

# Who on Earth Can Work From Home?

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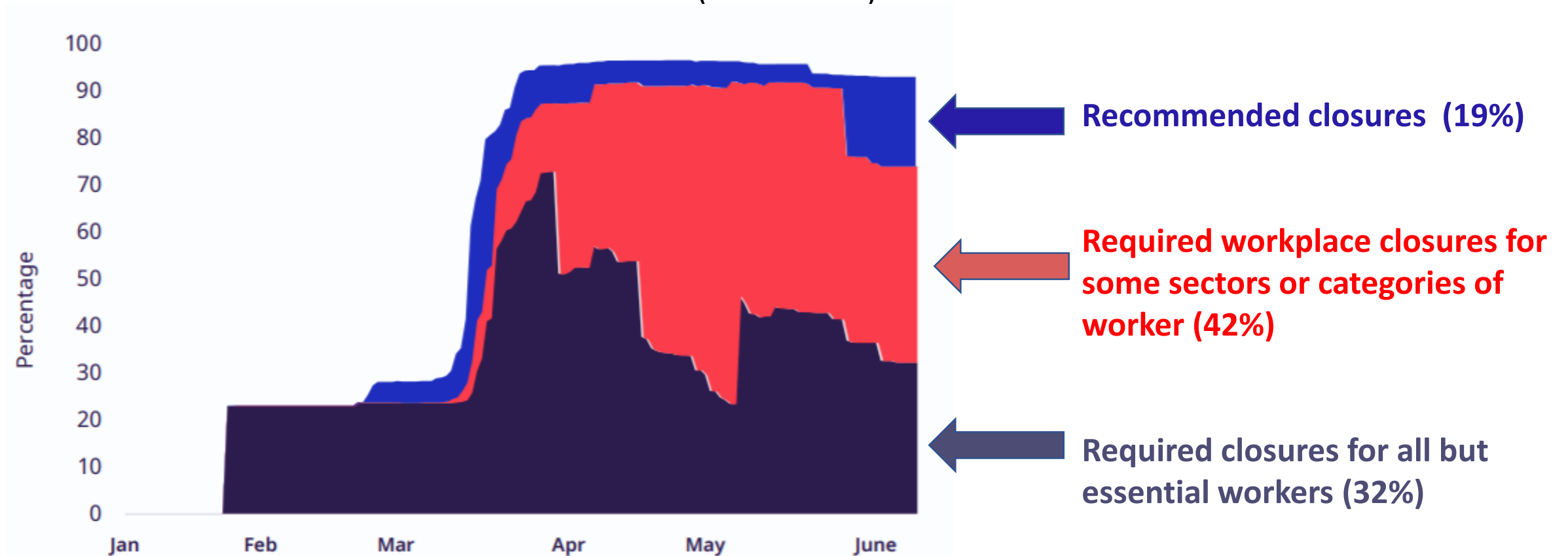
**E-Covid Seminar, July 6, 2020**

