The Great Reshuffle: Residential Sorting During the COVID-19 Pandemic and Its Welfare Implications

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[1]The views expressed here are those of the authors and do not necessarily represent the views of the Federal Reserve Bank of Dallas, Federal Reserve Bank of Philadelphia, or the Federal Reserve System.

Background and Our Research Findings

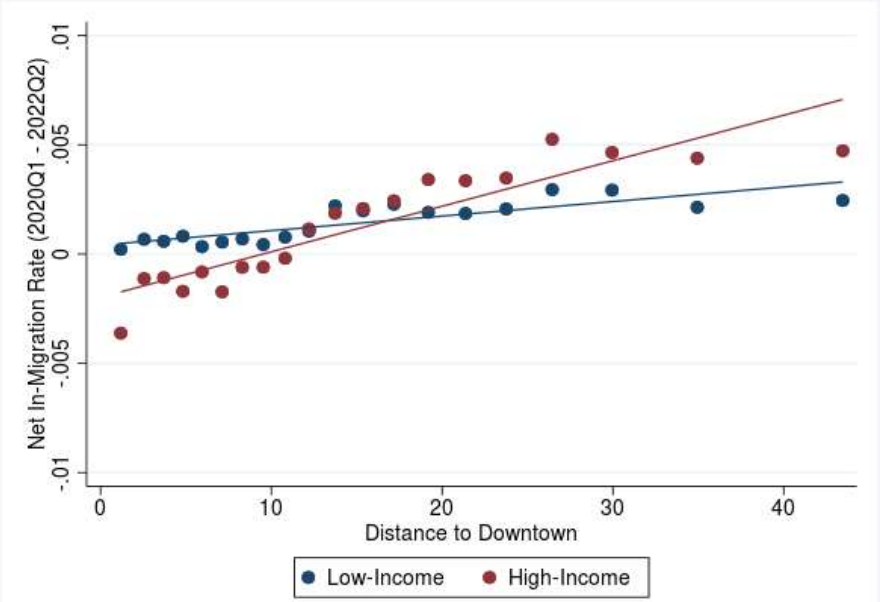
- Background
  - Spatial sorting since the 1980s before the pandemic: high-income high-skill population into large and dense cities; within cities, central locations experienced Gentrification
    - Driven by rising skill wage premium in dense cities
    - Worsened income inequality in the country
  - Since pandemic, evidence of flight to the suburbs, less populated areas, driven importantly by Work-from-home (WFH)

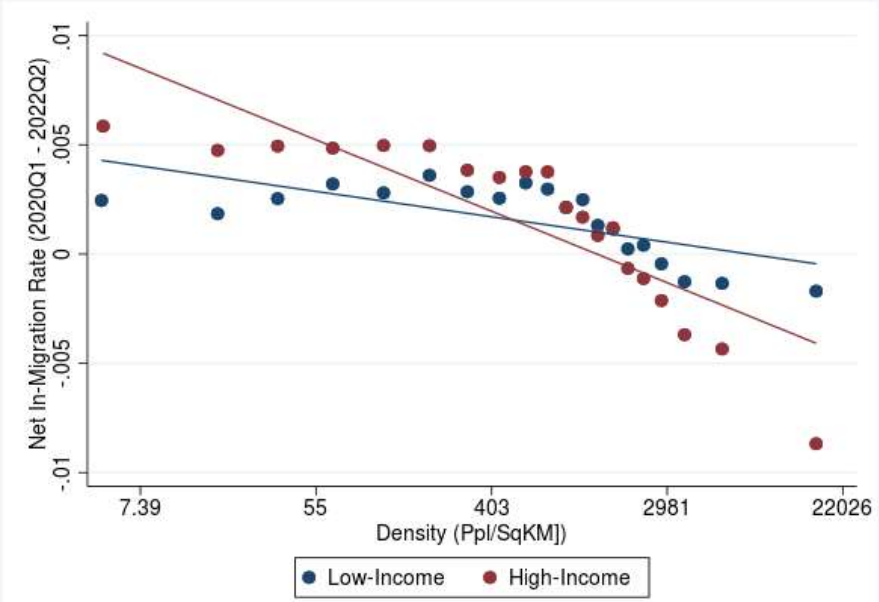
- Our contributions
  - Provide micro evidence of "reversal" spatial sorting
    - Across MSAs: from high density, expensive MSAs to lower density and less expensive MSAs
    - Within MSA: from central cities to the suburbs
    - Migration driven by high income population
  - Find spatial differences in rent and employment responses
    - Rents ↑ in destination locations but ↓ in origination locations
    - Job growth in the same direction but only for low-skilled
    - Driven by spatial differences in demand for local good and services
  - Welfare inequality caused by spatial sorting between the high-income and the low-income mitigated during pandemic
    - However, the gains are small in magnitude relative to the worsening of inequality due to the differential WFH availability by worker income

