



IFS Annual Lecture 2019  
**Penny Goldberg**

26 September 2019

The Royal Society, London

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# The Unequal Effects of Globalization

2019 IFS Annual Lecture  
London, UK

Pinelopi Koujianou Goldberg  
Yale University and the World Bank  
September 26, 2019

# Road Map

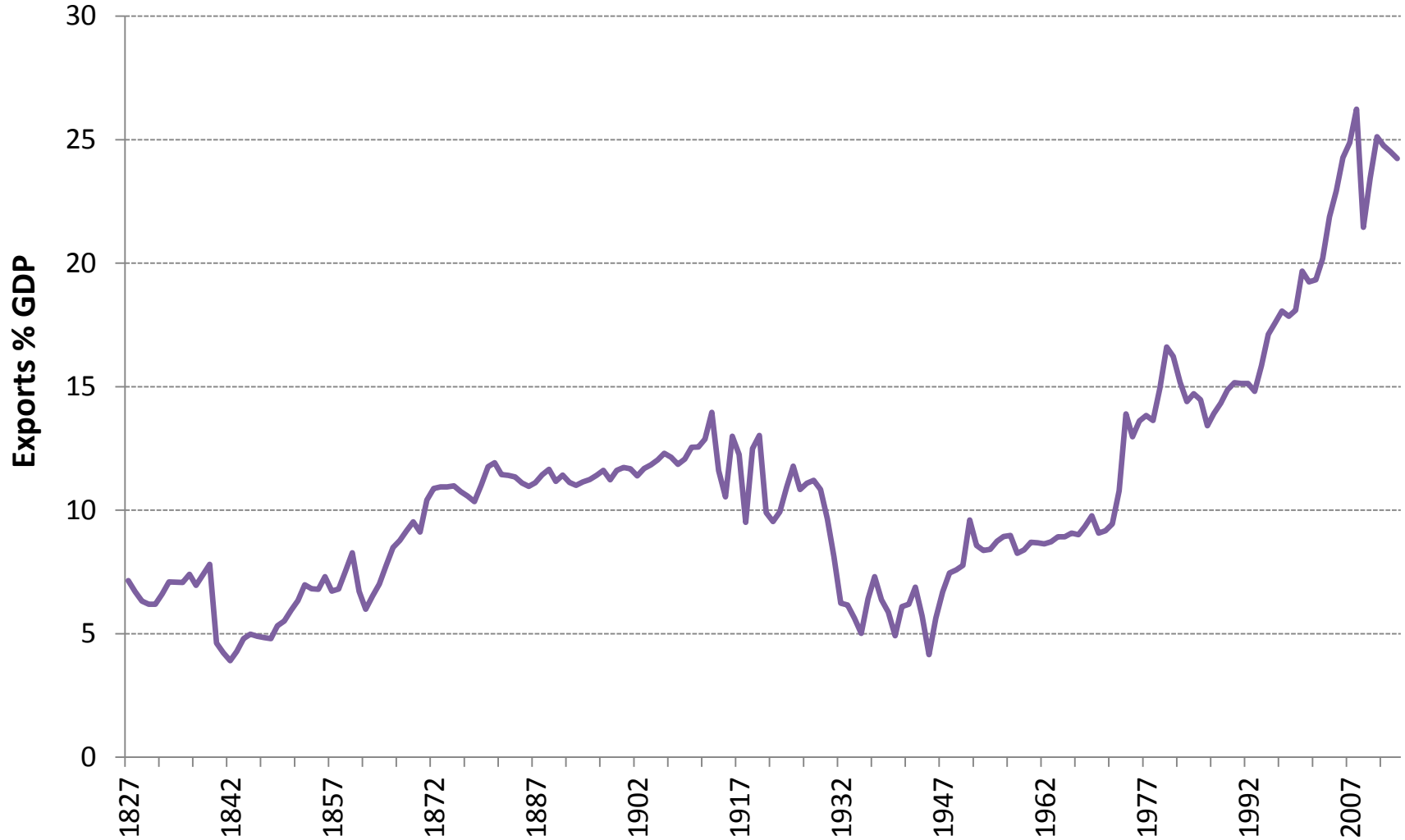
- A. The Age of Globalization and the Retreat from it
  
- B. Causes of the Retreat
  1. Perception that competition/trade has not been fair
  2. Increase in within-countries inequality
  
- C. Policy Implications
  1. Focus on place-based policies?
  2. Rethink international cooperation

# A. The Age of Globalization and the Recent Retreat

- Measureable Trade Barriers (i.e., tariffs) at an all-time low
- Trade Volumes have exploded post-World War II
- Many developing countries now integrated in world markets (China, India, South-East Asia, Latin America)

# The Age of Globalization

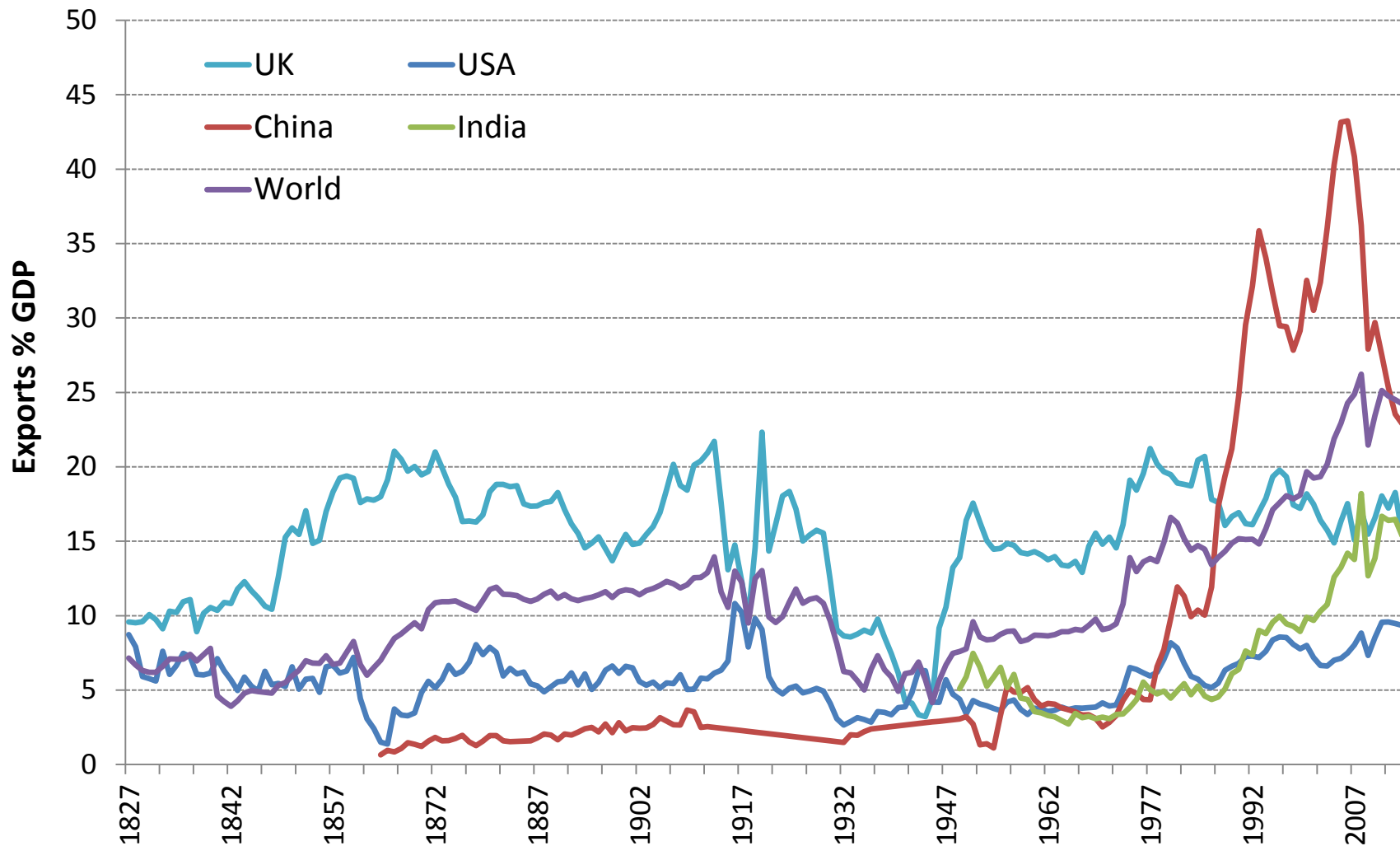
Exports as % of GDP, 1827-2014



Source: Fouquin and Hugot; CEPII 2016; National data

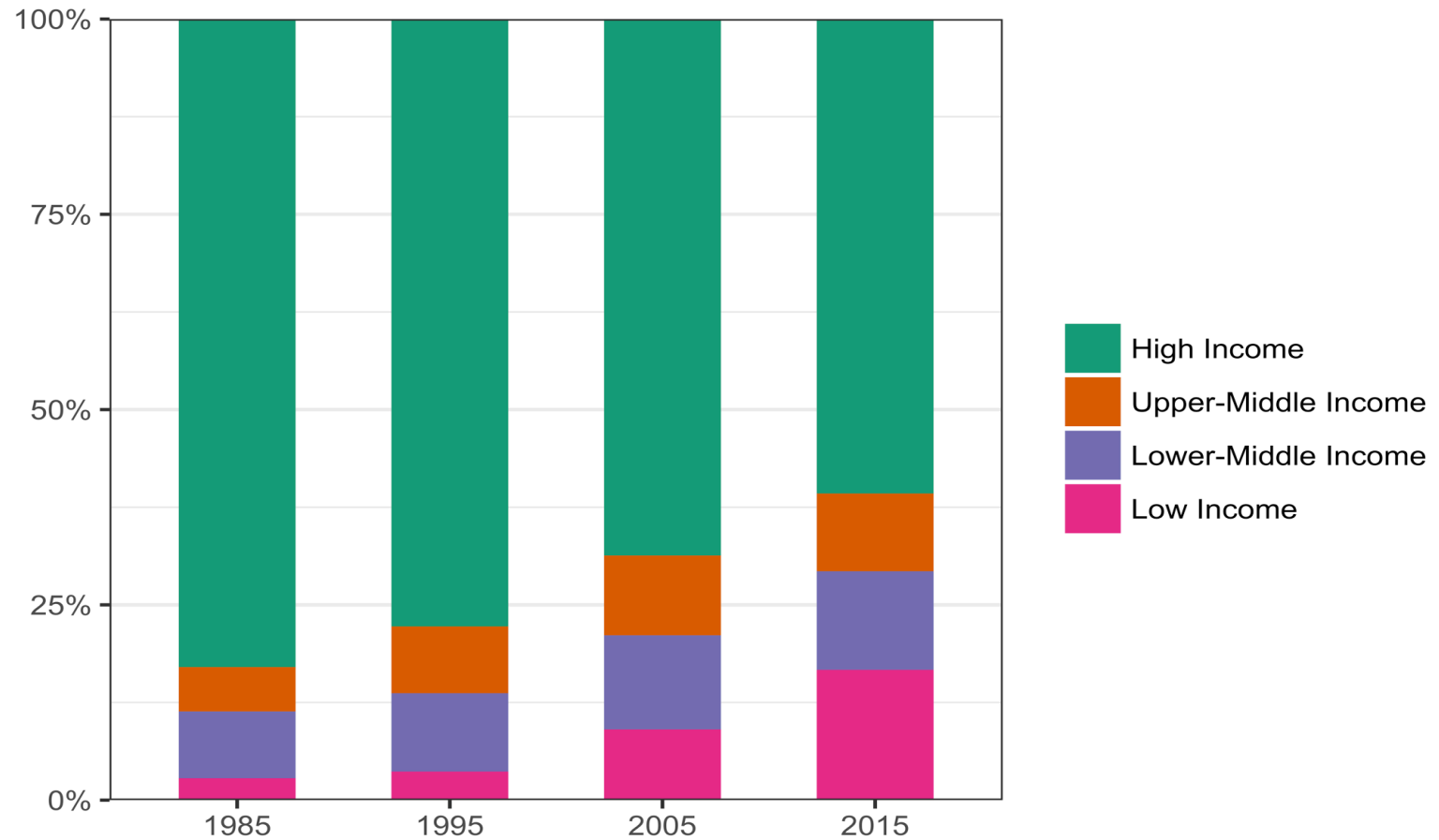
# The Age of Globalization

Exports as % of GDP, 1827-2014



Source: Fouquin and Hugot; CEPII 2016; National data

# Composition of World Exports by Income Group



Source: WDI, Pavcnik (2017); a country's time-invariant income category is based on 1987 WB income groups.

