

# Globotics and macroeconomics

Globalisation and the automation of the service sector

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**Richard Barldwin** (Grad Institute Geneva and CEPR)

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Discussion by

**Barbara Petrongolo** (U Oxford and CEPR)

# Globotics, labour markets and inflation

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  - Offshoring and global supply chains for goods
  - Impacts on employment, inequality and prices

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- services account for 3/4 of EU GDP;
- every sector uses intermediate services
- elastic demand in rich countries and elastic capacity in emerging markets

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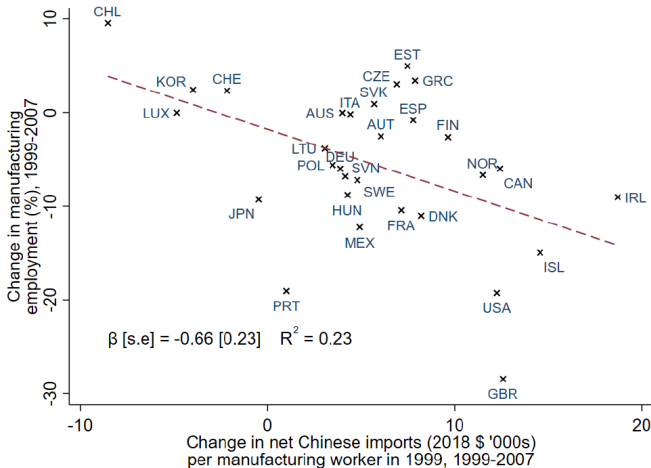
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- **What to expect?**

- Can we learn from earlier waves of globalisation?
- What do we need to make progress?

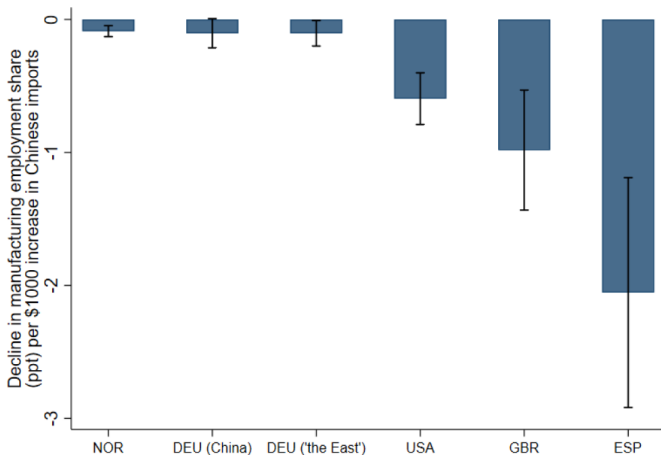
# Employment impacts of globalization in goods

## Change in manufacturing employment and Chinese imports



# But: Very heterogeneous impacts

Decline in manufacturing employment for \$1000 increase in Chinese imports

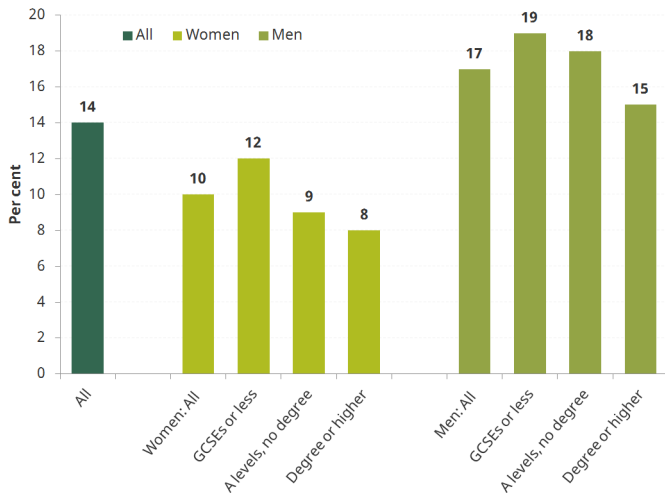


# Winners and losers

- Import competition unevenly concentrated across industries, areas and workers
- Employment effects more pronounced for **low-income, non-college** adults and (to some extent) **men**.
- Employment in some countries was shielded by active labour market policies (e.g. Germany, Norway)
- Larger differential declines in areas with greater exposure to import competition
- As manufacturing employment is relatively concentrated geographically, globalisation contributed to **rising inequalities across local areas**