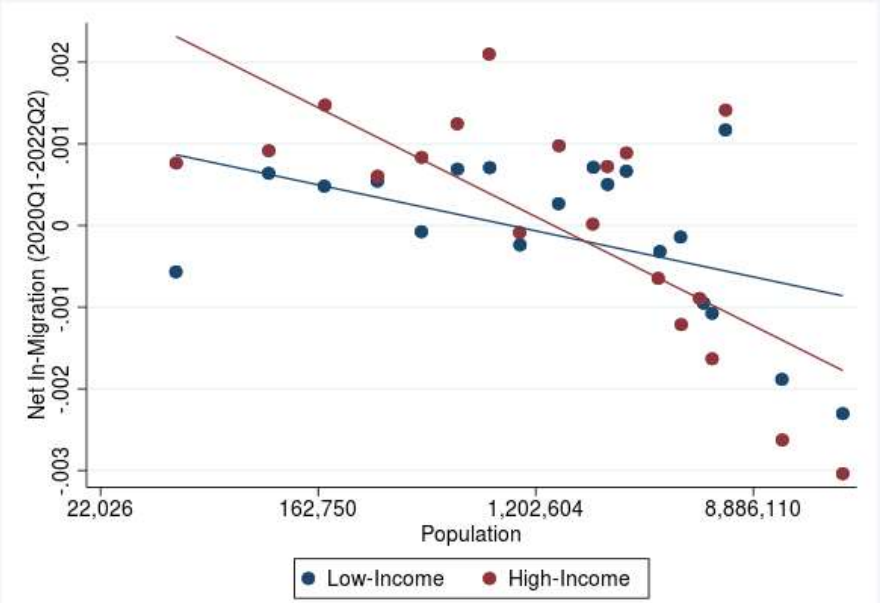
Data

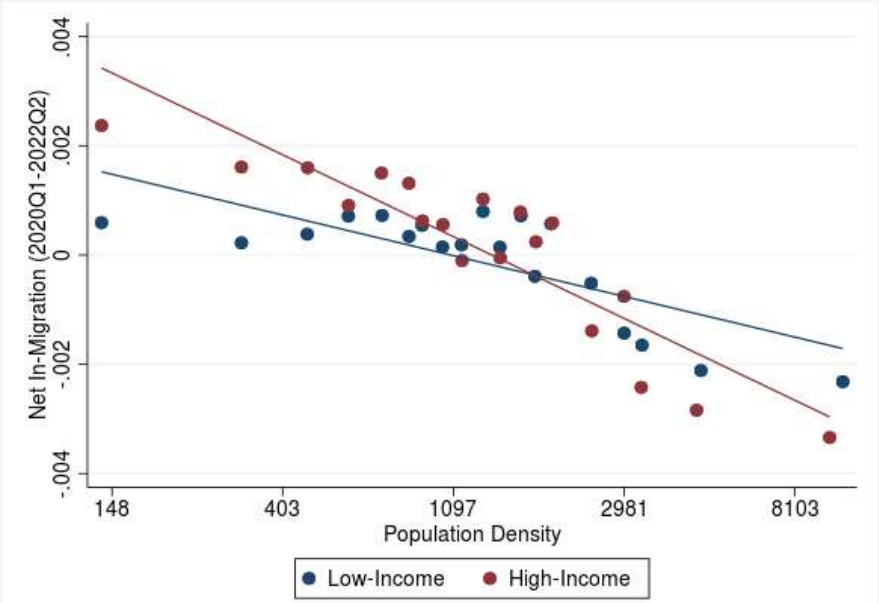
- **FRBNY Consumer Credit Panel/Equifax Data**
  - Construct Tract-to-Tract Migration Flow
  - Net Migration At the Tract Level by (Equifax) Imputed Income (based on debt information)
  - Can Aggregate up to MSA Level
- **IPUMS USA** - 2013-2017 American Community Survey
- **Zillow Research** - Rent Index
- **CoreLogic Solutions** - HPI Index
- **BLS– Quarterly Census of Employment and Wages** - Quarterly Employment by County and Industry
- **Burning Glass/Lightcast Job Posting**: wages by industry in each county
- **Google Mobility Report** - Weekly Visits to Retail and Grocery establishments

