar).

There is huge variation in what employees want, so let them choose?





NONCONFIDENTIAL // EXTERNAL



Opinion Office life

The ticking time bomb inside the new world of work

Employers may avoid lawsuits by laying down rules about when we need to be in the office

PILITA CLARK (+ Add to myFT







ry offices are likely to become busy once again — just not every day ® The LIFE Picture Collection/Getty Images

Pilita Clark FEBRUARY 13 2021

299

Be the first to know about every new Coronavirus story

A Get instant email alerts

Once the Covid crisis eases, the working week will be pleasantly transformed for millions of employees into an agreeable mix of a few days in the office and a few at home.

Or so I thought until last week, when I spoke to Nicholas Bloom, an awardwinning British economist at Stanford University whose eye-grabbing research on working from home began years before the pandemic.

His latest co-authored study, based on months of surveys of 22,500 Americans up until December, suggests homeworking is indeed here to stay.

Workers and companies alike have found it is better than expected. Both have sunk money into the equipment needed for it (\$600 for the average worker). The "shirking from home" stigma has faded. No one wants to go back to grim five-day office commutes.

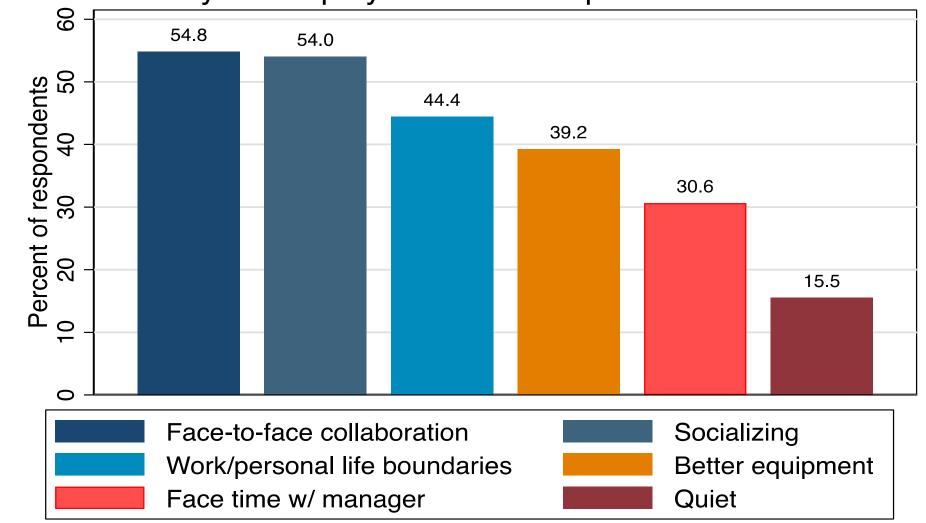
Mixed mode – great in stock-photos, but I hear many complaints





Indeed, the key benefits of being in the office is time with

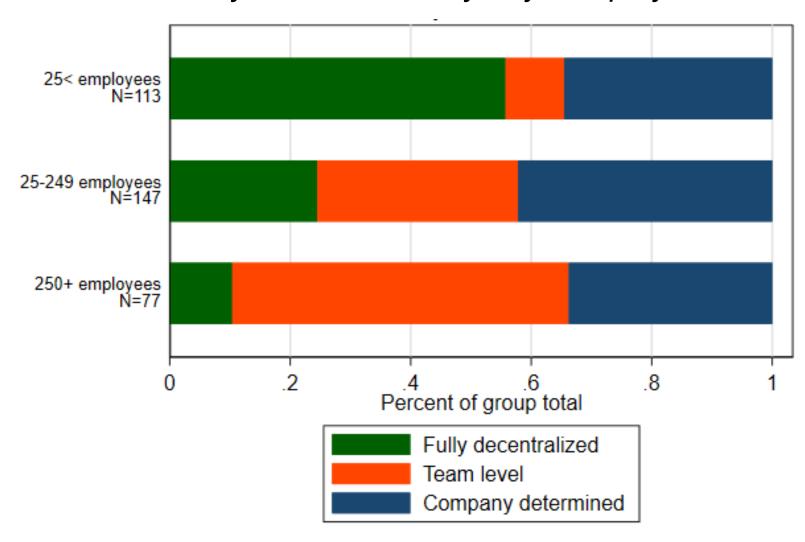
colleagues are the top 3 benefits of working on your employer's business premises?



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

NONCONFIDENTIAL EXTERNAL

company organized 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.