# Drivers of Trade Growth?

## Three Points:

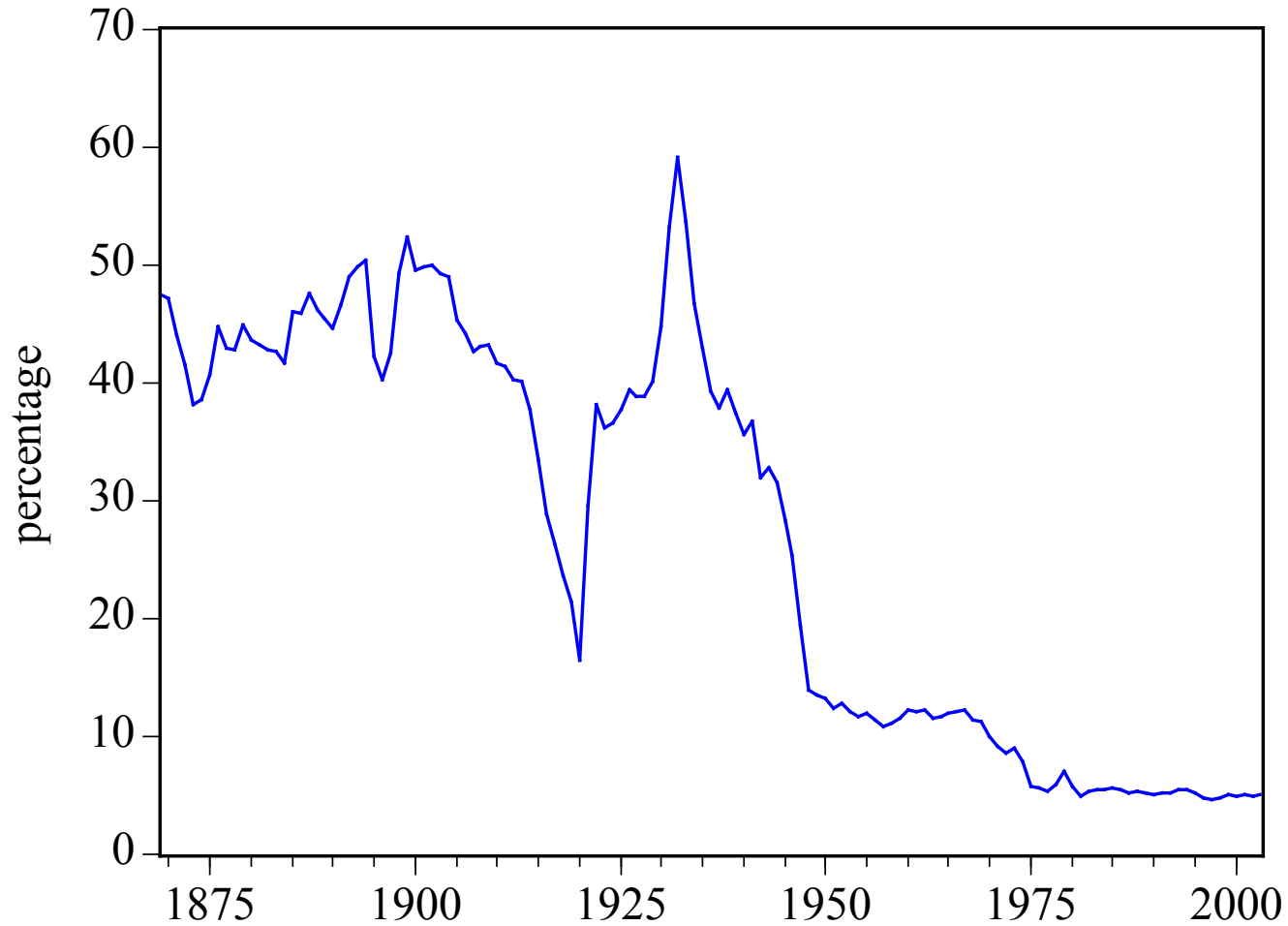
- World trade expansion is due to policy as much as to the decline of transport and communication costs
- Claims of a “secular slowdown” of trade are premature
- But: Recent backlash against globalization may lead to an era of sustained deglobalization



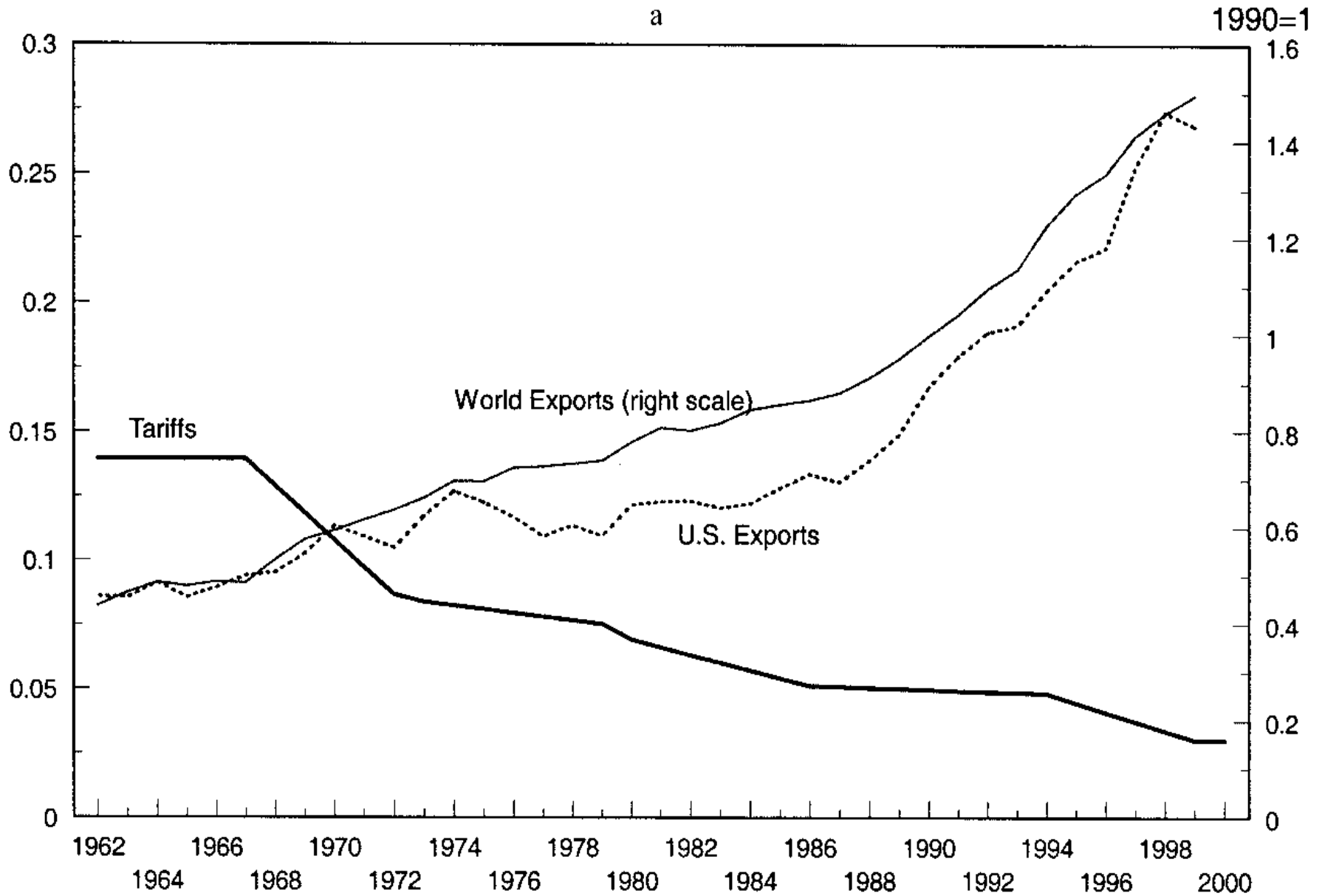
# The Role of Trade Policy

- Until recently, strong belief in “irrelevance of trade policy”
- Globalization was considered both inevitable and unstoppable
- Driven by secular declines in transport and communication costs
- Goldberg and Pavcnik (2017): Above view is misguided and due to the difficulties associated with measuring trade barriers in the 21<sup>st</sup> century

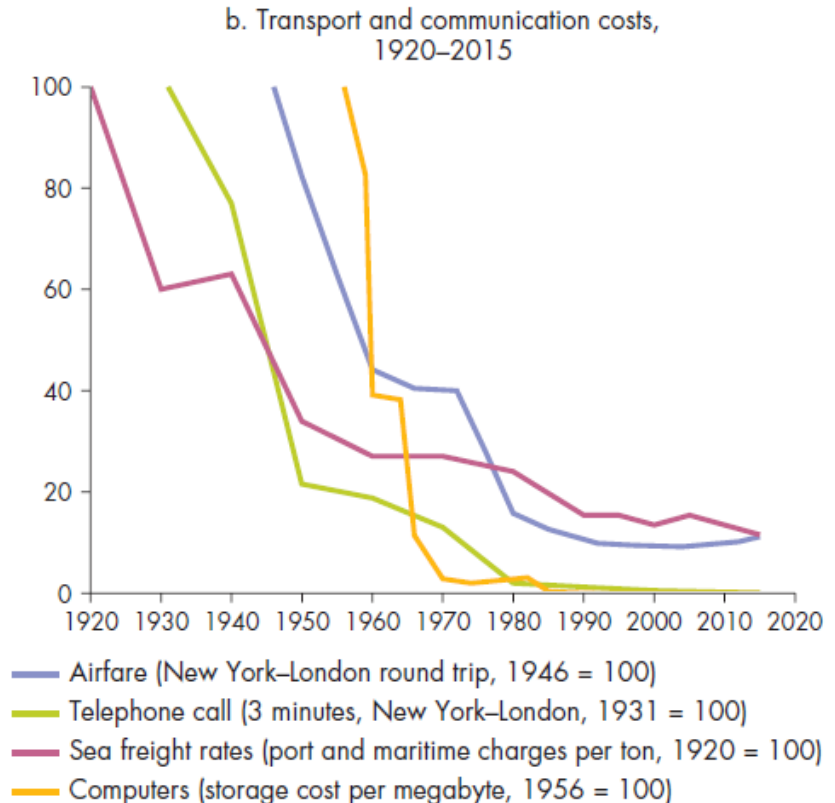
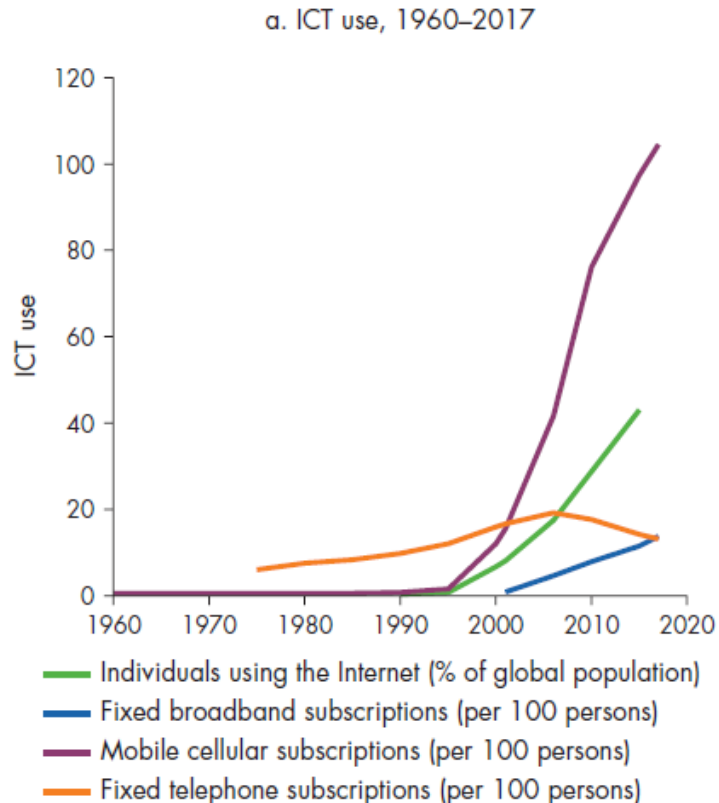
# Average U.S. Tariffs 1875-2002



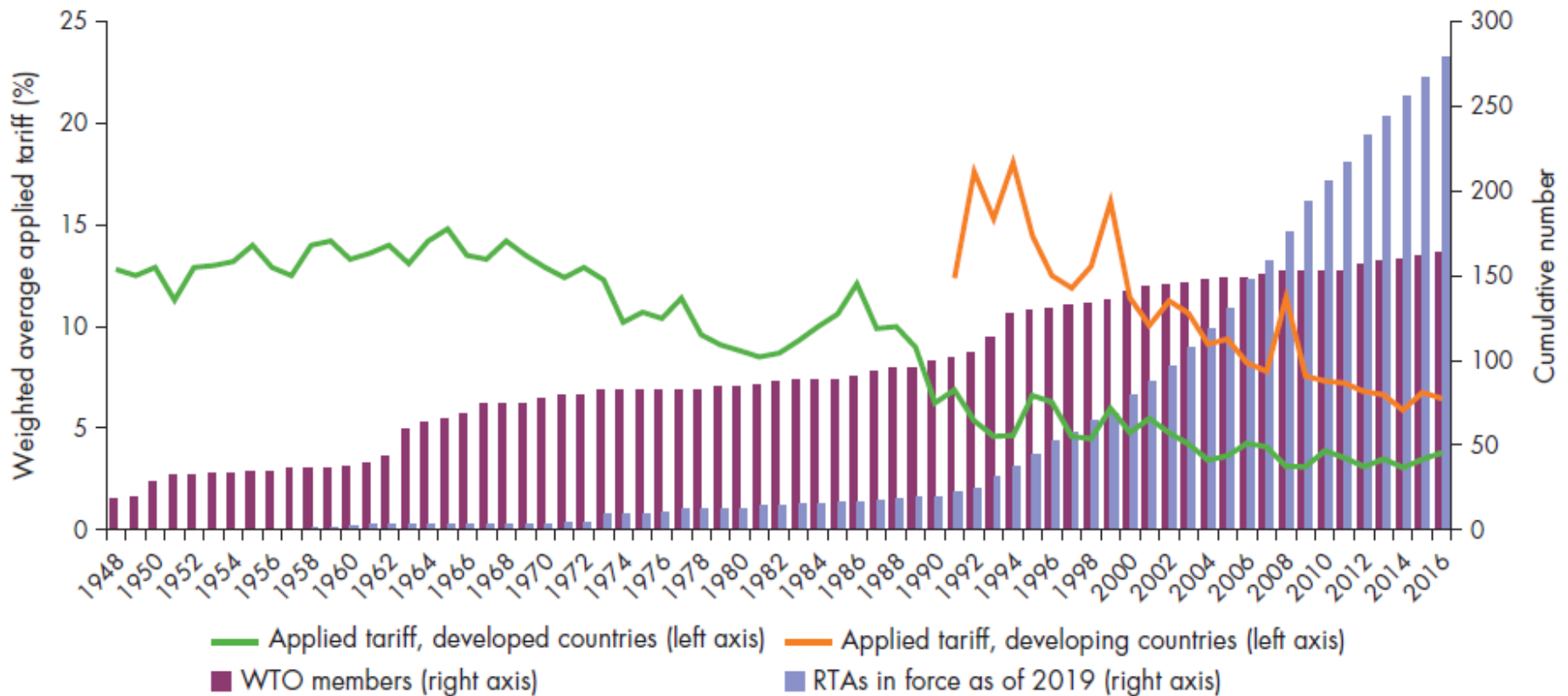
# From Yi (JPE, 2003)