Spatial Sorting by Income: Neighborhood and MSA



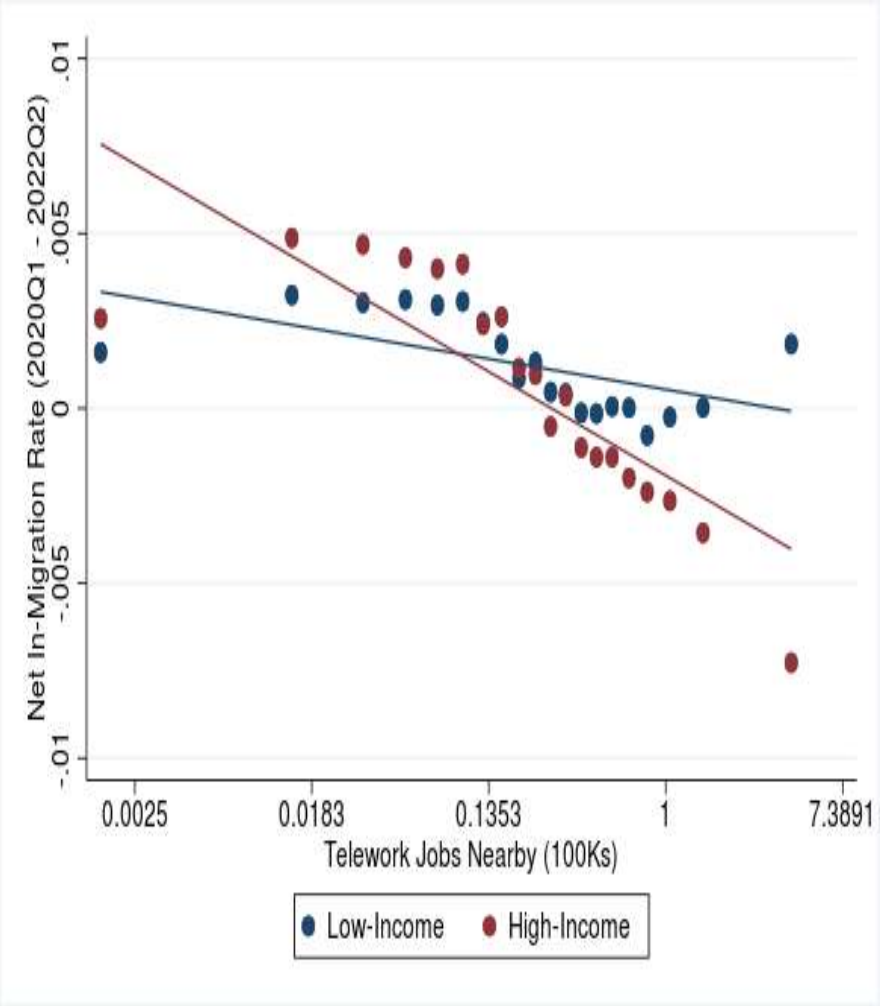