# Import exposure in the UK

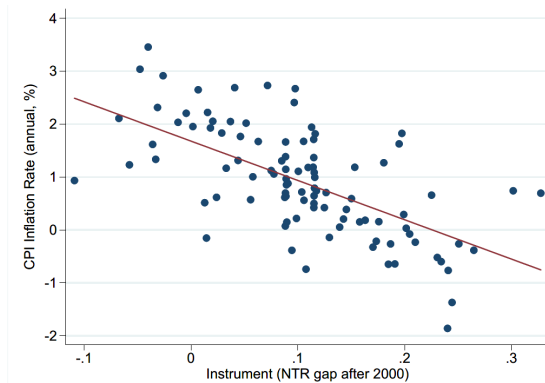
## % employed in highly-exposed industries (UK)





# Price effects

- Latest estimates find evidence of **large price effects**
- 1pp increase in import penetration from China causes fall in inflation of 2.2pp in the US (Jaravel and Sager, 2021)

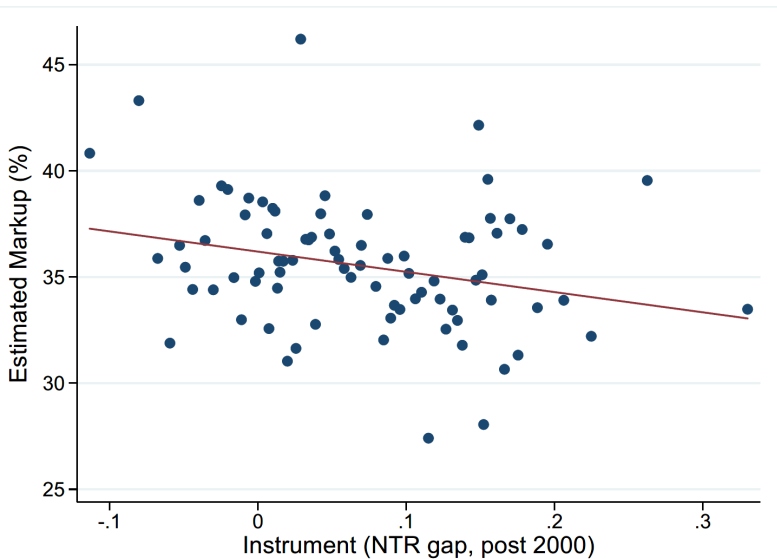


Data on 222 product categories, spanning goods and services.

# Channels

- Prices of imported goods
- Broader impacts on prices of locally produced goods
  - *most of the impact*
    - change in production costs (intermediate inputs, wages, productivity effects)
    - **changes in markups** via strategic interactions in price setting – *largest component*
    - especially so where domestic market concentration is initially larger

# The role of markups



## Trade-off: Consumer surplus vs displaced jobs

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- Possible to compensate those who suffer job losses
- Also: **distributional effects via expenditure channels**
  - Import penetration rose faster for products that sell relatively more to high-income groups
  - But price response larger for products that sell to lower-income households
  - Overall, high-income groups benefit proportionally more

# Societal and political repercussions

- **Fissures in fabric of society**

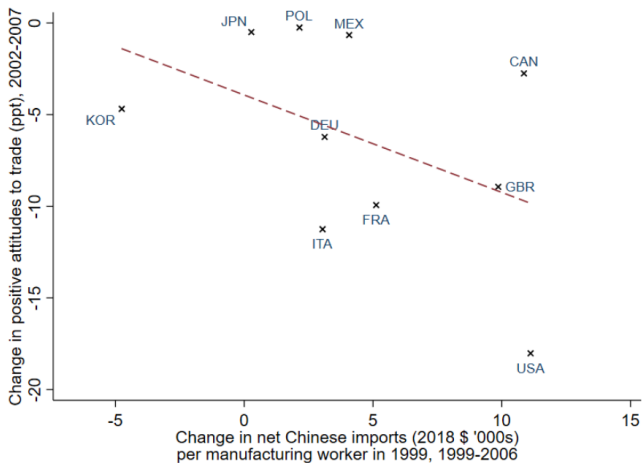
- Employment losses more painful than income losses per se
- Impacts on crime, mental health, divorce, mortality,
- Worsening attitudes towards trade among less-educated; beneficial impacts on prices mostly go undetected

- **Ideological and electoral shifts** to the right

- evidence from local labour markets in US and Germany with greater exposure to import competition (Autor et al, 2020; Dippel et al, 2021)
- Falls in employment in manufacturing between 1981 and 2011 are related to an increase in the Leave vote in the UK Brexit referendum (Langella and Manning, 2016).