# COVID-19 has triggered a global lockdown

## Share of world's employed in countries with workplace closures

1 January–15 June 2020 (percentage)

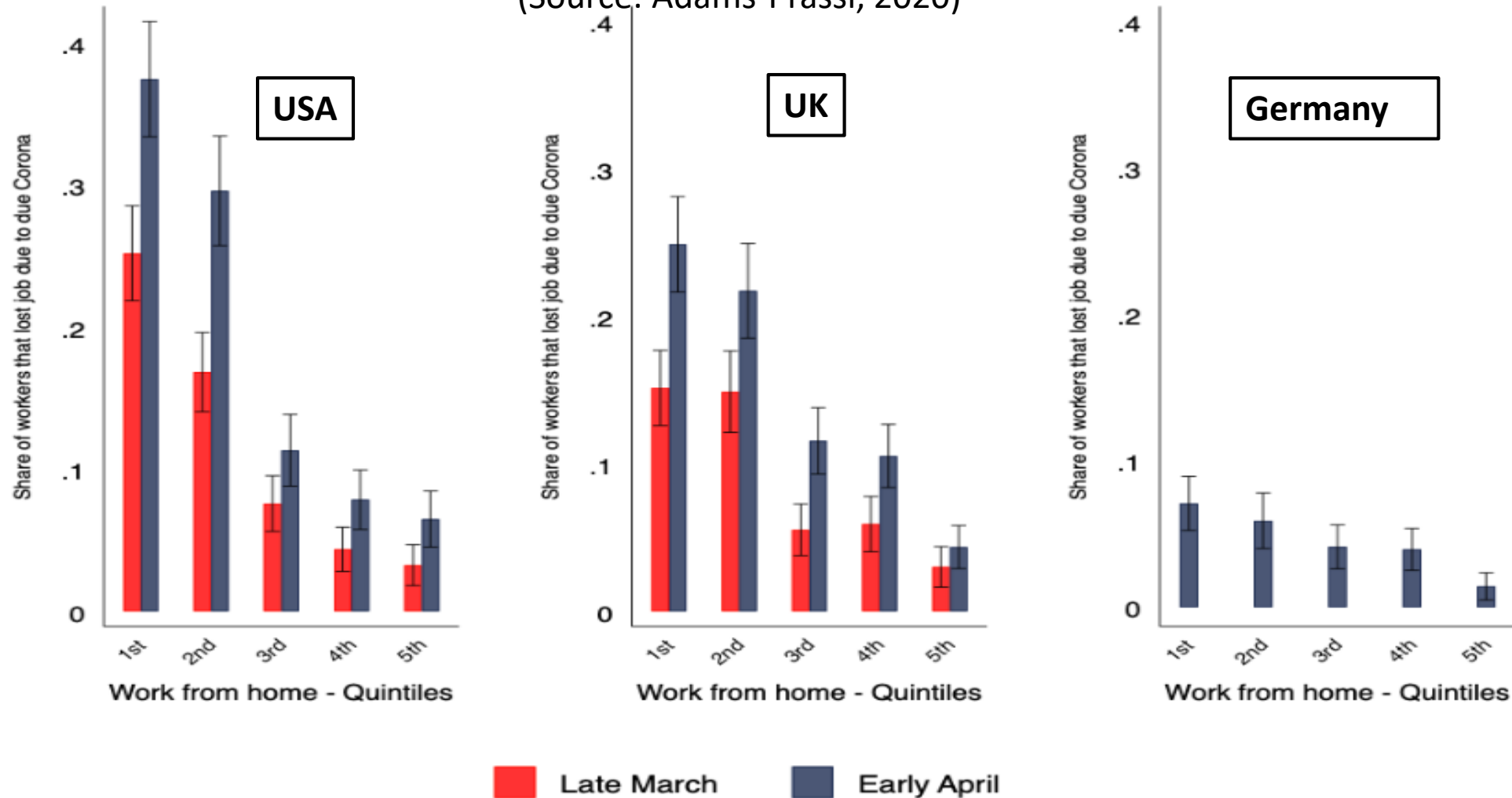
(Source: ILO)



# Telecommutable jobs are safer

Job loss probability depending on tasks that can be done from home

(Source: Adams-Prassl, 2020)



# This Paper

- **How many jobs can be done from home?**
  - **1 in 5 across the globe**
  - 1 in 26 in low income countries; 1 in 3 in high-income countries
  - Failing to account for internet access leads to a 25% upward bias
  - Bias is largest in low income countries (189% bias)
- **Who is most at risk?**
  - **Those who are already vulnerable**
  - Low-paid, young, **unskilled** workers on temporary contracts
- **How will COVID-19 impact labor market inequality?**
  - **Inequality will increase**
  - Especially in rich countries

# Roadmap & Contributions

- **Starting point: occupational measure of home based work** (Dingel and Neiman, 2020)
  - Based on task content of jobs from O\*NET
- **Our contributions:**
  - Account for **internet access** – across and within countries
  - Assess impact on **inequality**
  - Identify covariates of **vulnerability**

# Who needs internet access?

- O\*NET surveys questions
  - *How Important is Working With Computers to the performance of your current job?*
  - *How frequently does your current job require **electronic mail**?*
- Job requires internet access if combined score > 8 (out of 10)
- 55% of all SOC 8-digit occupations require internet access
- We do various robustness checks and results are similar