# The Role of the ICT revolution, Transport and Communication Costs



# From 1948 to 2016, tariffs dropped thanks to multilateral and regional trade agreements

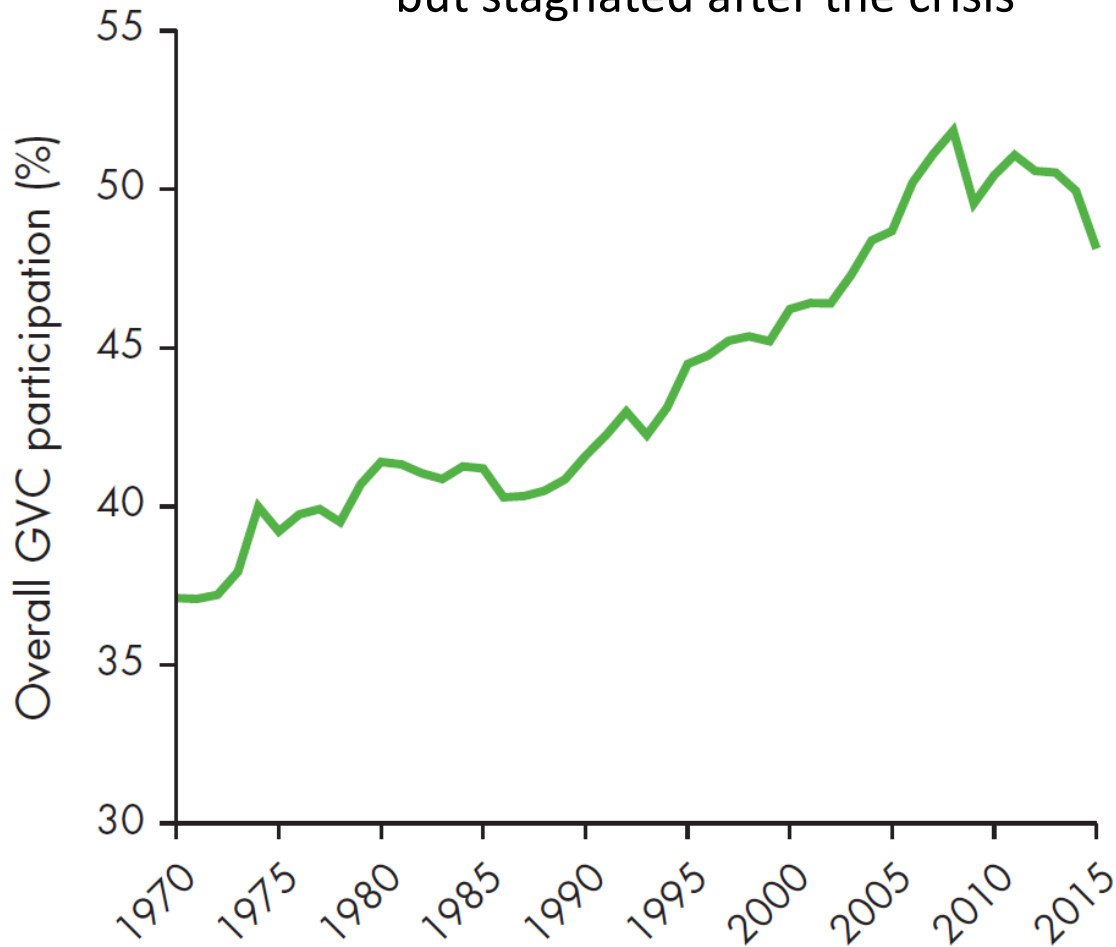


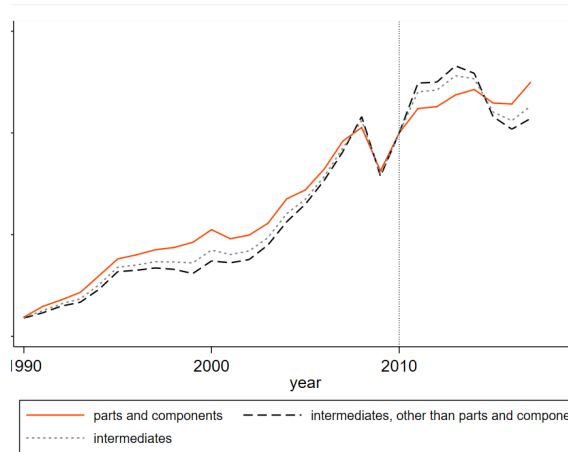
# The Retreat

- Global trade has slowed down after the 2008 financial crisis
- Secular slowdown?
  - Has international fragmentation run its course?

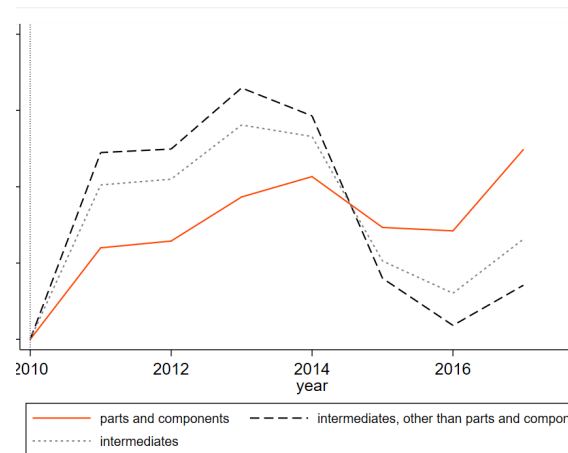
# The Slowdown of GVC Trade

GVC trade grew fastest in the “long 1990s”,  
but stagnated after the crisis





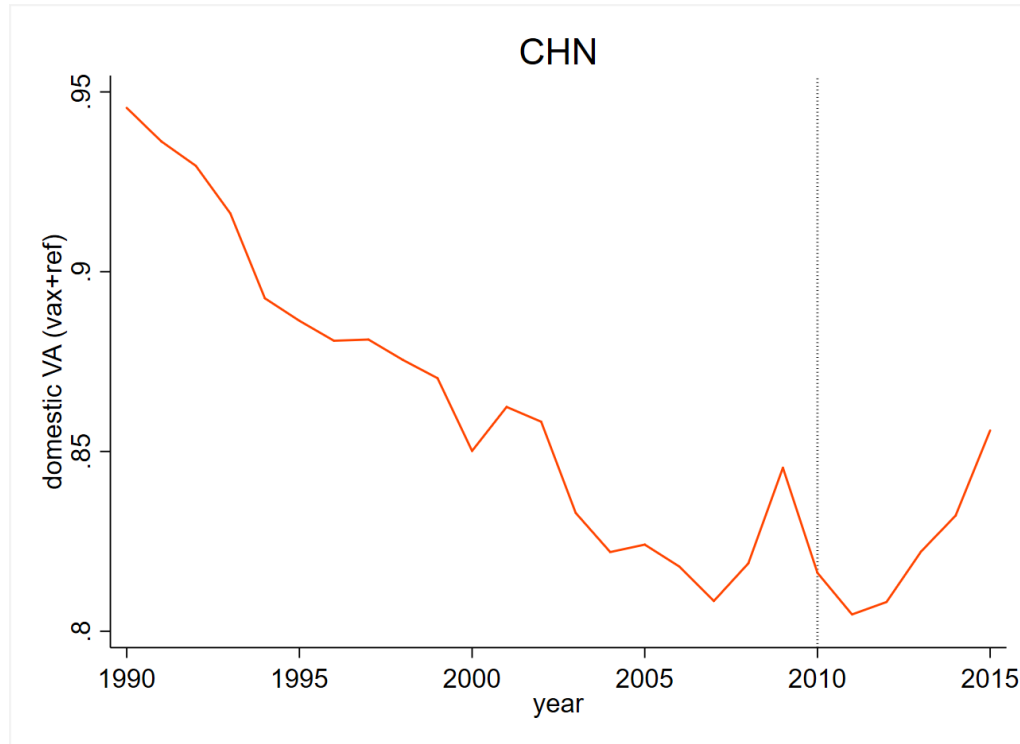
Has international  
fragmentation  
exhausted its  
push?



Parts and  
components vs  
intermediate goods



# China's domestic value added embodied in exports

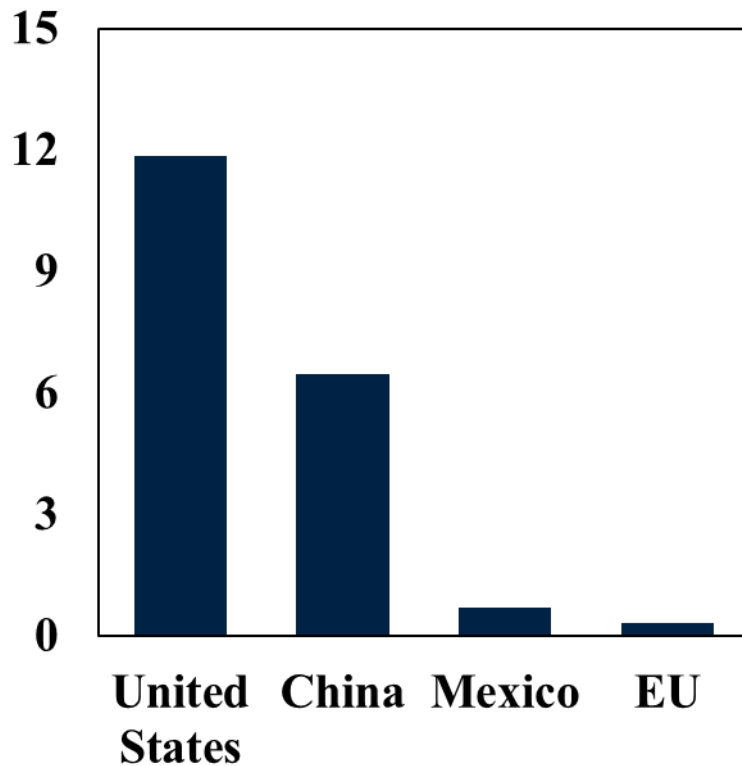


# The Policy Backlash

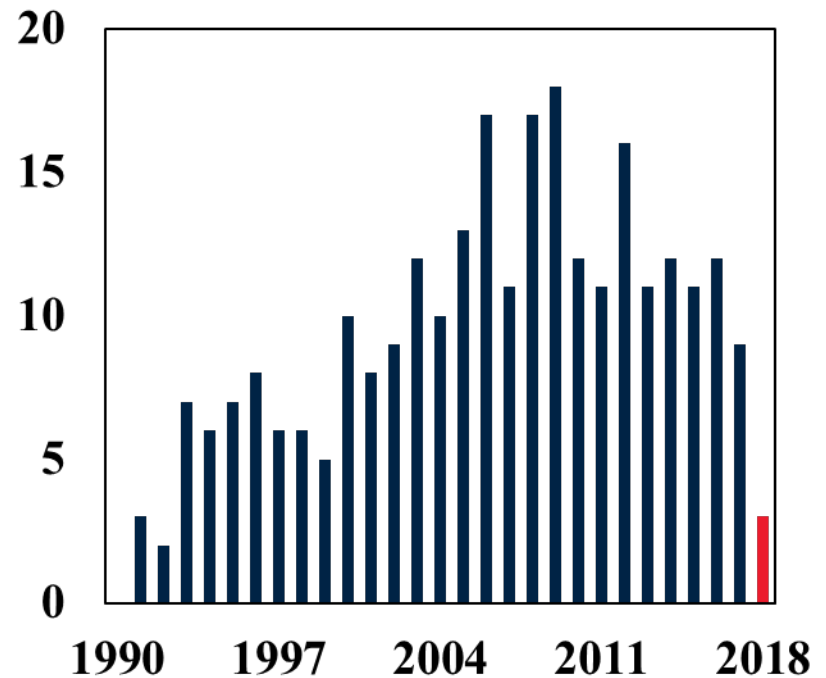
- Revolt of the public in many (developed) countries against free trade and immigration
- Not specific to a particular country  
US: Return to Protectionism; UK: Brexit
- Paralyzed WTO
- Uneven liberalization of agricultural trade
- Limited opening of services trade
- Rising behind-the-border measures and other distortions

# The New Policy Environment

Goods imports affected by new tariffs  
(Percent share, 2018)



New regional trade agreements  
(Number)



# Effects to Date

- Fajgelbaum, Goldberg, Kennedy and Khandelwal (2019)
  - So far, aggregate effects miniscule
  - But distributional effects considerable
    - Consumers bear the cost of tariffs
    - Agricultural regions in the US adversely affected (due to retaliation)
- BUT: Increased uncertainty
- Long-run effects on investment and global value chain relocation could be considerable

# Question

- Is this a small blip in the wave of globalization?
- Or are we at the beginning of a new era of sustained deglobalization?
- Answer will depend on policy choices