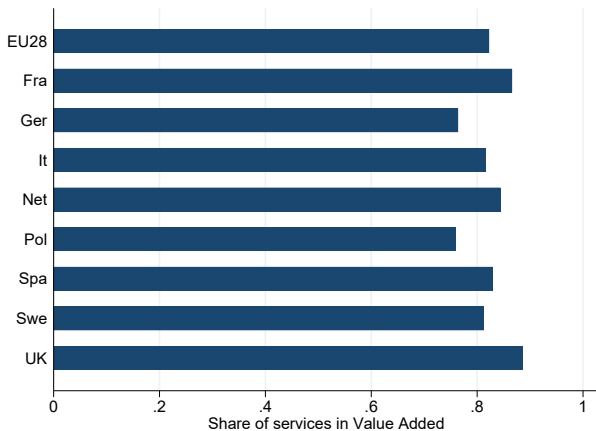
# Attitudes towards trade



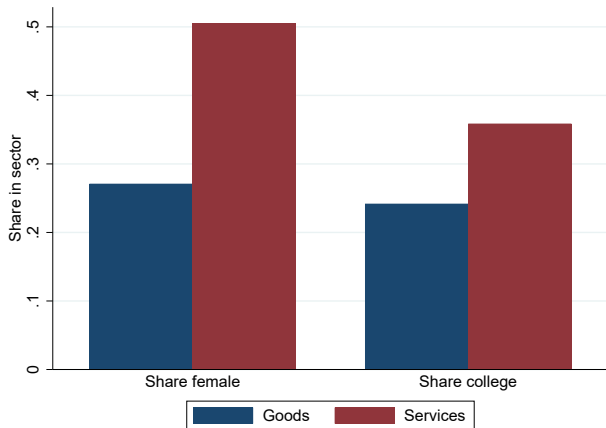
Source: Daventport et al (2021).

# What to expect from trade in services

## Weight of services in VA across the EU



# Winners and losers

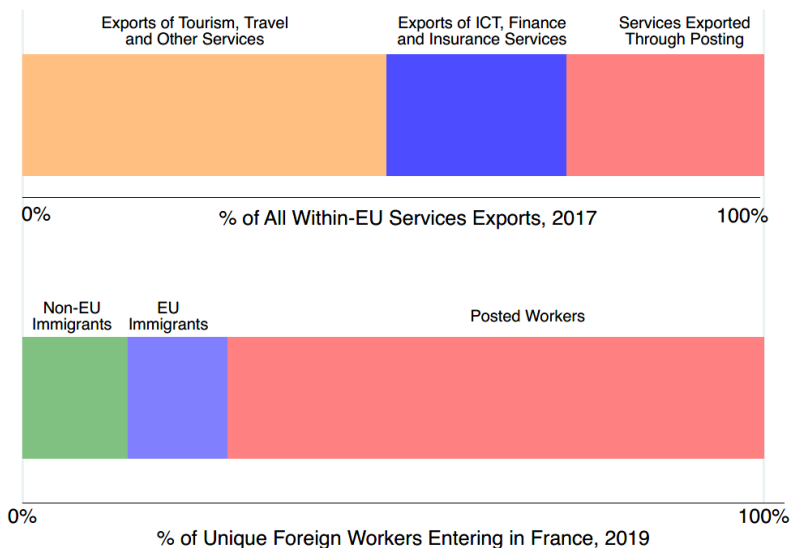


- Source: Calculations on UK LFS, 2017.
- **Also: services more geographically dispersed than goods**

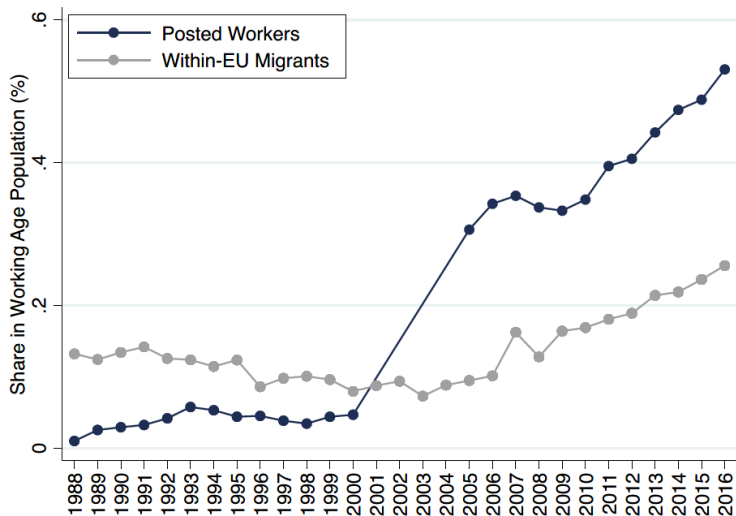
# “Trading non-tradables”

- Jobs in non-tradable sectors being offshored “on-site” (European Posting Policy)
- Mostly in: construction, cleaning, driving, and other manual service tasks
- Foreign firms perform services in the customer’s country of residence
- Posted workers stay formally employed by the sending firm but cross the border to perform service in the receiving country