# Who has internet access?

- Combine
    - **Internet usage by country and income level** (Gallup World Poll 2019)
      - Info on top 60% and bottom 40% of income distribution by country
    - **Wages by occupation** (ILOSTAT)
      - Rank occupations by average wages
      - Assign them to top 60% or bottom 40%
- ➔ country-specific measures of **internet penetration by occupation**



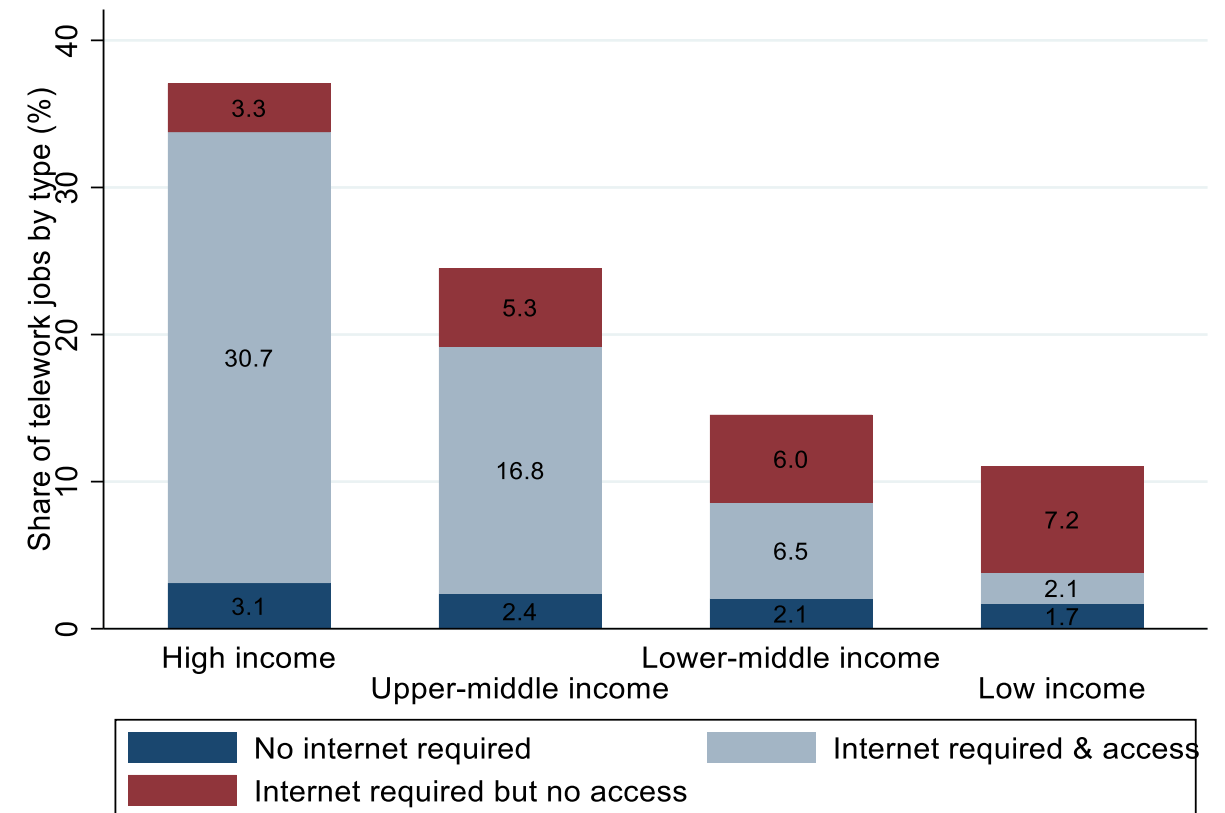


# ICT constraints are more severe in low income countries

- 1 out of every 11 jobs in high-income countries
- 2 out of every 3 job in low-income countries