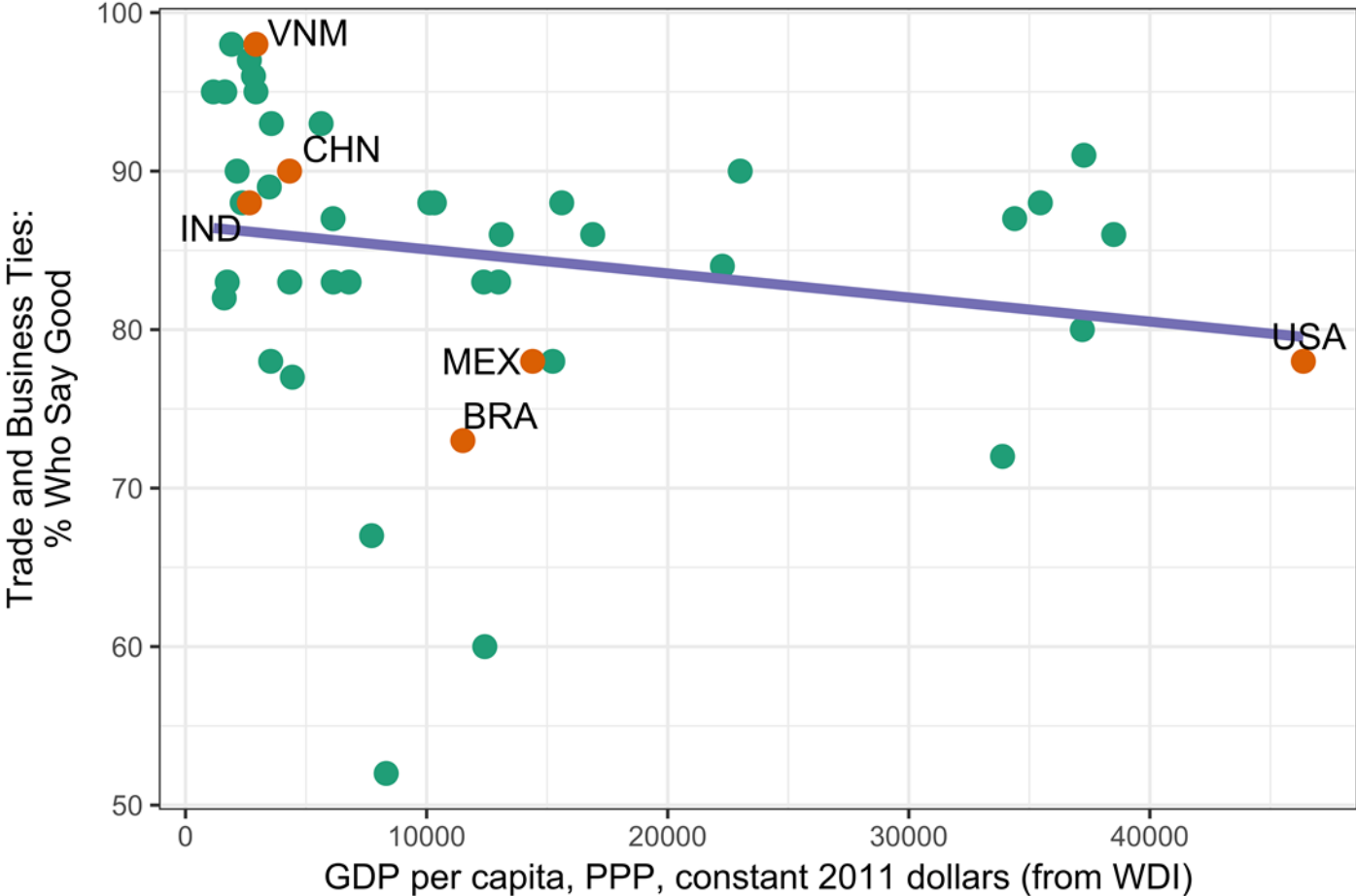


What caused the backlash in the first place?

## B. Causes of the Backlash

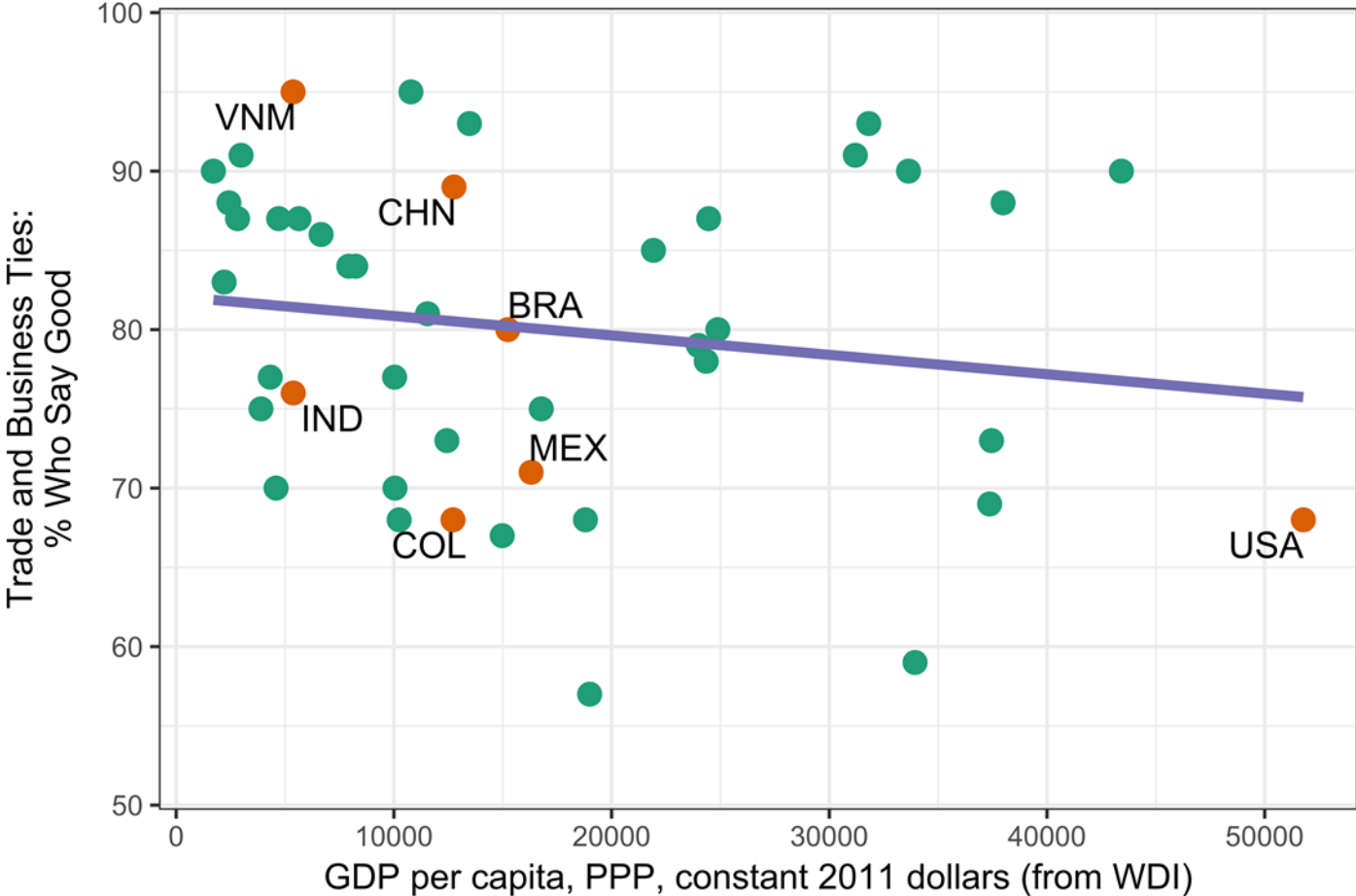
- Puzzle: Backlash started at a time of prosperity
  - Unemployment at a 50-year low in the US
  - Strong stock market
- What do attitudes surveys tell us?
  - PEW Global Attitudes Surveys

# Attitudes towards Free Trade - 2002



Source: WDI, PEW, Pavcnik (2017)

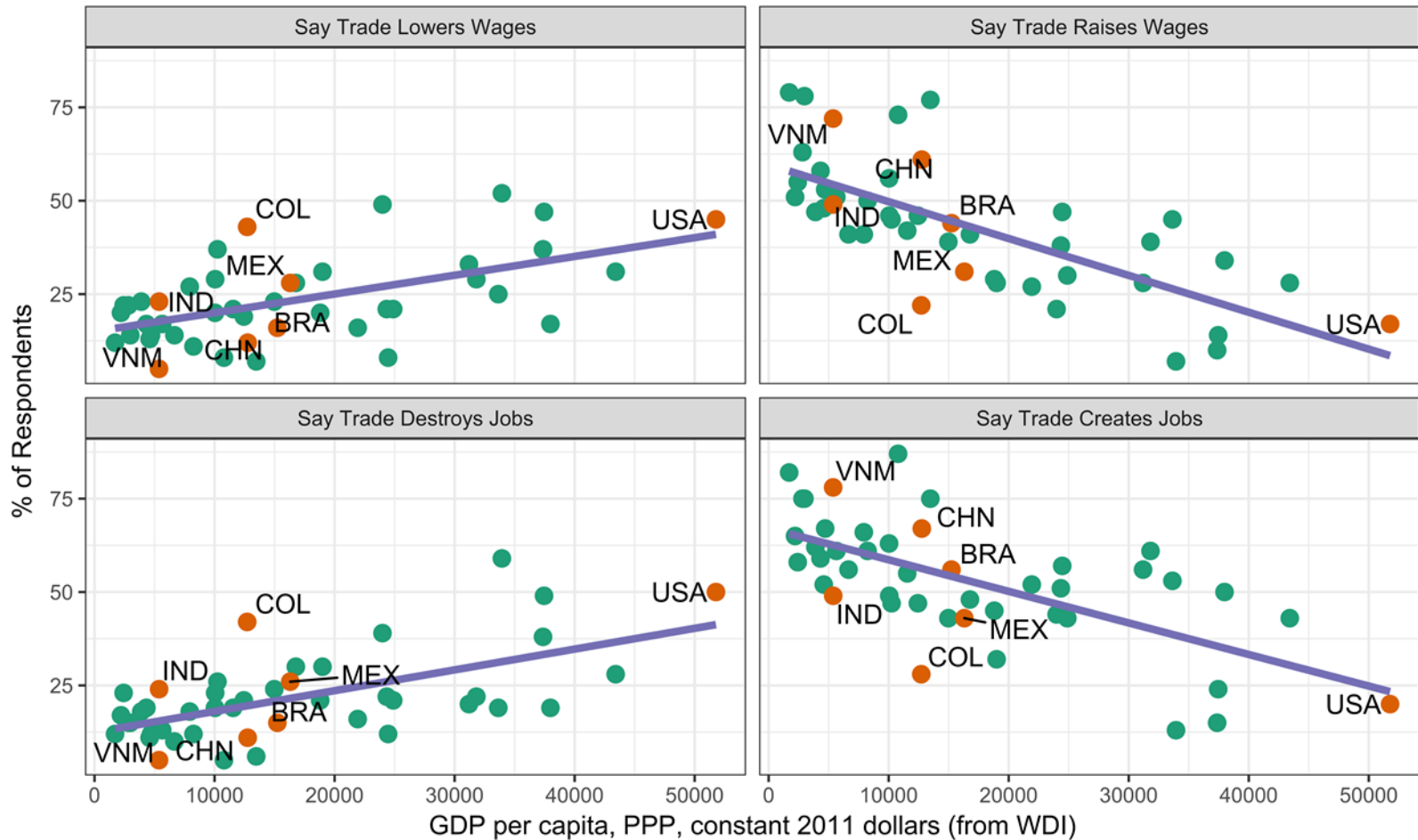
# Attitudes towards Free Trade - 2014



Source: WDI, PEW, Pavcnik (2017)



# Views on Trade and Labor Market Outcomes



# **→ Unequal Effects of Globalization**

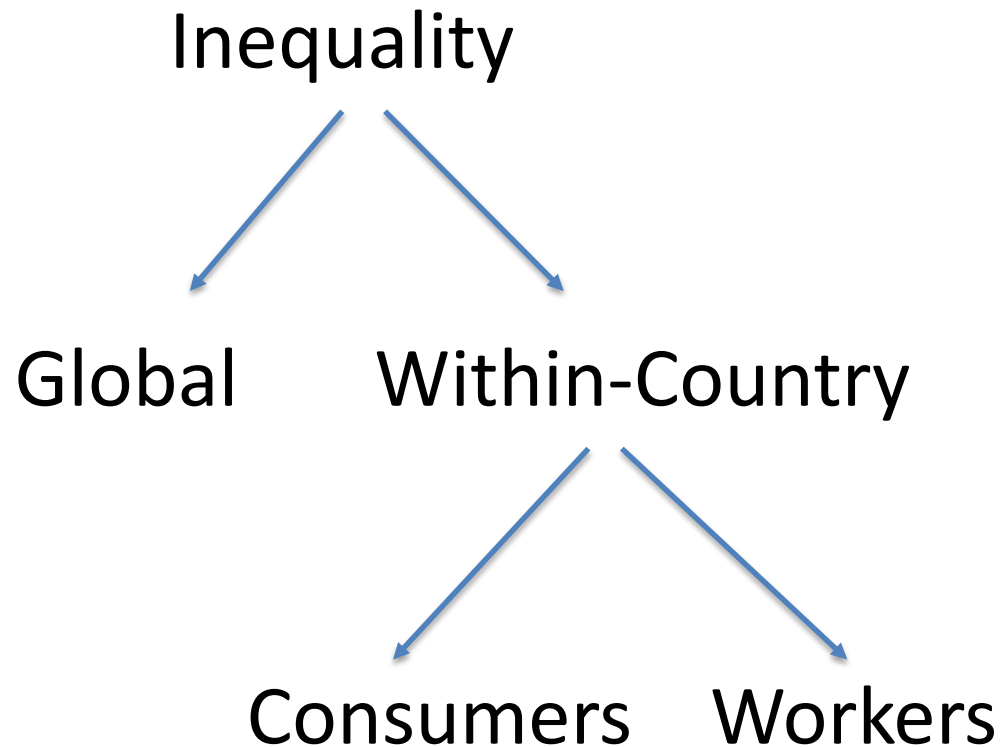
- Across countries**
- Within countries**

# On the Aggregate Gains from Trade

- In static models, gains shown to be small, especially for large countries.
- ACR formula:
  - Aggregate gains depend only on **share of domestic expenditure and trade elasticity** in a large class of models
- Consistent with Fajgelbaum, Goldberg, Kennedy and Khandelwal: “The Return to Protectionism”
  - Aggregate effects of current trade war: very small
- BUT: Distributional effects considerable

# Globalization and Inequality

- Inequality: What inequality?