Broad suggestions

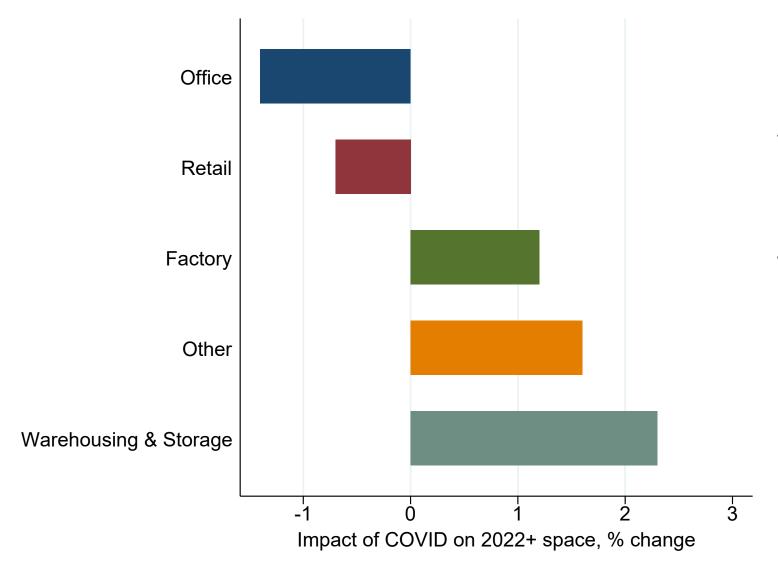
- 1) Try something low risk like Hybrid 3-2 for the rest of 2022
- 2) Acknowledge this is a six-month plan we face incredible uncertainty
- 3) Survey and collect feedback from all potential WFH employees in late 2022
- 4) Update to a longer-run plan for 2023 onwards

Three Implications of hybrid WFH for the Office

- 1) Size
- 2) Location
- 3) Design



1) Firms are not planning to cut office space



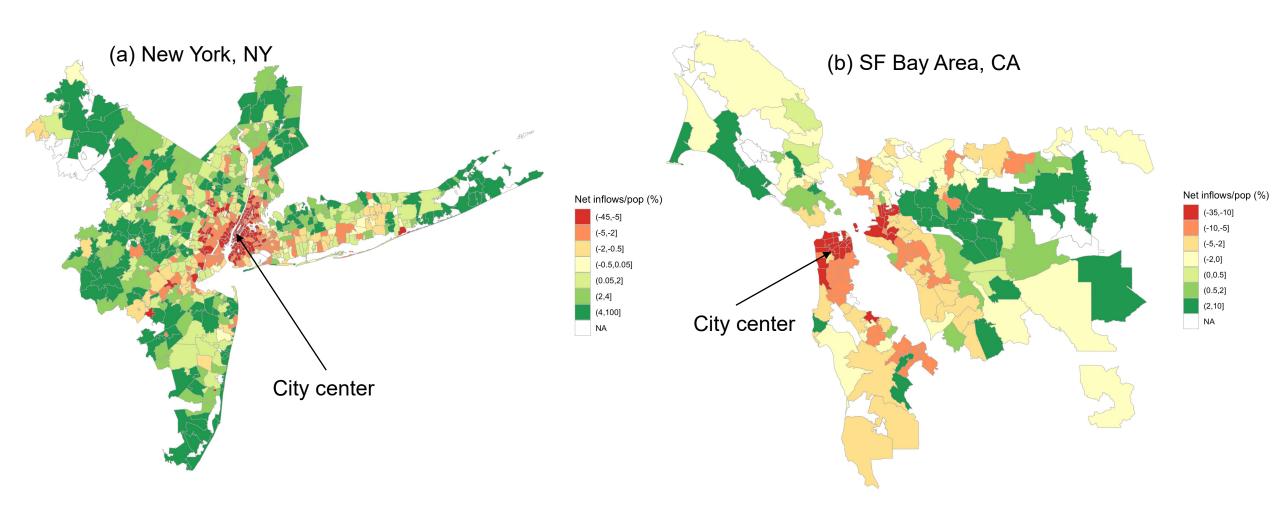
Why?