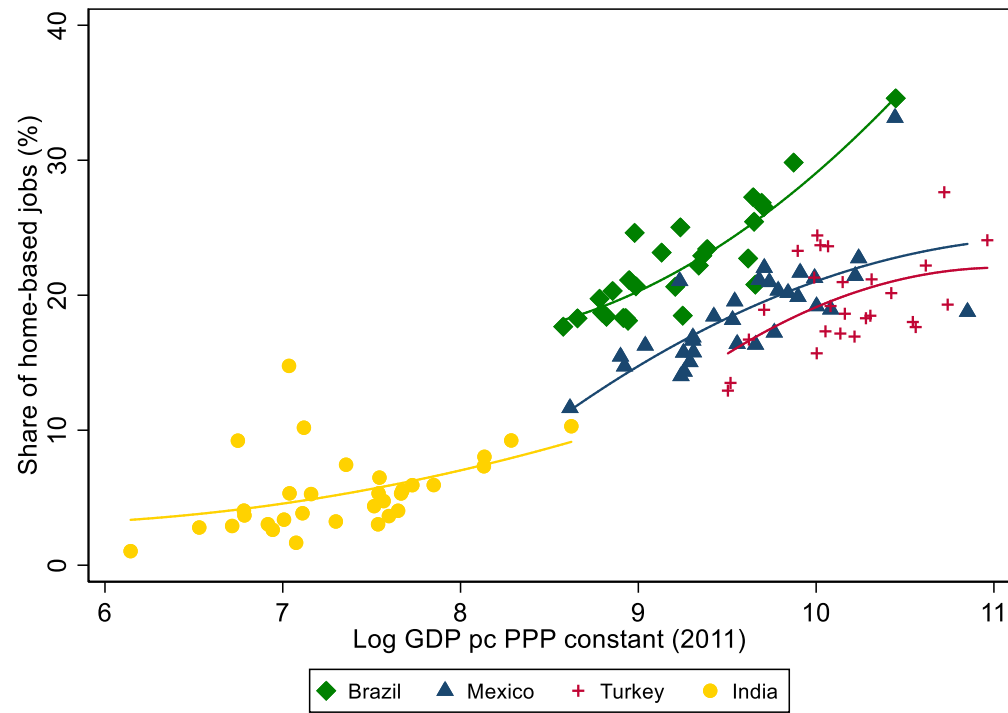
**cannot be performed from home because of internet access**