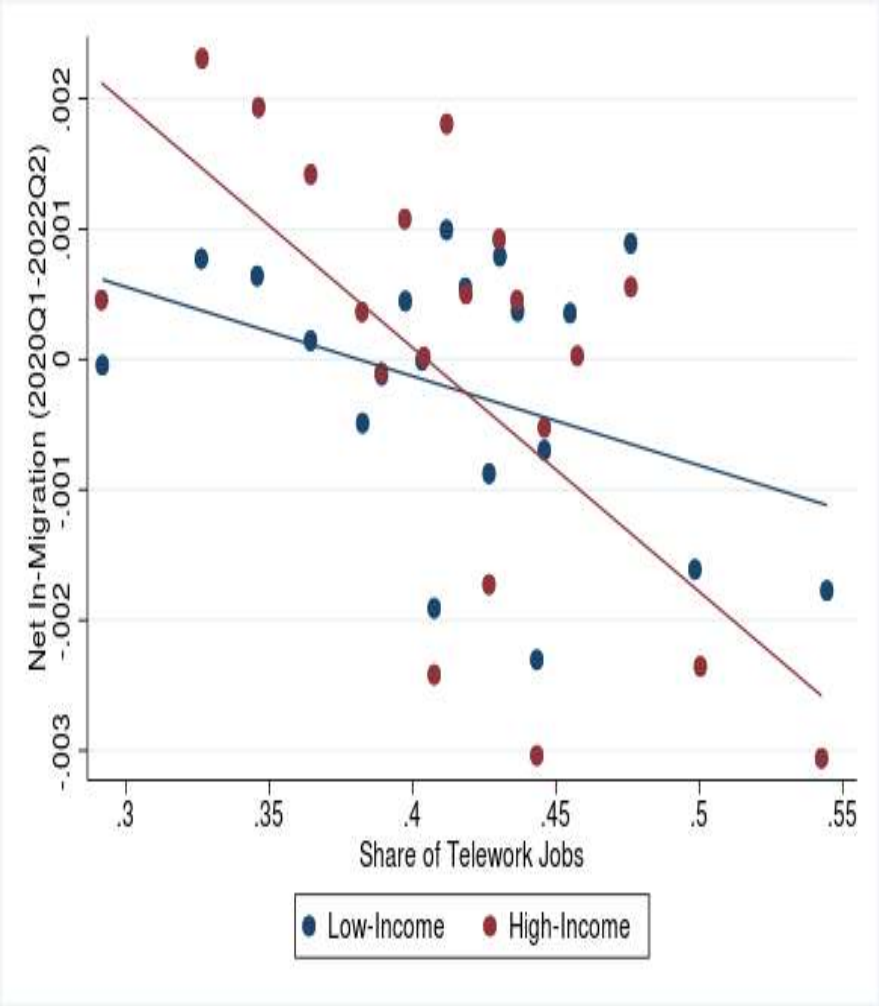




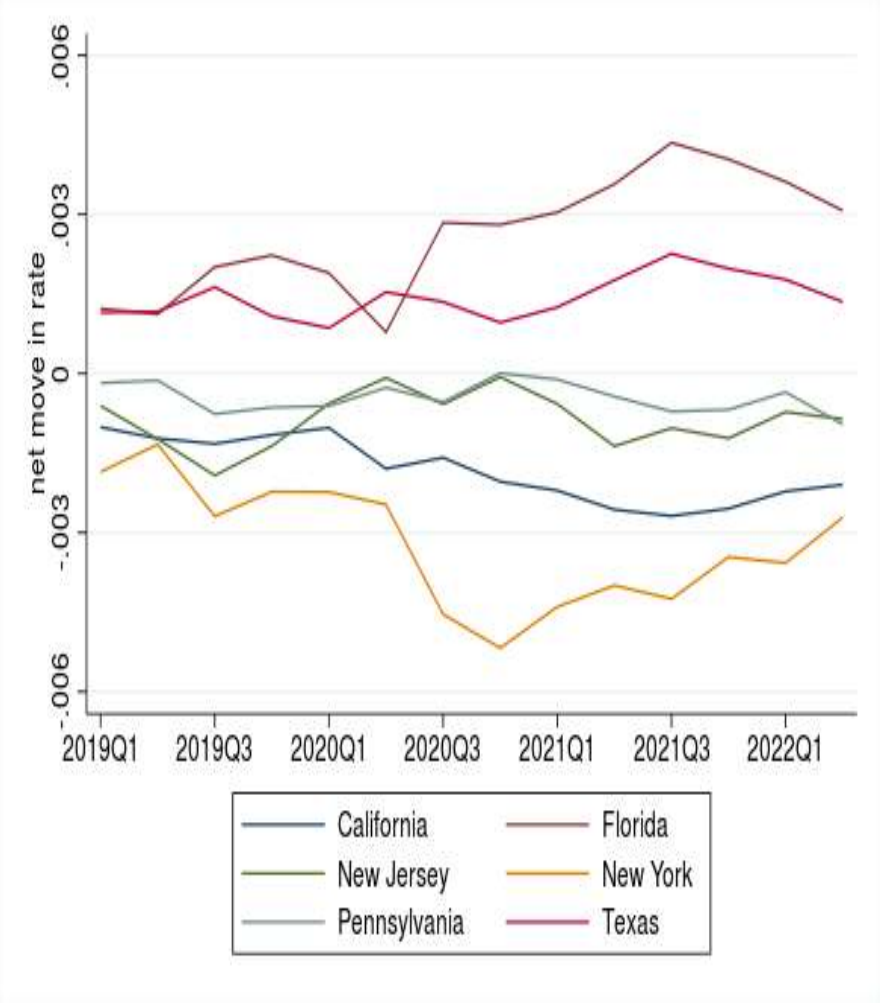
Telework Jobs Led to Spatial Sorting by Income