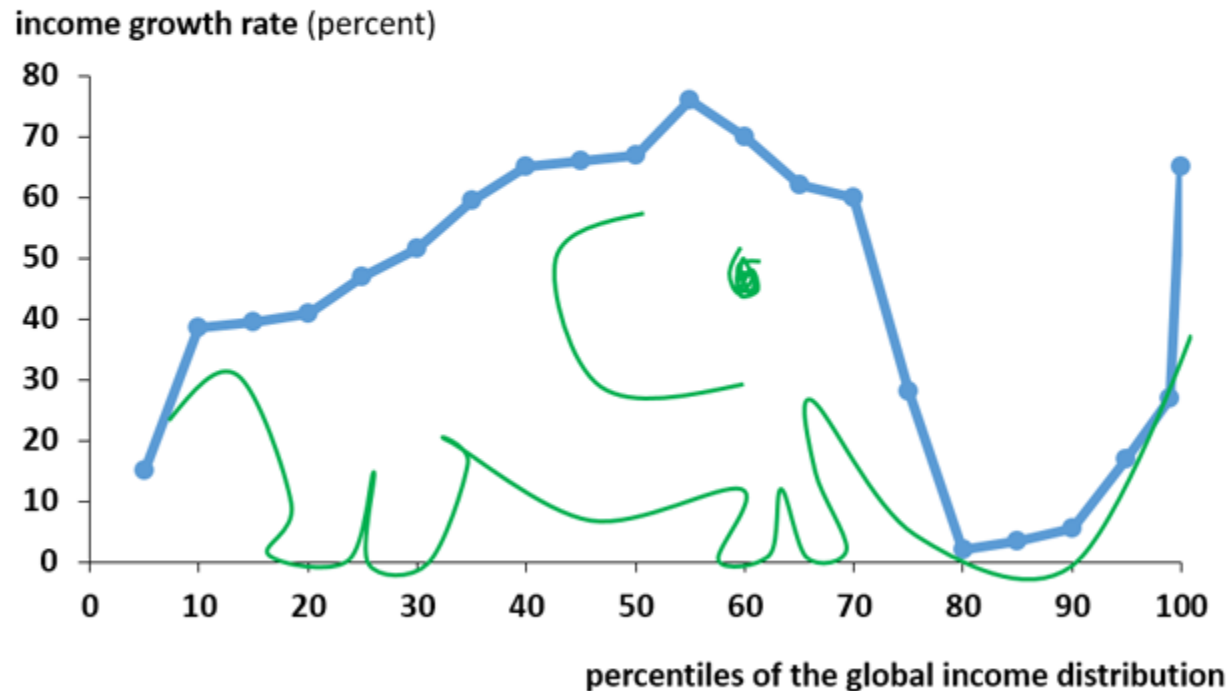


# Global Inequality

- Has been reduced dramatically post-World War II
- Deaton (“The Great Escape”); World Bank (WDR 2006); Branko Milanovic (“Global Inequality....”)
- Globalization, and in particular the integration of China and East Asian economies into the world trading system played an important role
- Tradeoff between global and within-country inequality?

# The (old) Elephant Curve

Global inequality has declined: Growth incidence curve, 1988-2008

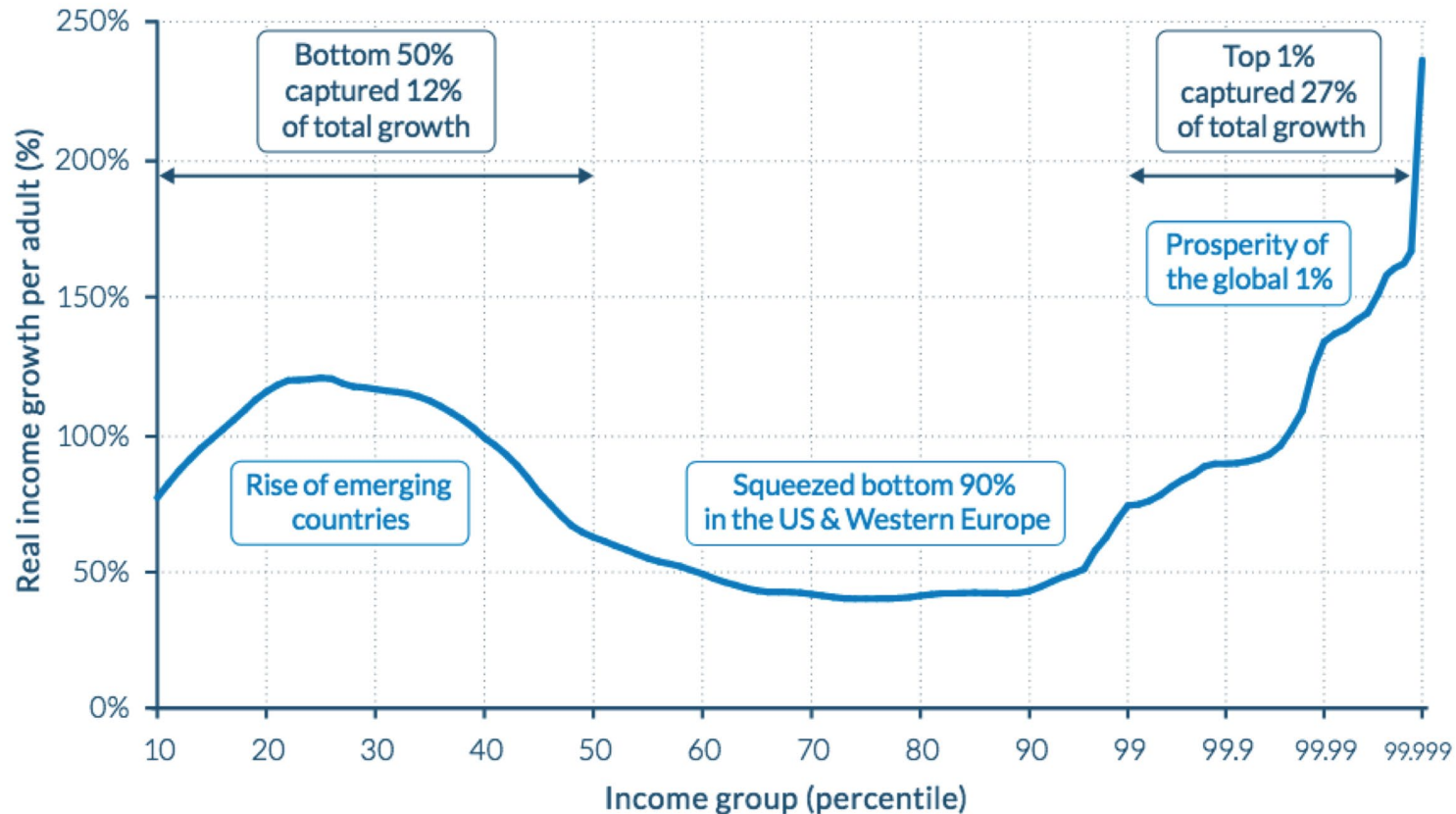


Source: Branko Milanovic and C. Lakner. Elephant added by C. Freund.

# The (new) Elephant Curve

**Figure 2.1.4**

Total income growth by percentile across all world regions, 1980–2016



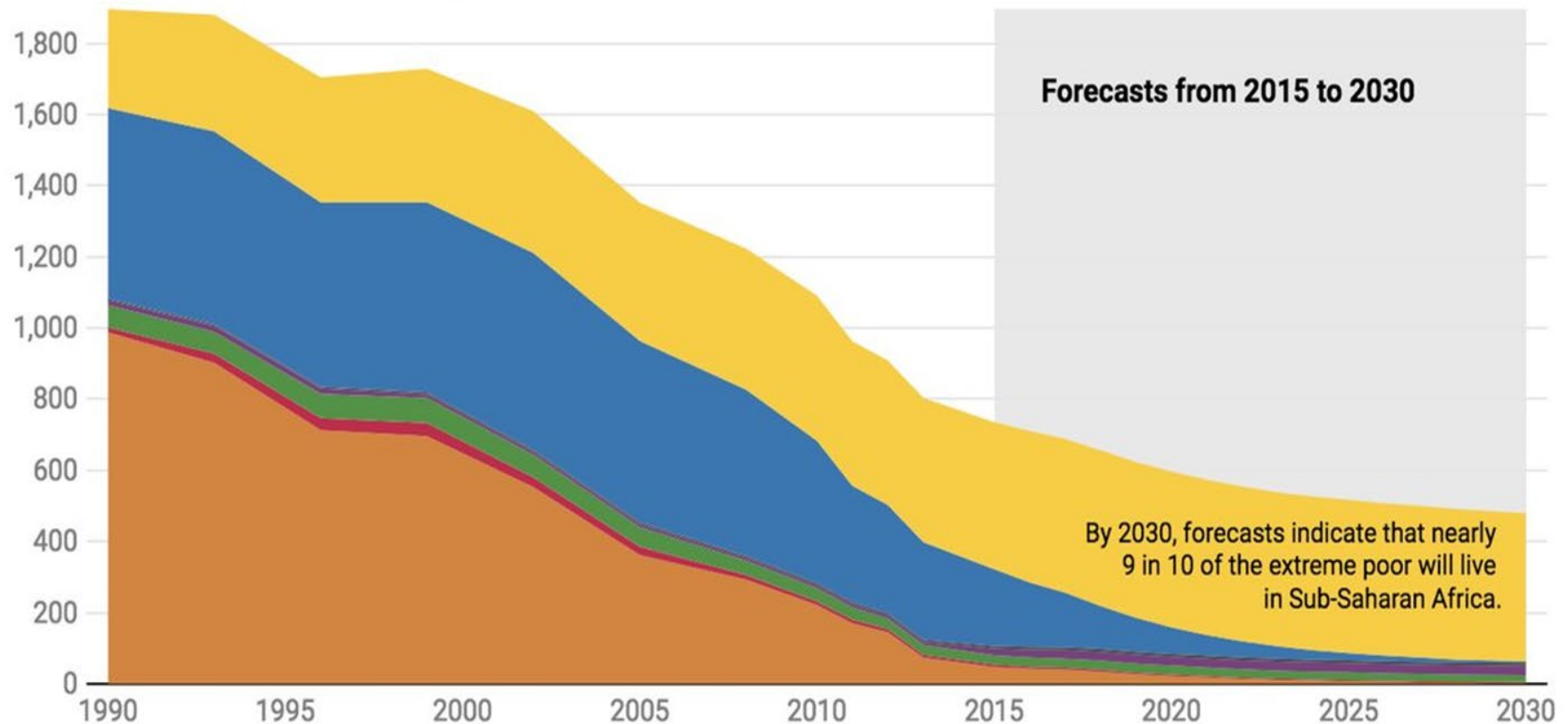
Source: WID.world (2017). See [wir2018.wid.world](http://wir2018.wid.world) for more details.

On the horizontal axis, the world population is divided into a hundred groups of equal population size and sorted in ascending order from left to right, according to each group's income level. The Top 1% group is divided into ten groups, the richest of these groups is also divided into ten groups, and the very top group is again divided into ten groups of equal population size. The vertical axis shows the total income growth of an average individual in each group between 1980 and 2016. For percentile group p99p99.1 (the poorest 10% among the world's richest 1%), growth was 74% between 1980 and 2016. The Top 1% captured 27% of total growth over this period. Income estimates account for differences in the cost of living between countries. Values are net of inflation.