Types of home based work by level of income

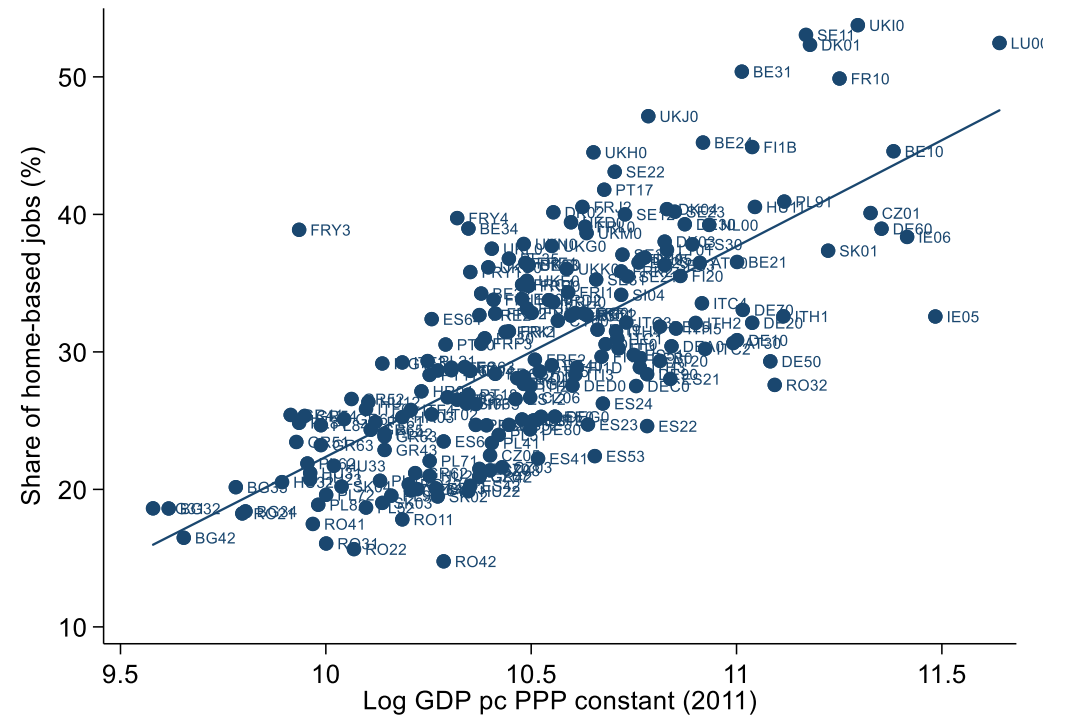


# Lagging regions have fewer home-based jobs

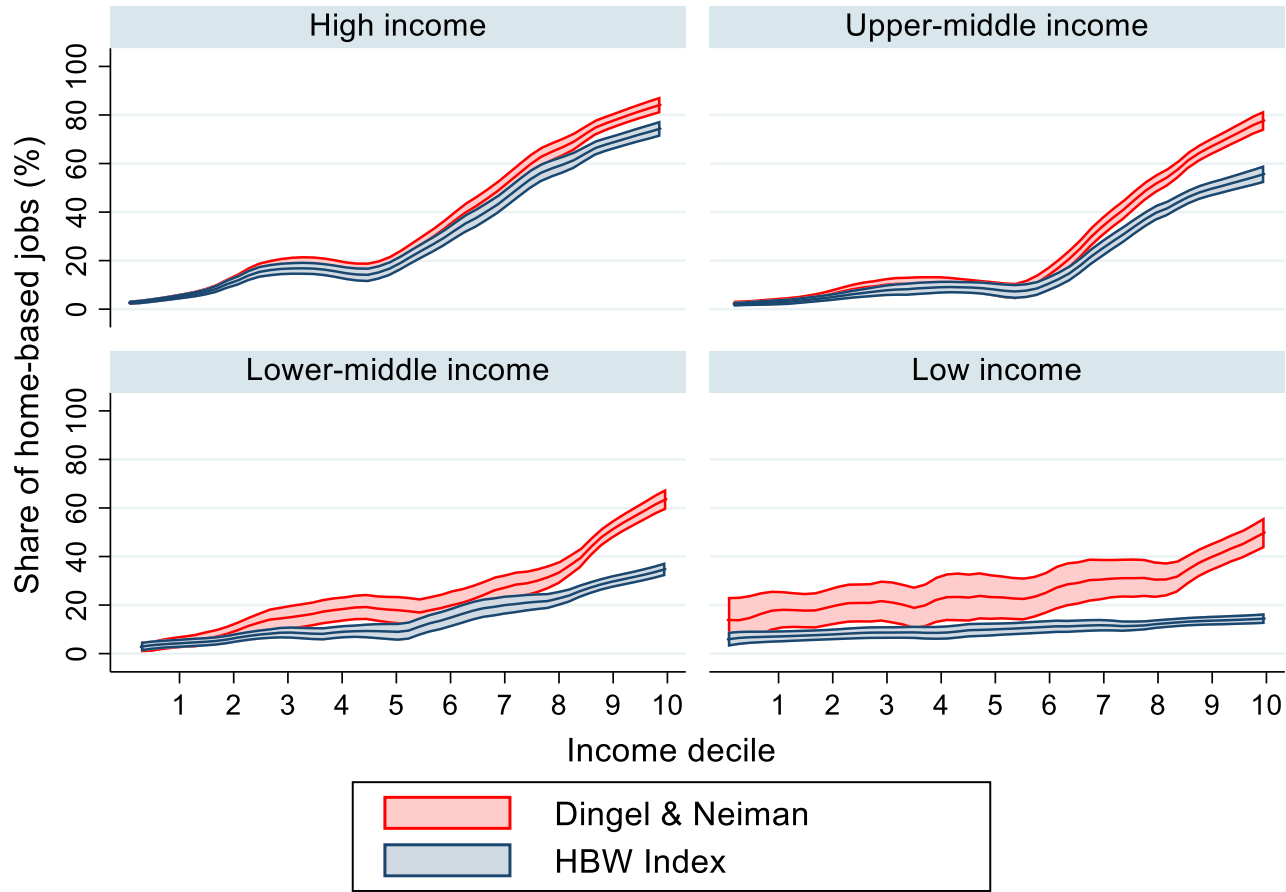