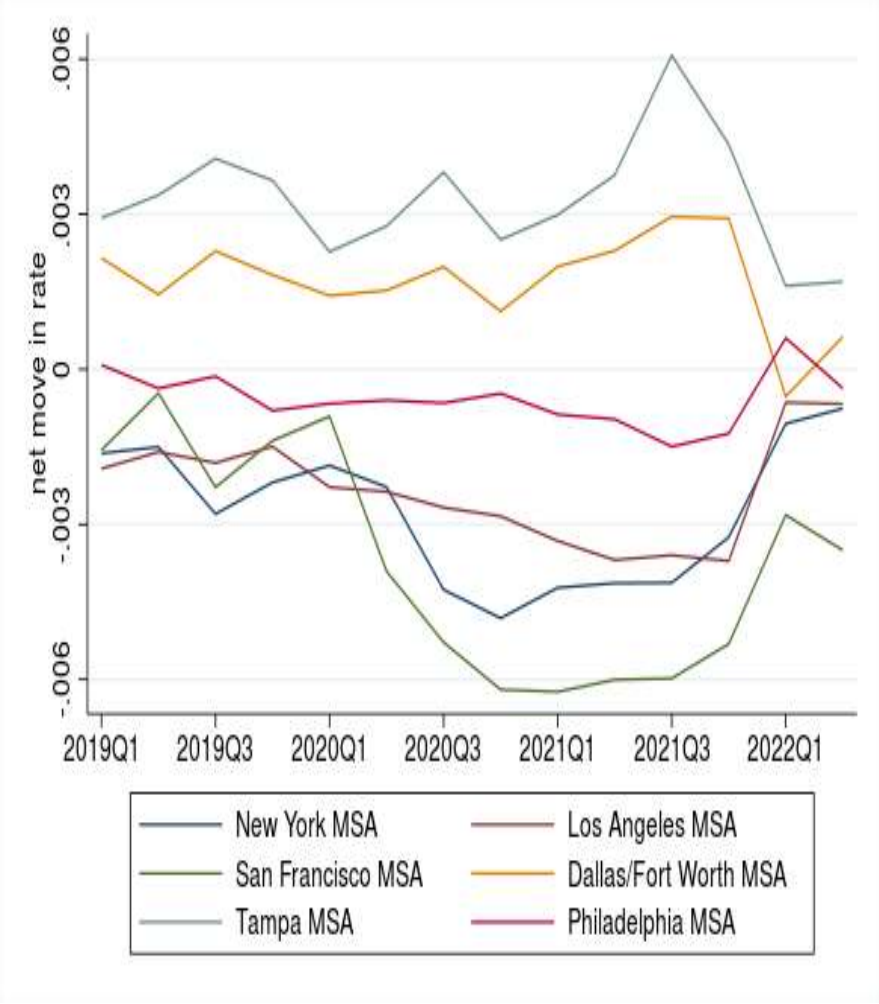
- Nearby telework jobs proxy for resident jobs and hence ability to move without job impact





Net Migration Rate for Selected States and MSAs





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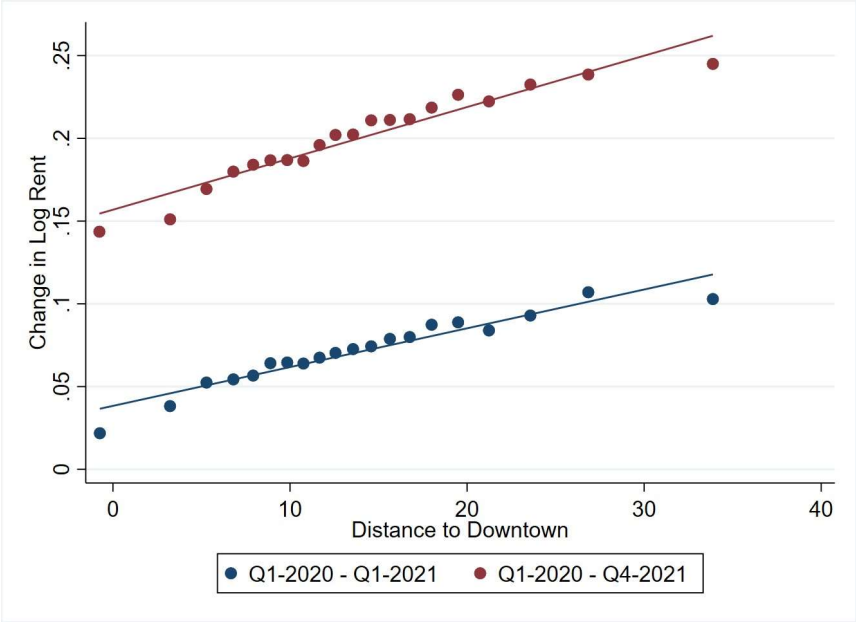
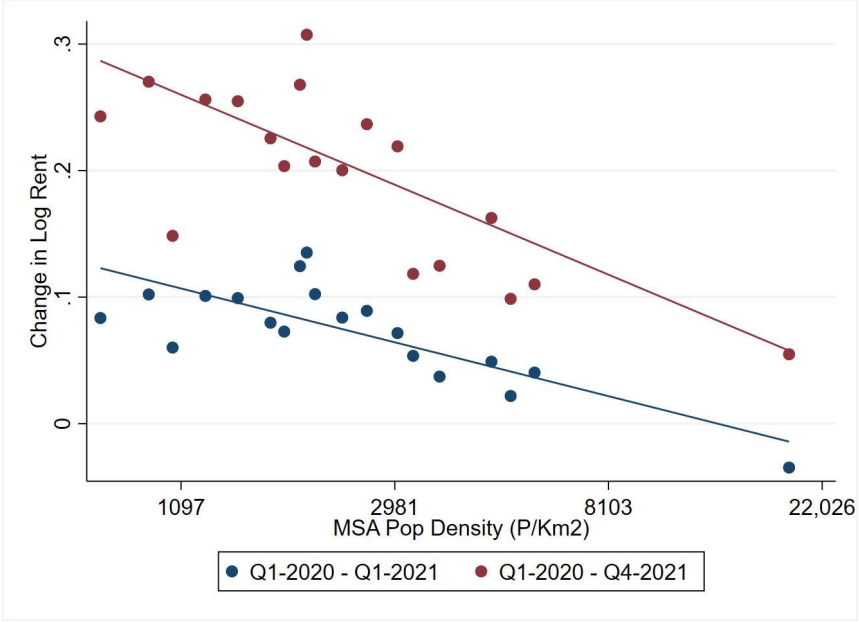
Spatial Difference in Rent Growth