Scheduling – employees want to WFH on Monday and Friday

Source: 445 US firms in October 2021 re-weighted to match the US economy. From the Survey of Business Uncertainty https://www.atlantafed.org/research/surveys/business-uncertainty

2) Location: people are leaving city centers (e.g. NY and SF)

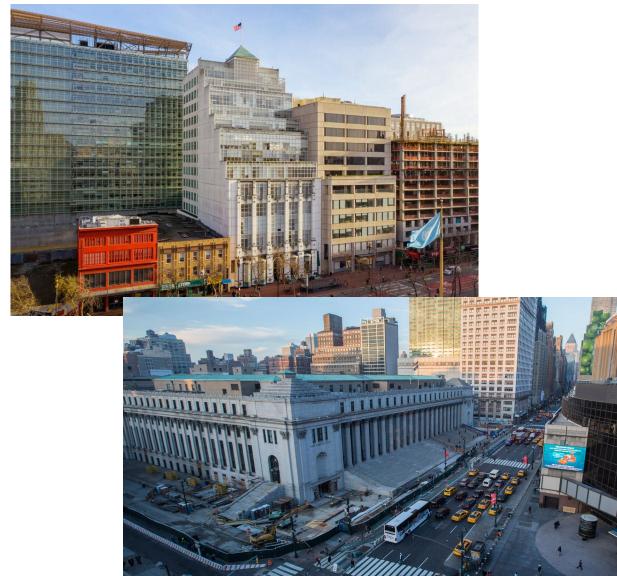
Cumulative net flows (moves in – moves out) from Feb 2020-Jul 2021 as a % of the zipcode population



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

NONCONFIDENTIAL // EXTERNAL

focusing on quality space Office Parks (Texas and Cupertino)