Brazil, Mexico, Turkey, India



European Union Regions



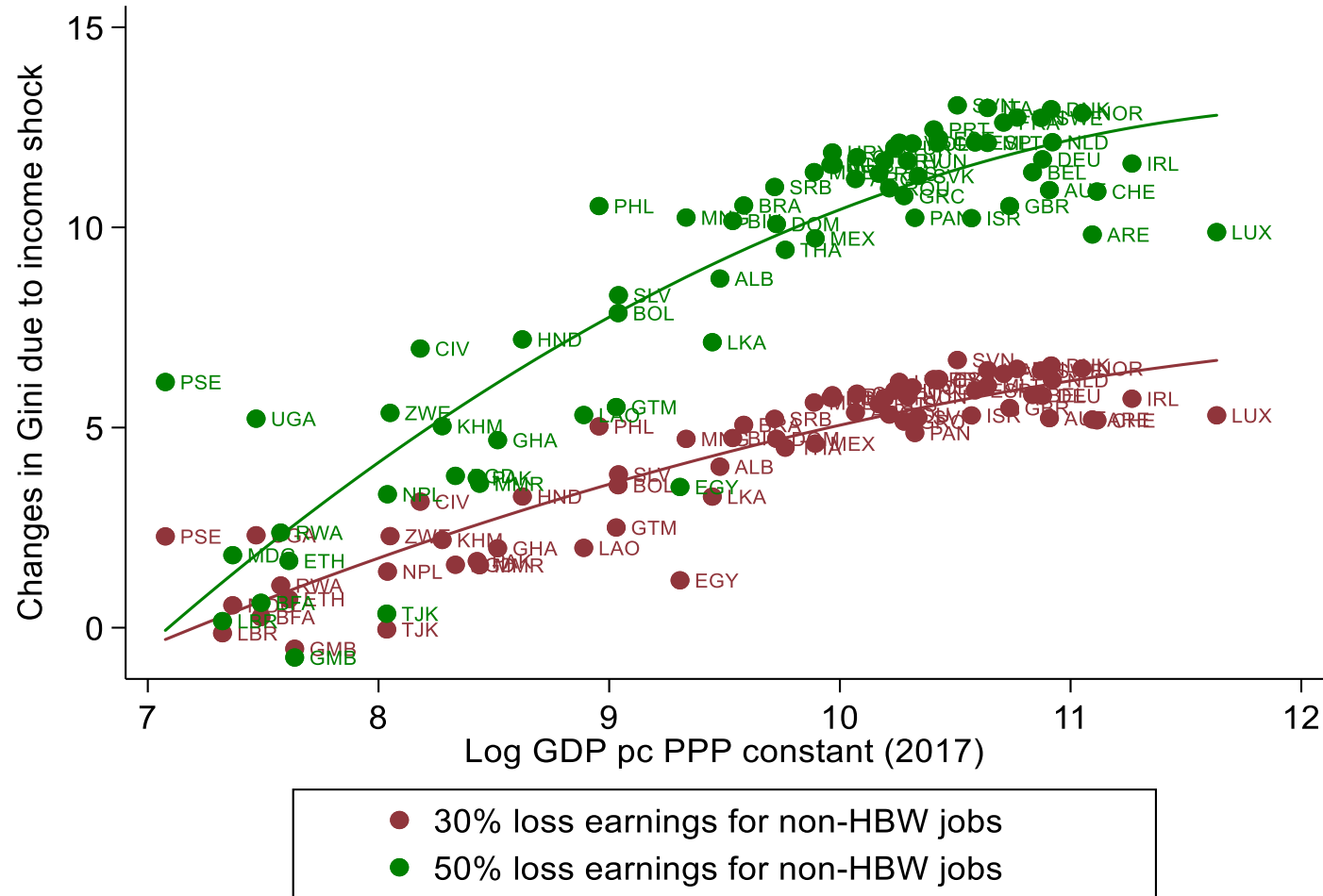
# Home based work and income distribution