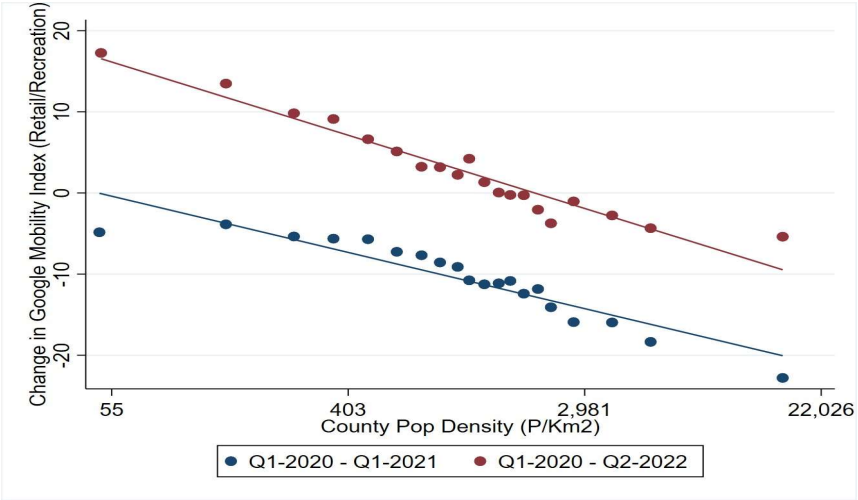


(a) Within-MSA: Distance to Downtown

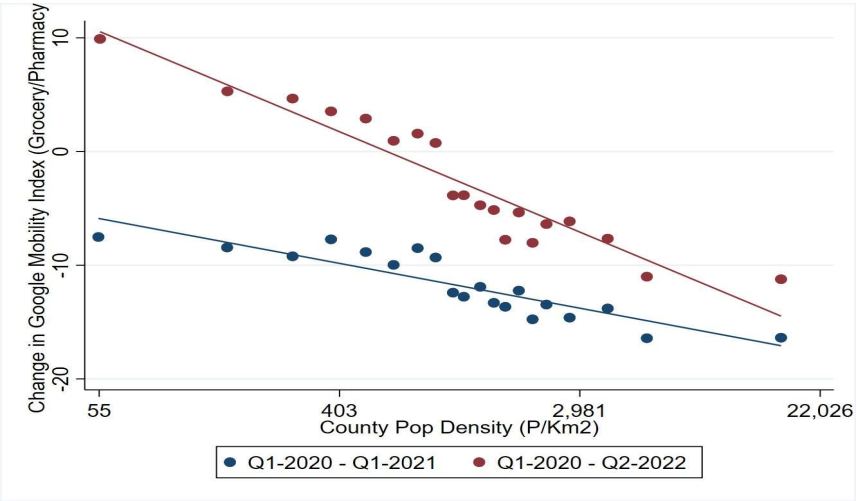


(b) Cross-MSA: Density

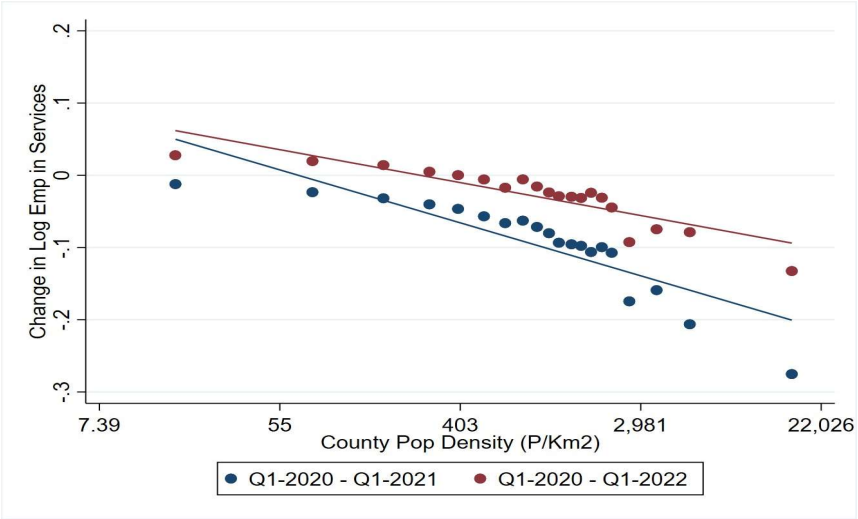
Spatial Difference in Change in Demand For Local Services and Employment