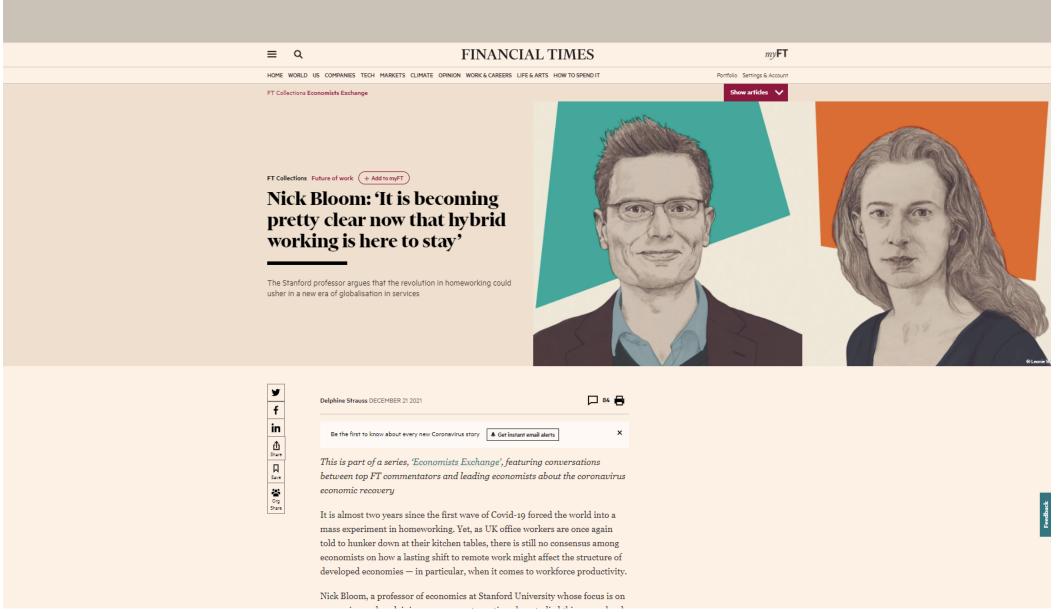


Individual office corridors are out

Cubicles, meeting rooms and open plan (lounge) seating are in

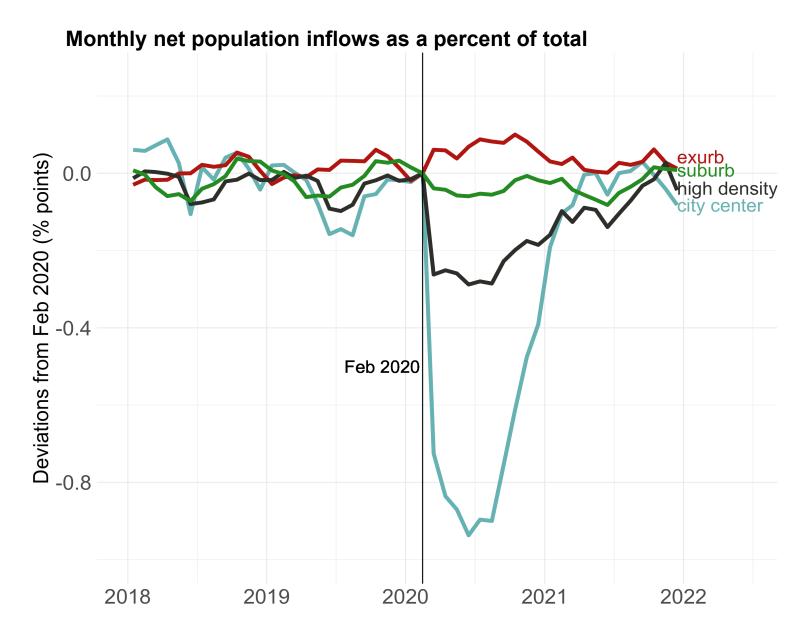


Finally WFH will increase outsourcing and offshoring





So long-run NY may lose 5% to 10% of city center population from WFH

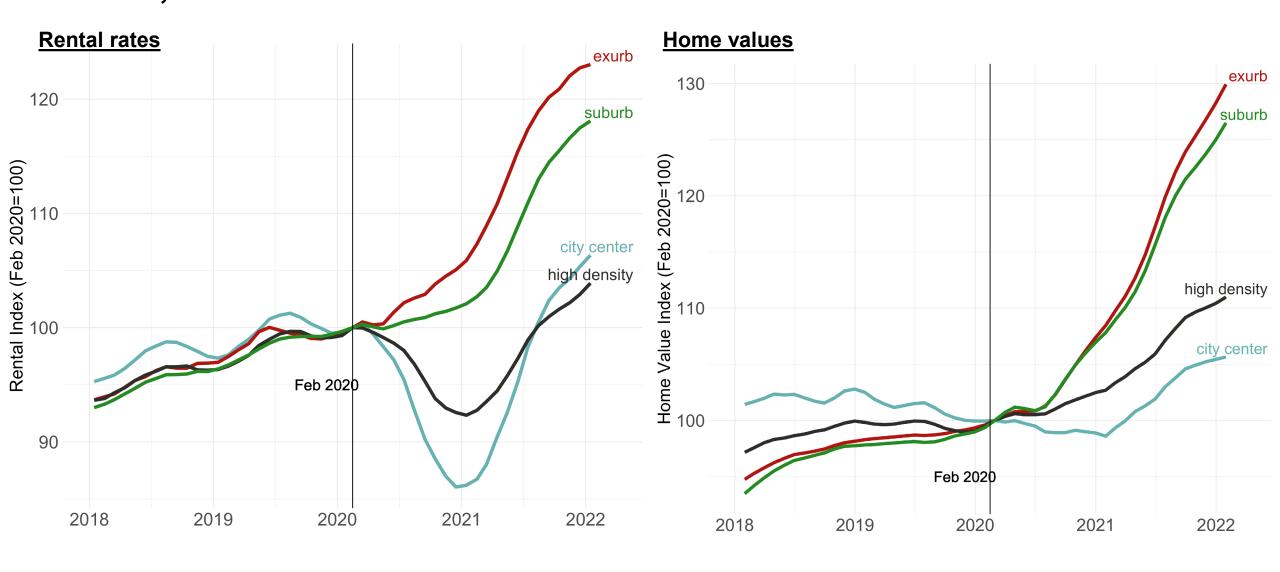


Source: Arjun Ramani and Nicholas Bloom "The Donut Effect", NBER Working Paper 2021 using US Postal Service Change of Address Data. Note the data has not had seasonal fluctuations removed. https://nbloom.people.stanford.edu/sites/g/files/s

Data until December 2021

biybj4746/f/w28876.pdf

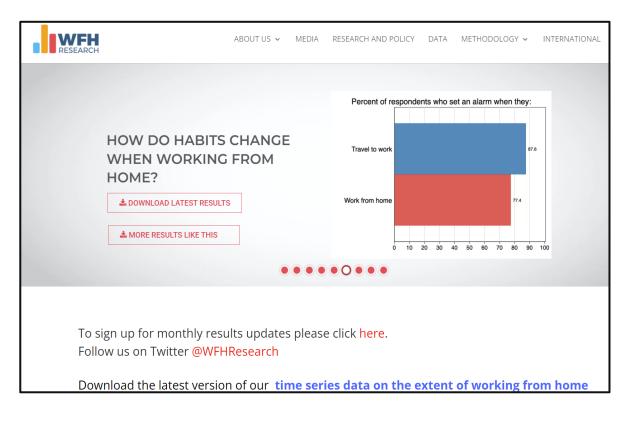
Is this bad - rent and property prices will soften, but the city will continue to thrive, with a little less bustle and more affordable than 2019



Notes: Zillow zip-code rent and home value data for NY, LA, SF, Chicago, Dallas, Houston, Miami, Philadelphia, Washington, Atlanta, Boston and Phoenix by zip-code population density. **Source**: "The Donut Effect" by Arjun Ramani and Nicholas Bloom (2021)

Further information:

www.wfhresearch.com



www.sternspeakers.com