# The Decline in Global Poverty

People in extreme poverty (millions)

East Asia and Pacific Europe and Central Asia Latin America and the Caribbean Middle East and North Africa  
Rest of the world South Asia Sub-Saharan Africa



Source: World Bank PovcalNet and Poverty & Equity Data Portal



# Is Trade Fair?

- Frequent complaints that large developing countries abuse the “special and differential status”
- Market access in some developing countries limited
- Subsidies; SOEs; Intellectual Property Rights; Forced Technology Transfer
- Service Trade still highly restricted
- Rise of “behind the border” restrictions
- All this compounded by inadequate measurement
- More and better data than ever before
- BUT: Despite more and better data, still key economic entities hard if not impossible to measure (NTBs, “behind the border” restrictions, regulatory restrictions)

# **Within-Country Inequality**

## **People as Workers**

→ Labor Market Effects of Globalization

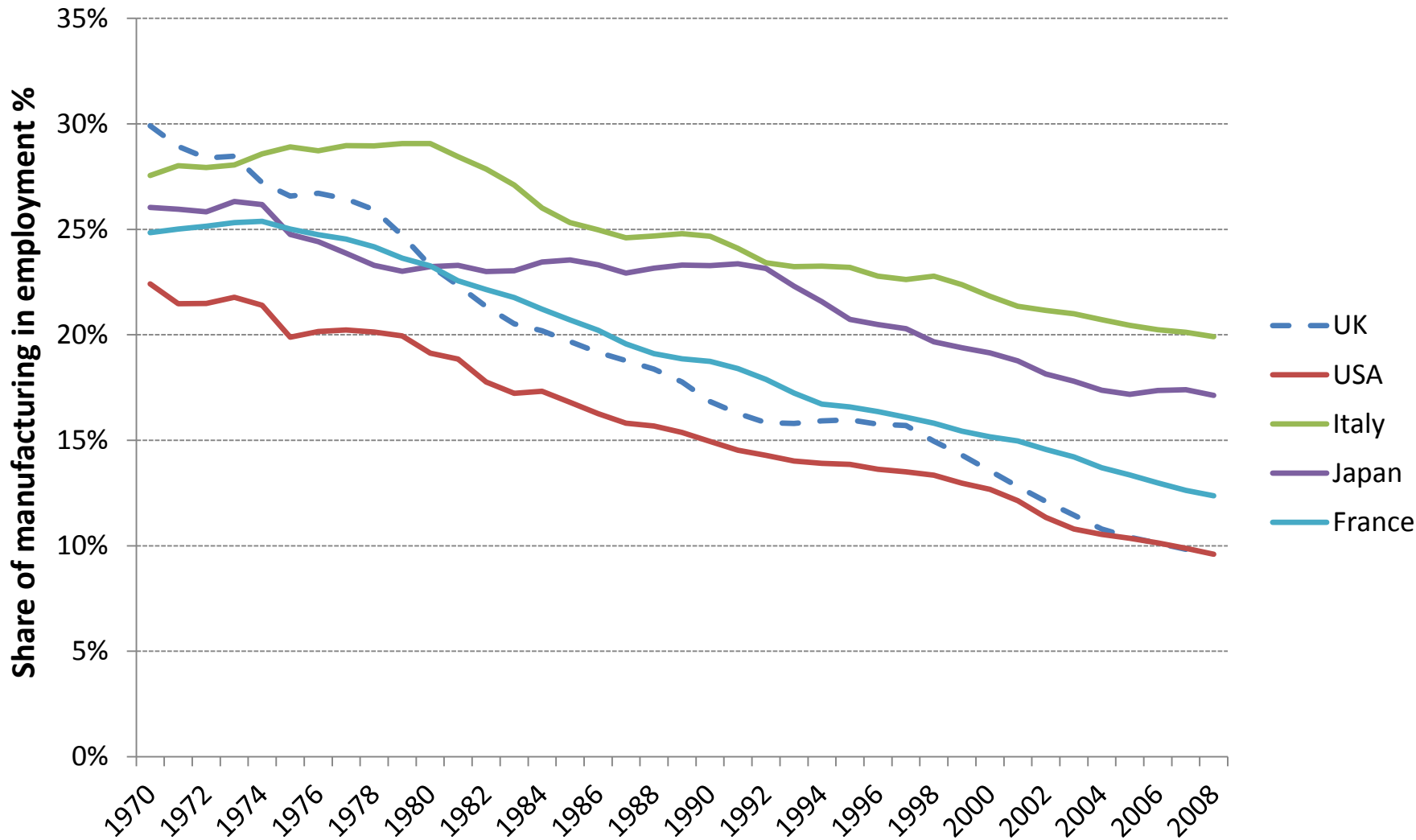
# Labor Market (US and Europe)

- Increase in Skill Premium in the 70s, 80s and 90s
- Polarization starting in the late 90s
- Decline in Manufacturing Employment in the last 15 years

**→ Role of Globalization?**

# The Decline of Manufacturing

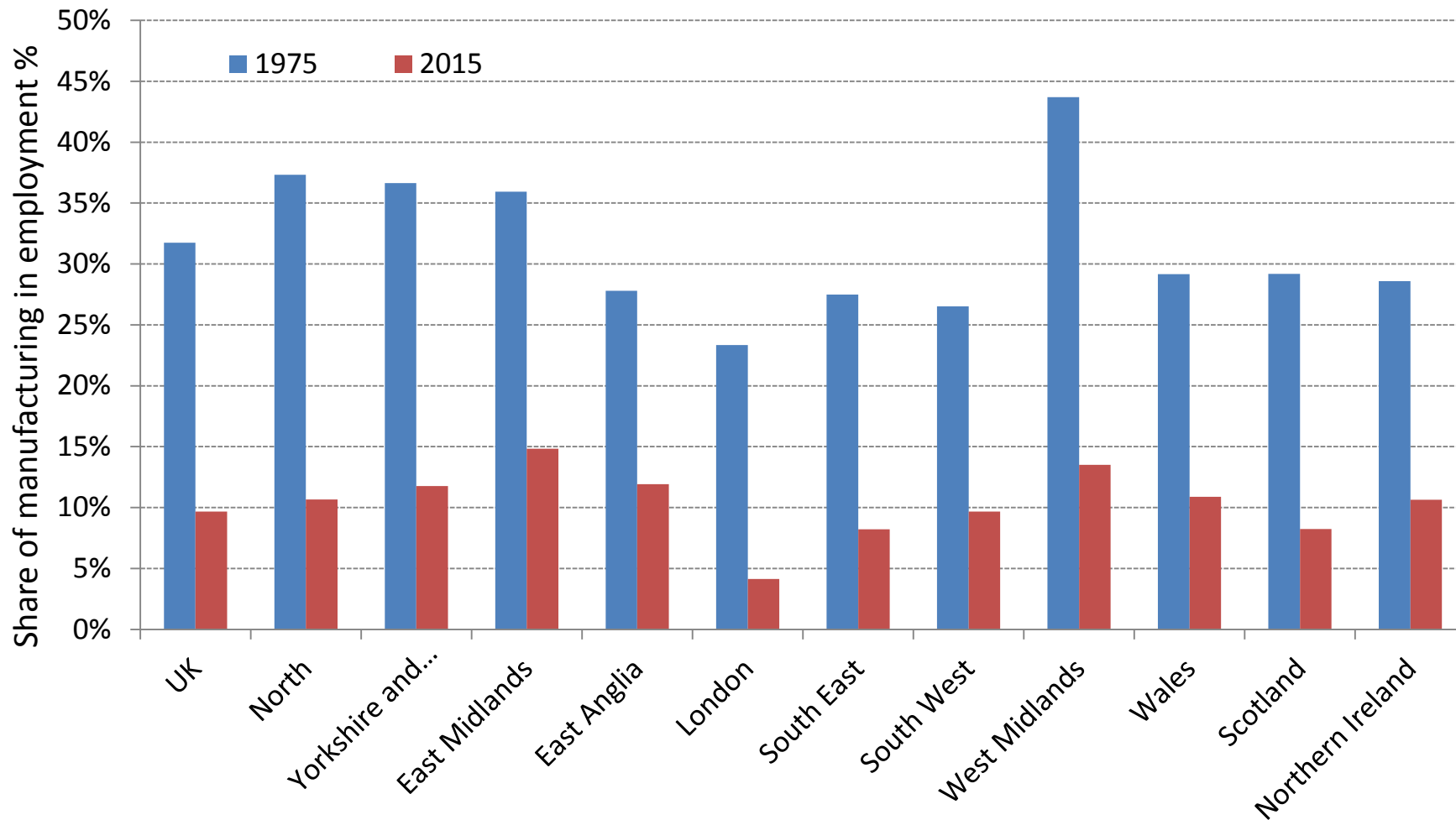
Manufacturing as % of total employment, 1970-2008



Source: OECD STAN database. Calculations by Peter Levell (IFS).

# Manufacturing in regions of the UK

Manufacturing as % of total employment, 1975 and 2015



# What We Know so Far

- Workhorse model of international trade (Heckscher-Ohlin) provides a natural way to link trade to the increase in skill premium
- BUT: Consensus that trade played only a secondary role in the increase of the skill premium
- Trade only important in interaction with technology

# Shifting Consensus in the 2000s

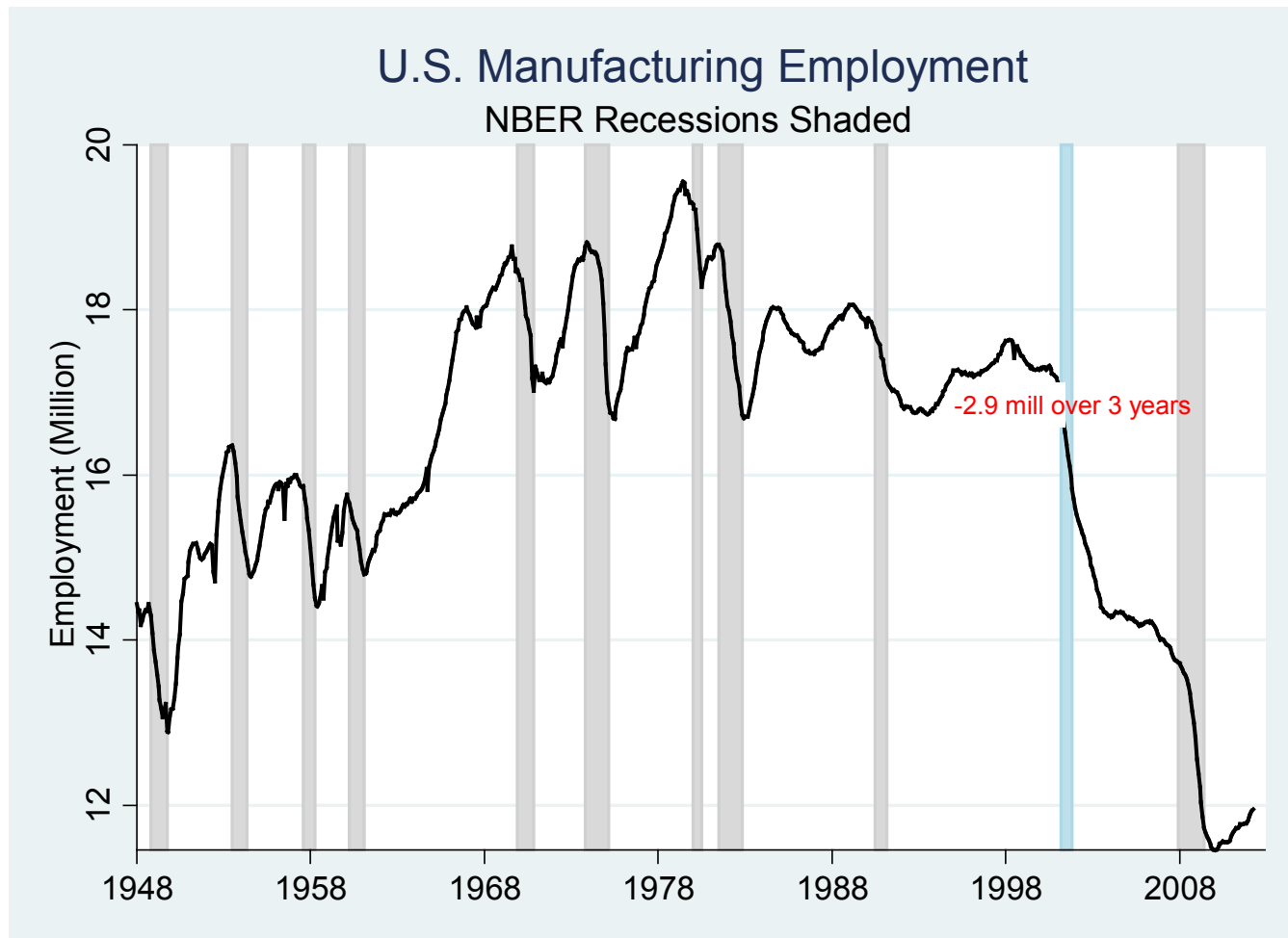
- Trade is a potentially important driver of inequality
- Why? (→ still open question)
  - China
  - Shift of focus from Skill Premium to Regional Inequality

# On the Role of China

- ADH, Pierce and Schott (AER papers):  
→ The “China Shock”
- China responsible for dramatic decline of US manufacturing employment and rising regional disparities
- But why were the effects less dramatic in Europe?
- What was the experience in developing countries?