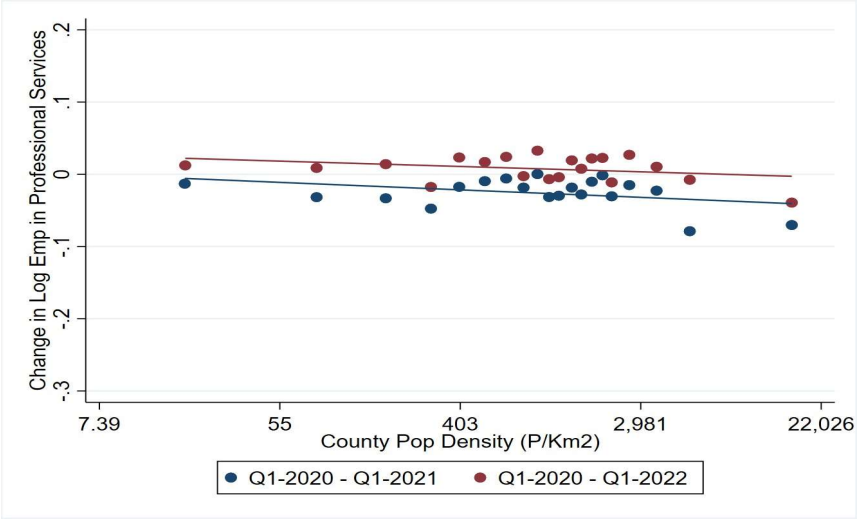
(a) Retail/Recreation



(b) Grocery/Pharmacy

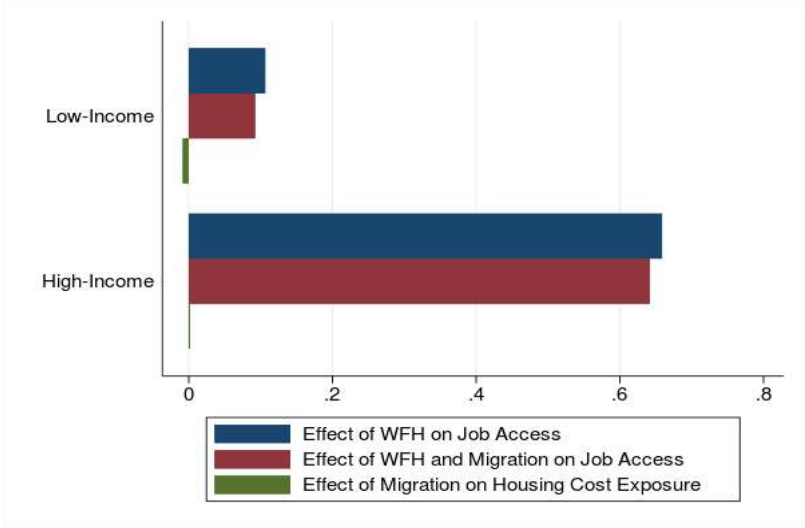


(c) Local Service Industries

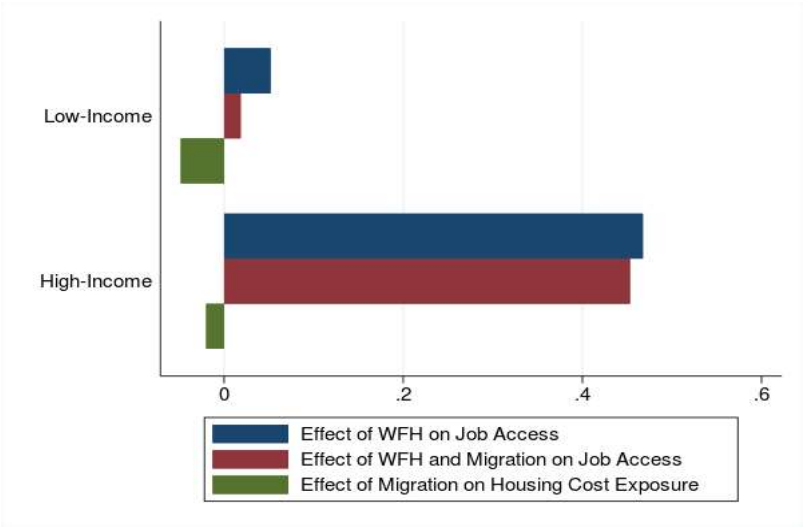


(d) Professional Services

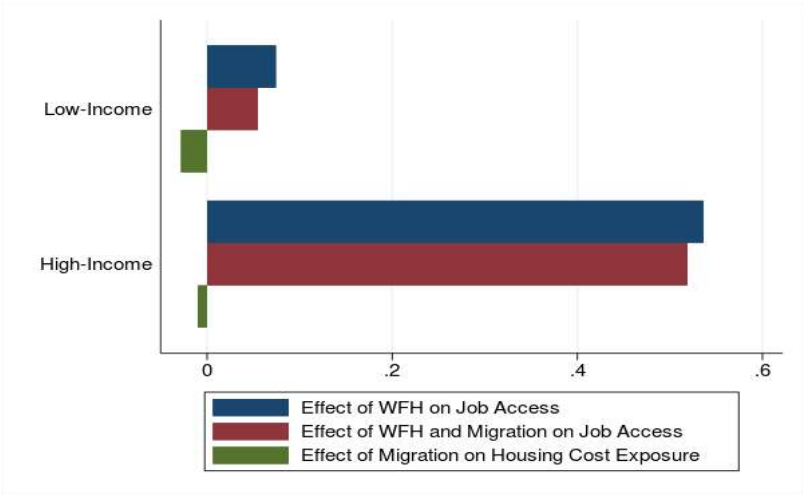
Welfare Impact of WFH and Migration



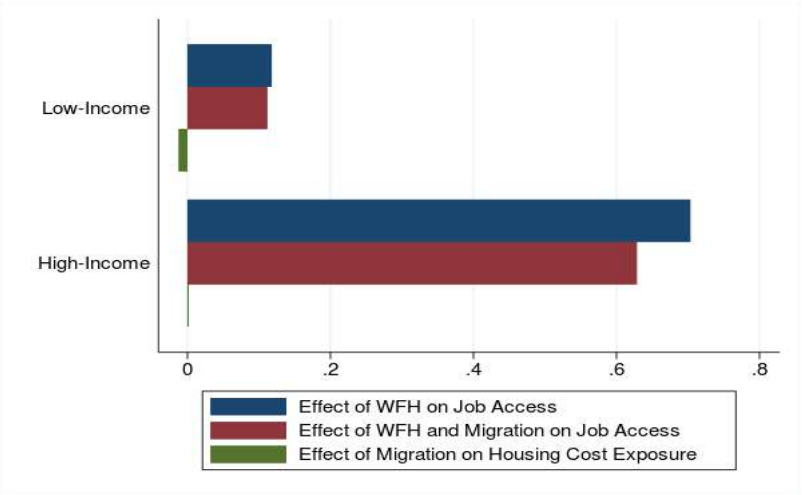
(a) National Average



(b) Star Cities: New York, Los Angeles, San Francisco



(c) Largest 25 Cities: Downtown Counties



(d) Other Cities: Downtown Counties

Aggregate Welfare Implications

Migration lowered welfare inequality by around **1.2pp** equivalent of income gap, the gap was much smaller than the massive rise in welfare inequality caused by the differential adoption of WFH or the weflare inequality accrued due to the spatial sorting occurred prior to the pandemic (over 50pp equivalent of income gap)