# Posting flows and globalisation in the EU

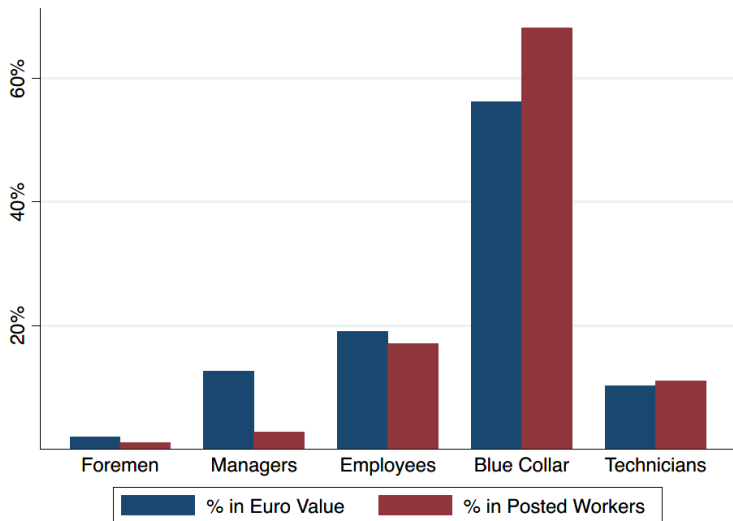


# Trends in posted workers

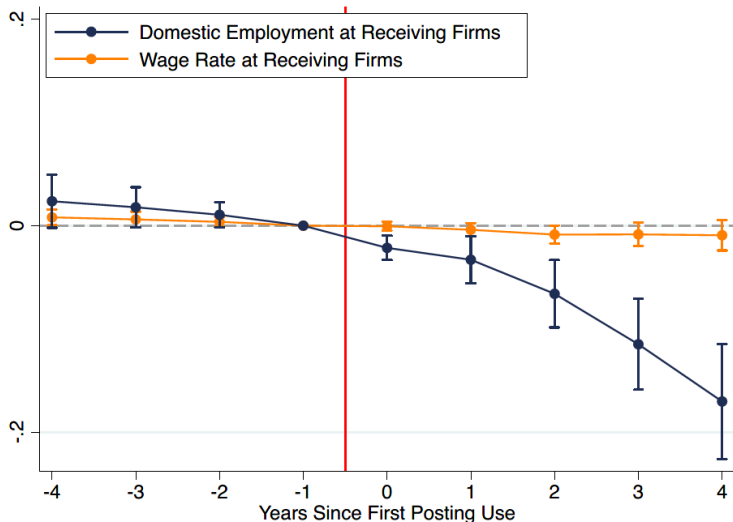


Source: Munoz (2021)

# Occupations/qualifications of posted workers



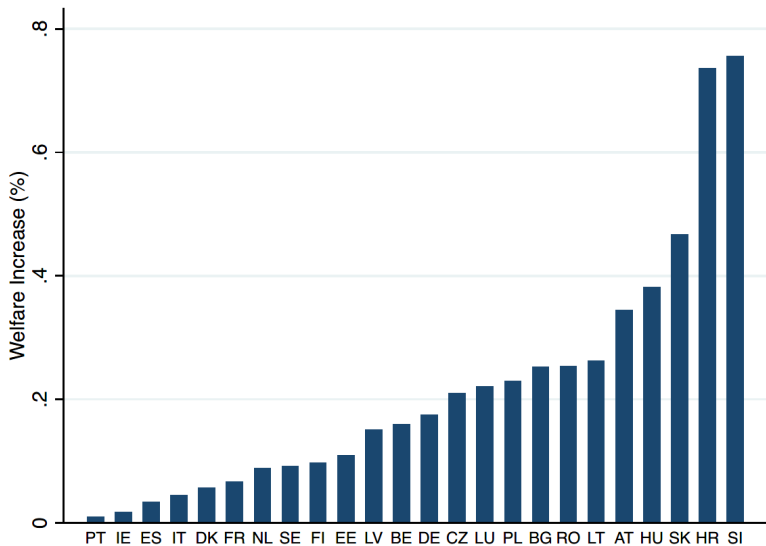
# Employment losses in receiving firms



Source: Munoz (2021). 1 less domestic jobs at receiving firms for each 3 posted workers. No impact on wages.



# Gains in welfare



Source: Munoz (2021).

## Some take-away points

- Evidence from past two decades has taught lessons on various impacts of globalisation in goods
- Much less is known about globalisation in services, to which rich countries' exposure will be much larger
- Employment impacts may not be as concentrated as for globalisation in goods
- At times of mounting concerns over inflation, question is how much would globalisation in services reduce prices or slow inflation
- Very early evidence points at similar effects on prices as for goods, but too limited to extrapolate for broader phenomenon to come