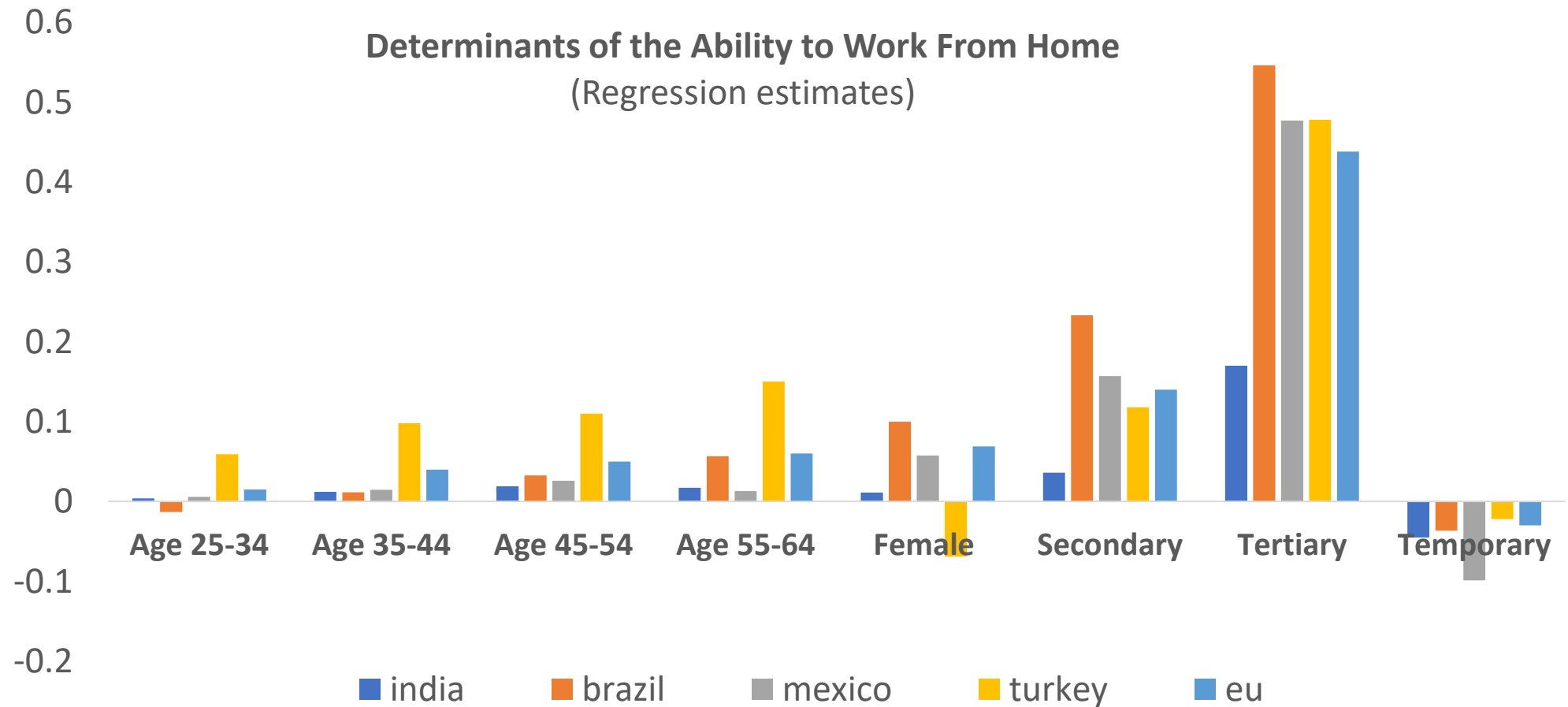
Prevalence of home-based work increases with income level in every country

And the rise is faster in wealthier countries.

# COVID-19 is likely to exacerbate income inequality especially in rich countries



# Education is the strongest determinant of ability to work from home



# Conclusion

- **Globally, 1 in 5 jobs can be done from home**
  - The ratio is **1 in 3** in high-income and **1 in 26** in low-income countries
- **Failing to account for internet access biases estimates upwards by 25% on average**
  - Bias is the largest in low-income countries
- **Covid will increase income inequality**
  - Rich countries faces the largest increases
- **Those who are already vulnerable are also the least likely to work from home**
  - Low-paid, young, **unskilled** workers on temporary contracts are at most risk

Thank you.

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