THE SPATIAL AND DISTRIBUTIVE IMPLICATIONS OF WORKING-FROM-HOME
The Spatial and Distributive Implications of Working-from-Home

The Idea: Work-from-home (WFH) → persistent change in the way we organize labour

It raises new issues:
- Workers might need more space to be productive at home
- They commute to the office less often
- Not all occupations are equal in front of remote work

This paper
- How did WFH reshape households’ housing demand?
- Should workers who cannot WFH care?
- How will WFH impact inequality in the short and long run?

Data
New evidence on the impact of WFH in London
• House prices and rents
• Property-level data
• Detailed property characteristics

Model
• General Equilibrium Heterogeneous-Agent Model
• Spatial: City is made of 2 locations
• Households’ utility:

\[ U_h = \frac{\gamma H^{\epsilon_H} (1 - \sigma) + \tau H^{\eta} + \epsilon_W}{1 - \sigma} \]

Some workers can WFH → allocate their hours:
- The office: more productive but pay commuting cost
- Home: no commuting cost but use housing space

Efficient units of labor from the office:
Efficient units of labor from home:
Overall efficient units of labor:

\[ \bar{H}_{h,k} = (\bar{H}_h^O)^{\gamma_H} + (\bar{H}_h^R)^{\epsilon_H} \]

Efficient units of labor of from home:

\[ \bar{H}_h^R = \bar{A}_h^R (\bar{V}_h, \bar{V}_h^R)^{\epsilon_H} \]

Overall efficient units of labor:

\[ \bar{H}_{h,k} = (\bar{H}_h^O)^{\epsilon_H} + (\bar{H}_h^R)^{\gamma_H} \]

House prices and rents are determined in equilibrium in each location → Endogenous WFH decisions from part of the workforce...

... shift house prices and rents, and...
... trickle down to the rest of the economy

Main Mechanism
House prices and rents are determined in equilibrium in each location
→ Endogenous WFH decisions from part of the workforce...

WFH Experiment: Impact of a permanent change in preference for WFH

Change in preference calibrated to match the patterns of WFH during the transition period

Explore the impact of WFH at two horizons:
• Short run
• Long run

Results
1. House prices and rents ↑ everywhere
   - Largest ↑ in the suburb
   - ↑ demand for space
   - ↓ commuting penalty
2. Speed of price ↑ depends on the composition of new movers
   - Suburb: wealthy movers → buy right away
   - Center: movers need to build liquid wealth before buying
3. Suburb-wide gentrification
   - Workers who cannot WFH are crowded out of ownership
   - Non-telecommuters’ home-ownership rate: -4 pts
4. Rise of a Tele-premium
   - Inequality across occupations rises
   - Workers who can’t WFH → welfare losses...
   - that can be mitigated by Office-to-Apartment conversions

First column of welfare table computes welfare for the baseline/ Last column computes welfare for the office-to-apartment conversion policy experiment