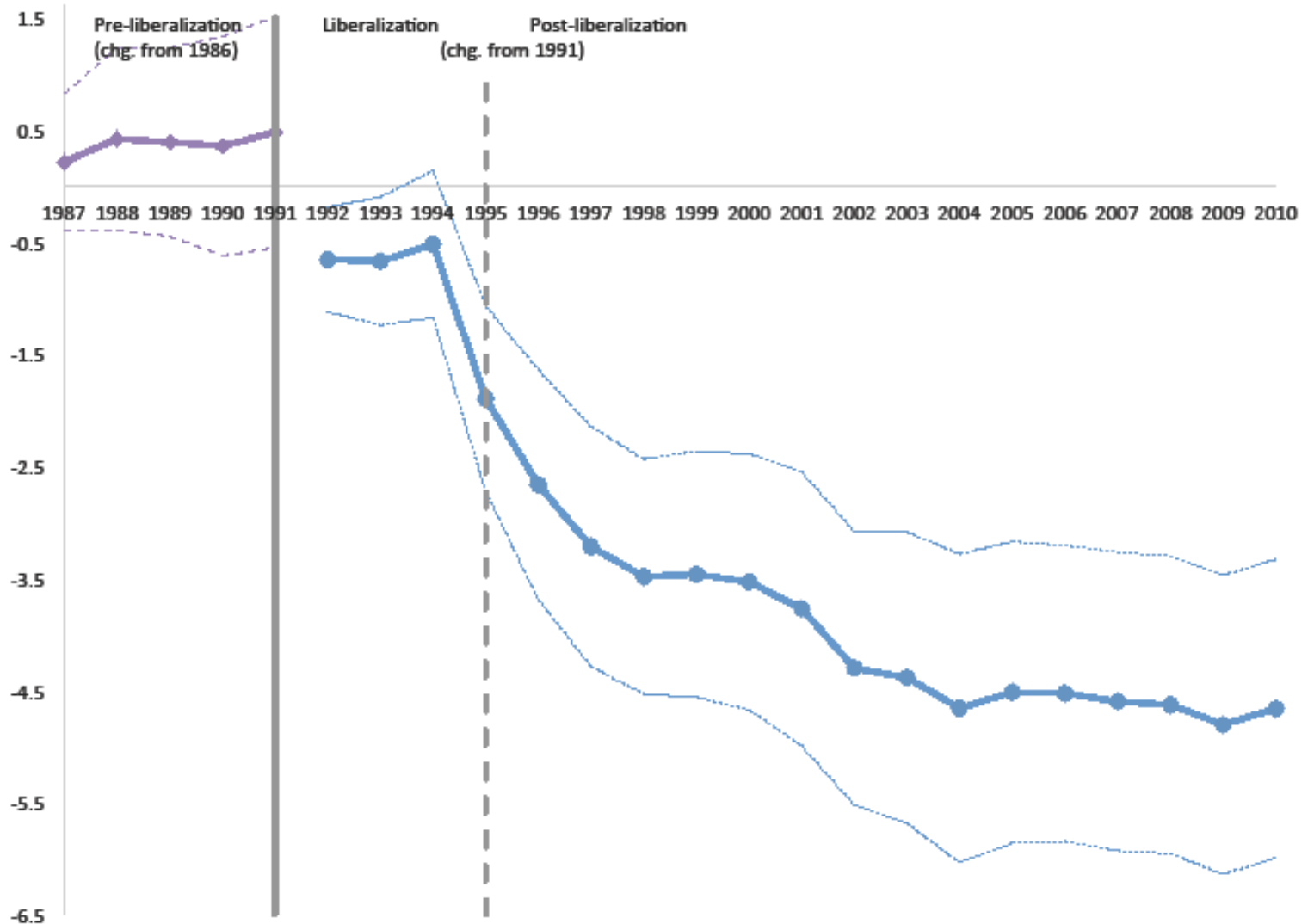
# Post-War U.S. Manufacturing Employment



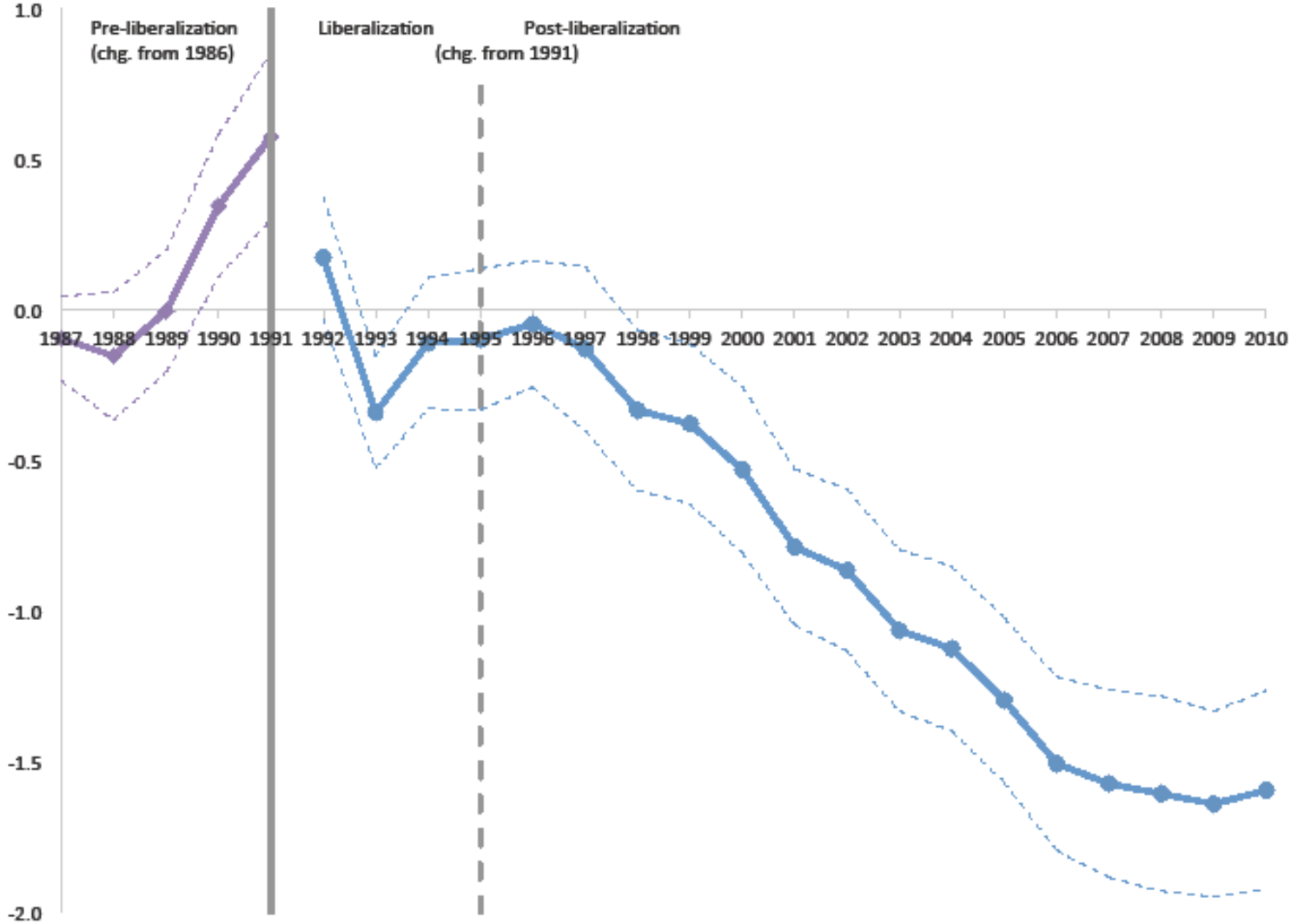
# Alternative Interpretation: Shift of Focus to Regional Inequality

- Supported by evidence from developing countries (Topalova, Dix-Carneiro and Kovak)
- ADH focuses on inequality across commuting zones
- Suggests limited mobility of labor across space

# Effects of Brazilian Trade Liberalization on Employment (Dix-Carneiro and Kovak, 2015)



# Effects of Brazilian Trade Liberalization on Earnings (Dix-Carneiro and Kovak, 2015)



# Additional Insights

- Edmonds, Pavcnik and Topalova (India); Dix-Carneiro and Kovak (Brazil):
  - Effects are not confined to labor markets
  - Adverse effects on education; child labor; crime

# Open Questions

- Why is inter-regional mobility so low?
- What is the nature of “mobility costs?”
- How long is the “long run”?

# Two Observations

- Autor et al (US and “China Shock”): Large effects after nearly a decade of adjustment (2001-2010)
  - Dix Carneiro and Kovak (Brazilian Trade Liberalization in early 1990s): Adverse effects get magnified over time, and long-run distributional impact (after two decades) larger than short-run impact.
- The “Long Run” can be very long, and things do not necessarily get better with time.

# The Role of the Informal Sector

- In Dix-Carneiro and Kovak, labor market eventually recovers because of expansion of **informal sector**
- How general is this result?
- Role of Labor market frictions?
- Welfare and policy implications?



# Within-Country Inequality

## People as Consumers

- Models tell us that trade leads to lower prices, higher quality, more variety
- But what do the data tell us?
- Empirical work on prices and consumer side very limited.

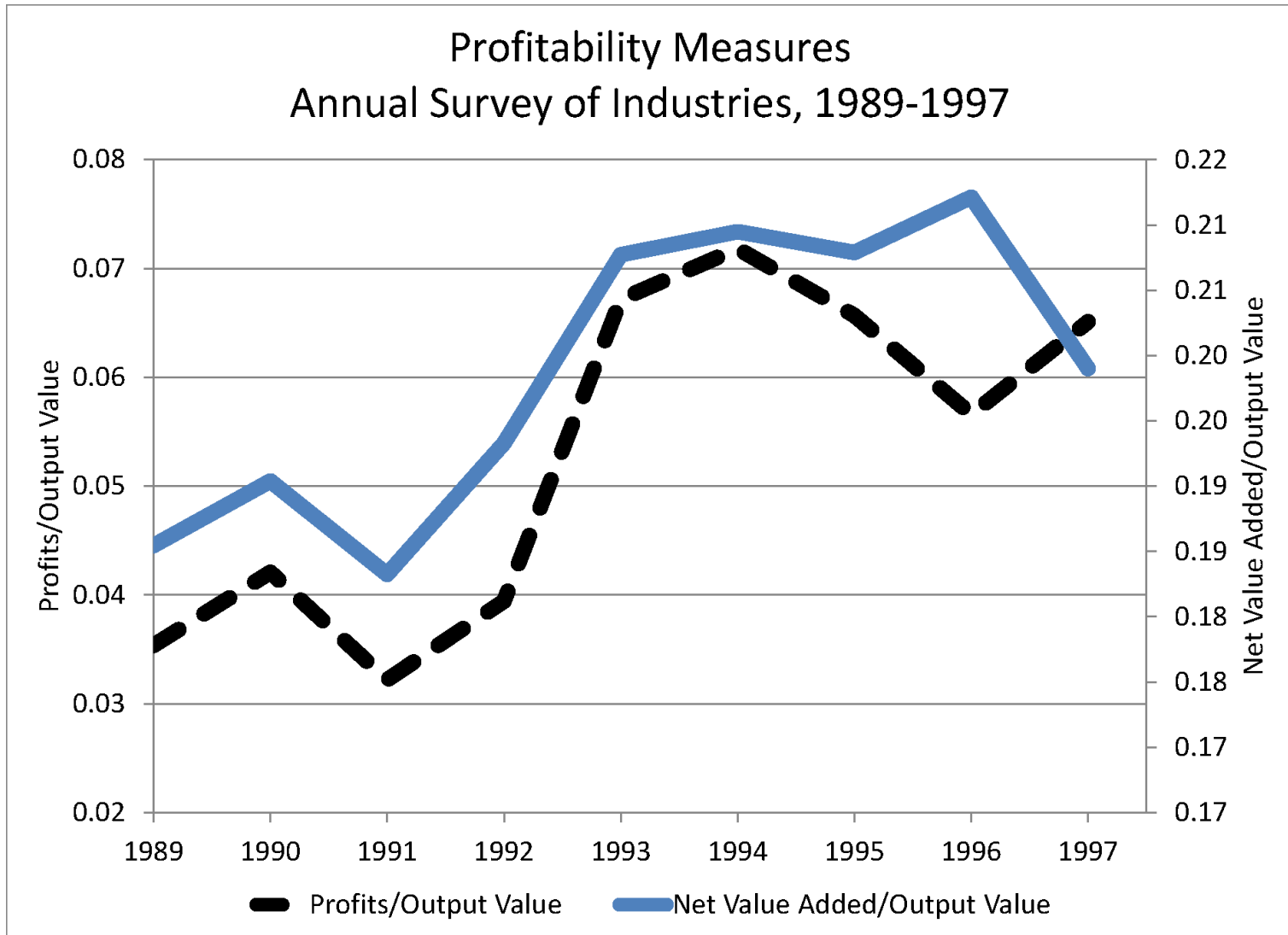
# Evidence from Developing Countries

- De Loecker, Goldberg, Khandelwal and Pavcnik (ECA 2016):
  - Trade Liberalization reduced prices
  - It increased quality
  - Led to greater product variety
  - But increased firm profits
  - Benefits to consumers in the form of lower prices smaller than predicted by models of perfect competition or constant markups

