

# Discussion of Dingel and Neiman's “How many jobs can be done at home?”

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# Occupation data

- Occupation data is often used to organize estimates about working conditions
  - Who does care work? Who uses computers?
  - Here: Who can work at home full time?
  - There is lots of variation within occupations
  - Simple results are usable.
- Data sources and classification used here:
  - O\*NET comes from DOL's Employment and Training Administration
    - Coded this by whether tasks can be done working from home
  - Merged these O\*NET inferences into SOC (Occupational Employment Statistics)
    - Making it possible to make representative statements about the workforce
  - And to ISCO-08 for international comparison

# Some key findings

- 37% of US workforce could work at home; they make 46% of the wage and salary income.
- Regions differ on work-from-home, associated with industry mix
  - High tech vs repair/maintenance, farming, health care
- International comparisons
  - Wealthier information economies enable more work from home
- Curious cases / ambiguities:
  - Farmers – International comparisons may depend a lot on how they are classified.
  - Librarians (likewise archives, museum, or gallery staff) – can research but not curate physical collection
  - What's this person's home like? Does it have broadband? – Regional/international variation
  - Apprenticing to experienced people may be more difficult – does work-from-home invest less in the future?
  - “Dealing with the public” variable in O\*NET doesn't distinguish well among jobs requiring face-to-face interaction from those that can be done via telephone or computer; experiences varied during the pandemic. (thanks to Matt Dey and Mark Loewenstein)

# This work was an excellent emergency response

- Covid crisis recognized in U.S. in mid-March 2020
- A version of this paper was online on April 3, 2020 (?!)
  - Easy to read, concise, clear paper
  - Reusable simple definition
  - Replicable with shared source code, and adaptable to other data
  - ➔ Widely cited

# Empirical comparisons

- My BLS colleagues have measured work-from-home in American Time Use Survey and and NLSY79, and CPS supplements
- Dey, Frazis, Loewenstein, and Sun (June 2020) compared rates of work-at-home before the pandemic to the Dingel-Neiman occupation categories (Data: ATUS, NLSY79)
  - Only 2-6% of employment in jobs judged unsuitable were working at home prior to the pandemic
  - That's a low "error" rate overall; higher for paperwork-intense jobs
- Substantial increase in telecommuting and work at home since 1995 in several data sets
  - Ambiguities of measurement: working generally from home versus overtime at home. (Frazis, 2020)
- Approximately 25% of U.S. workers in 2018 worked at home sometimes (Woods (2020), ATUS)

# Work-from-home after Covid

Drawing from comments by John H. Chuang, CEO of staffing agency Aquent:

- Large numbers of talented workers want to work from home
- Employers save money on office space if workers work from home
- Work-at-home expands job-match options for both sides
  
- ➔ Expectations change – Society's latent capacity for work-at-home has been activated
- ➔ Job-search equilibrium changes – expanded work-at-home sticks around
  
- More job searches can be national or international to begin with
  - Many job openings and interviews may assume worker will mainly work from home
  - Might find matches faster or raise standards for match quality
  - AND new tech could expand the 37% of work-from-home. High-speed Internet, sensors, robots, virtual reality, augmented reality. E.g. for security services and manufacturing.

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