# Liberalization Effects on Profits

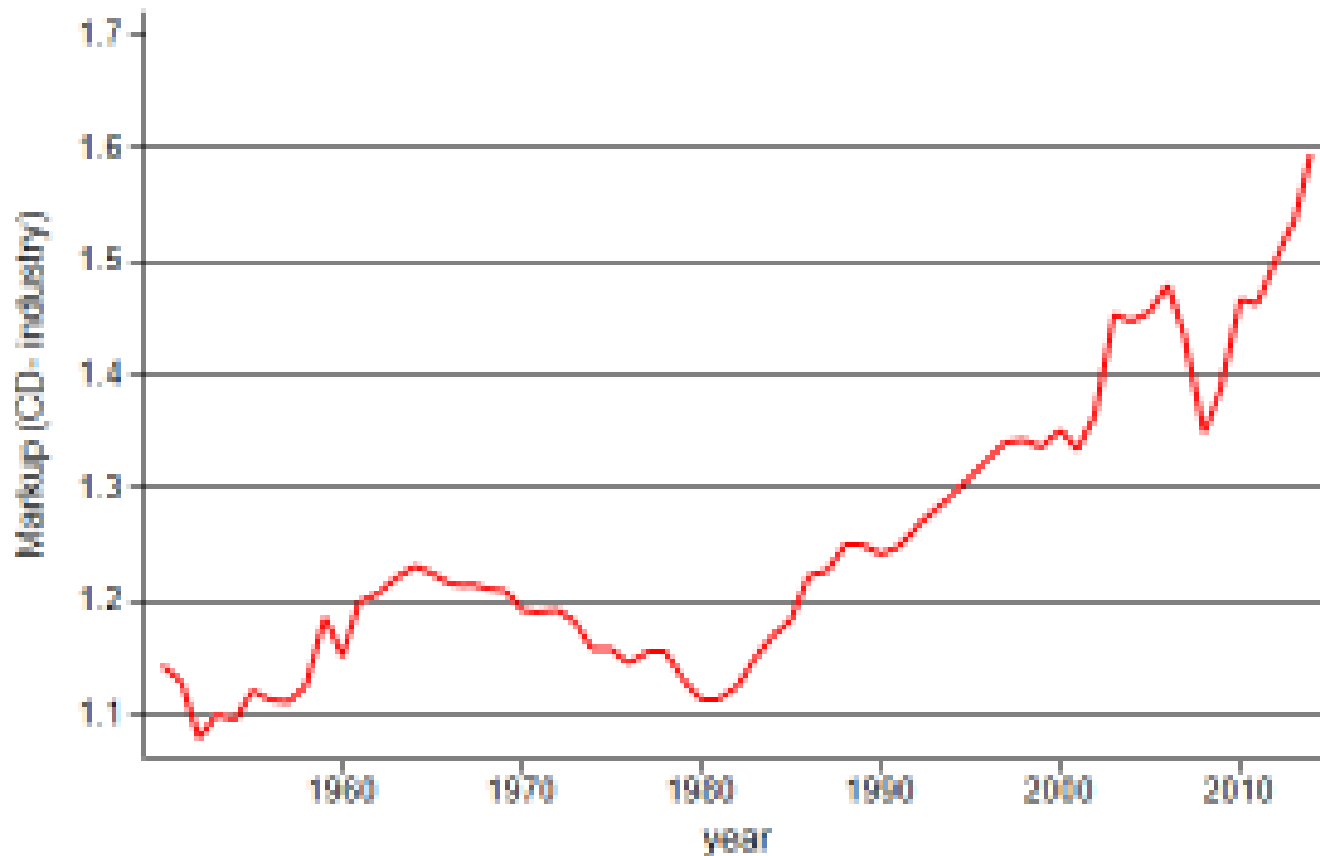
- Liberalization of input tariffs reduced costs of producers
- Cost reductions were not passed through completely to consumers in form of lower prices
- So profits increased
- In the short run, producers benefited more than consumers
- But firms with highest markup increases have the most new product introductions
- Potentially substantial dynamic gains through product innovation and higher product quality

# Evolution of Markups in India

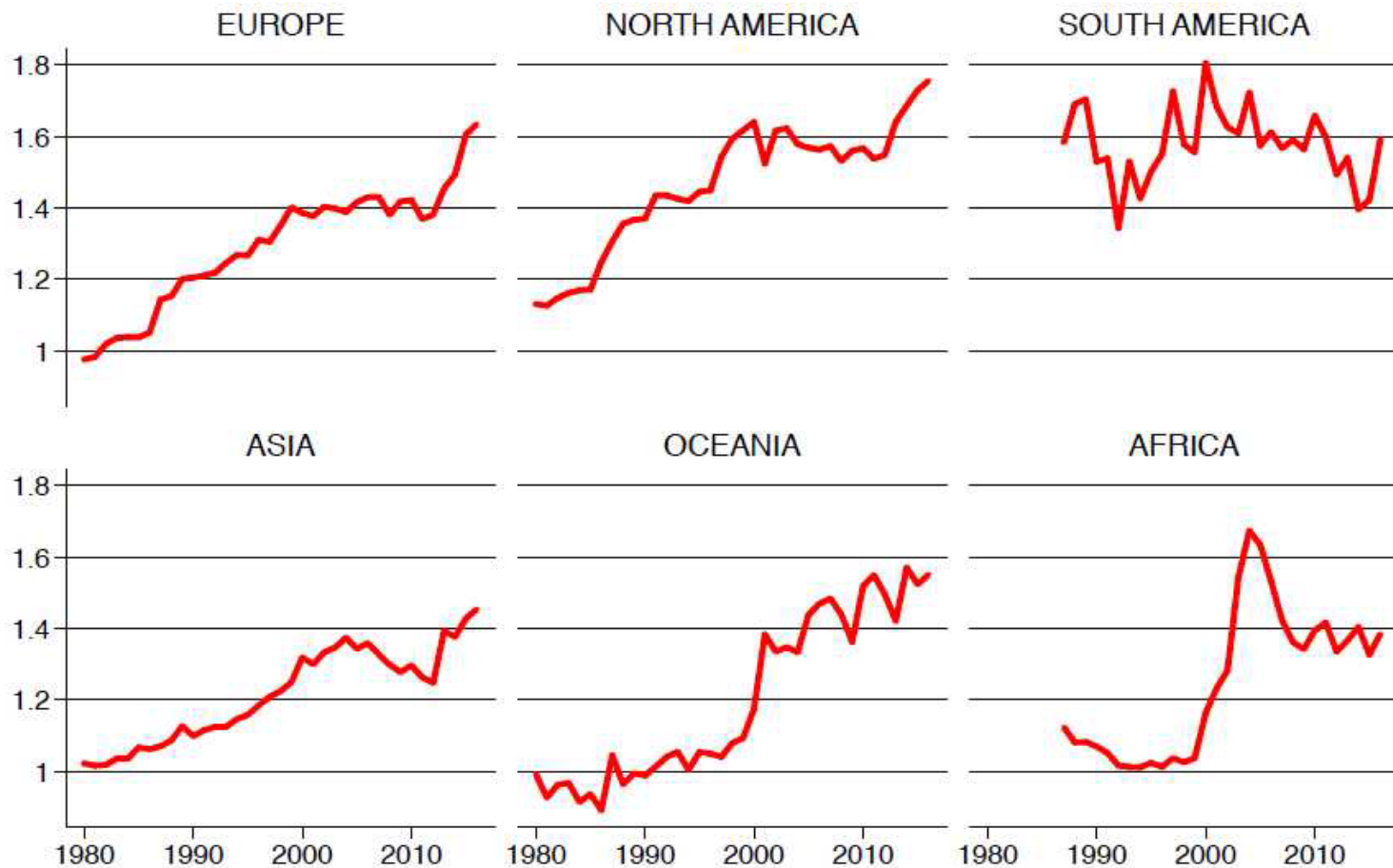


# Globalization and Rise in Markups

- Increase in Firm Profits (De Loecker and Eeckhout)
- Role of Globalization?



# The Rise in Global Market Power (other continents)

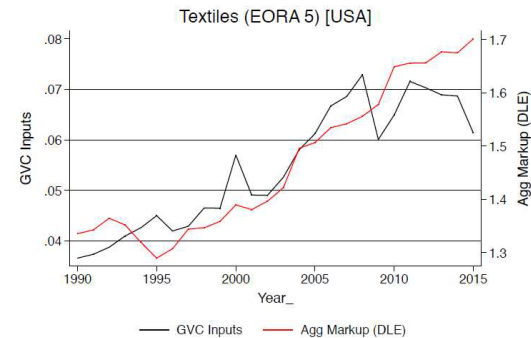
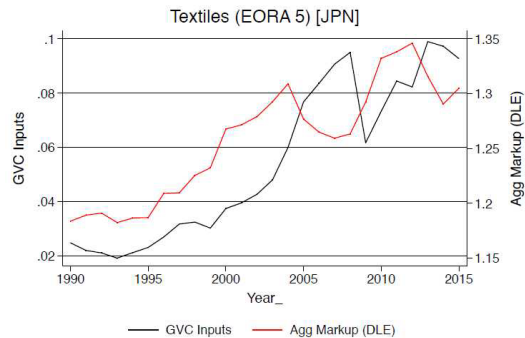
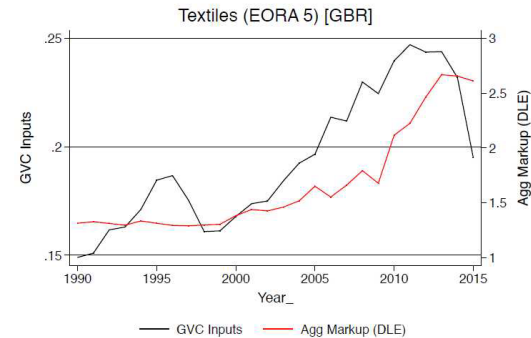
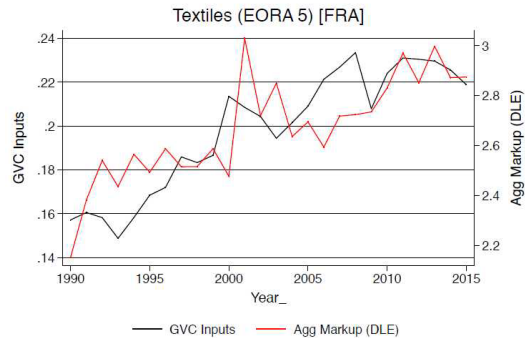
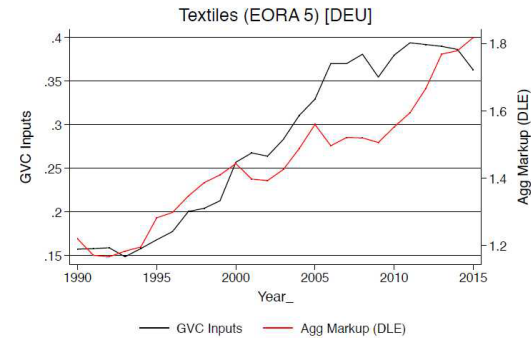
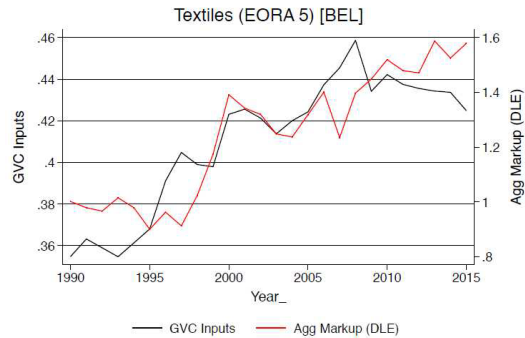


# Open Questions

- Did globalization contribute to the rise of markups worldwide?
- Did it contribute to the declining labor share?

# Global Value Chains and Markups (Textiles)

## World Bank, World Development Report 2020

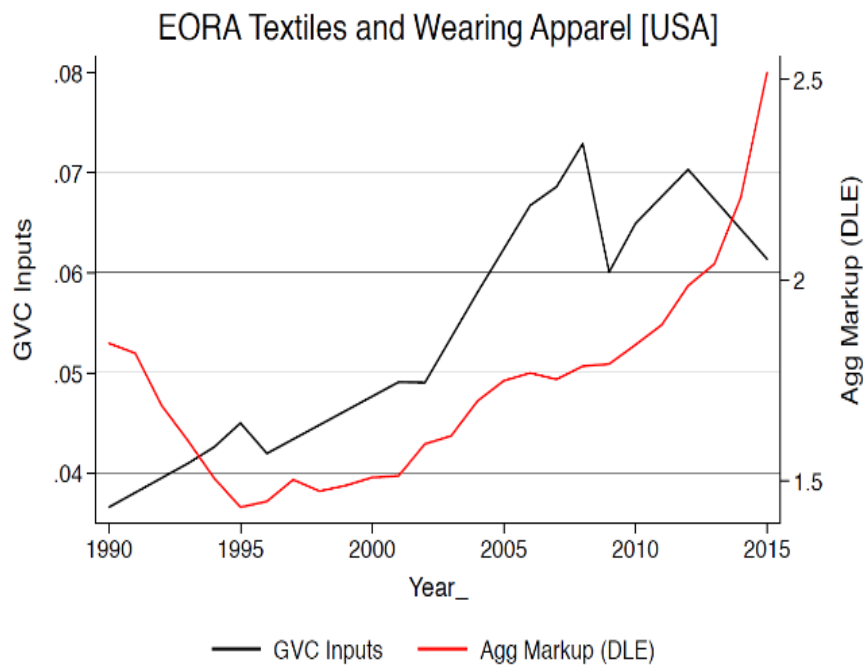




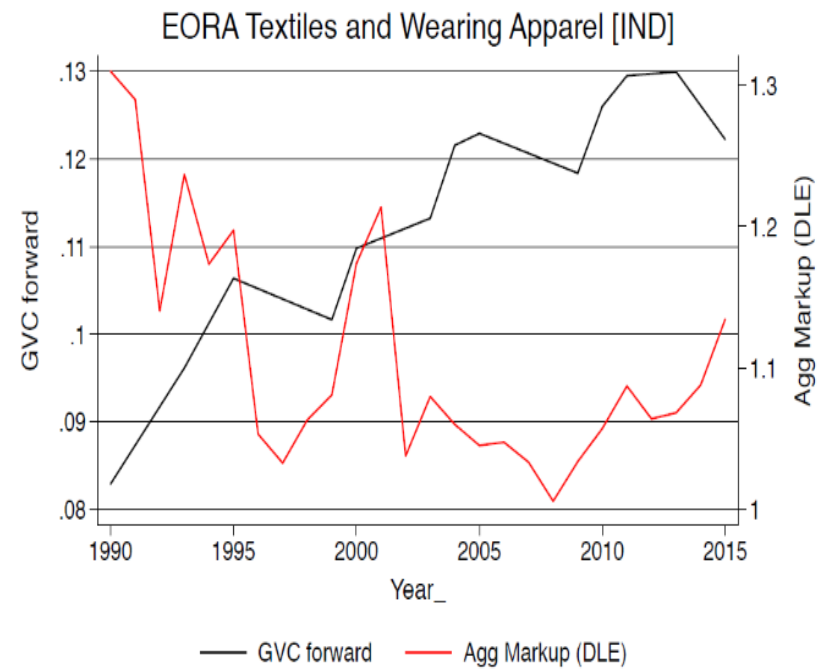
# Global Value Chains and Markups (Textiles)

## World Bank, World Development Report 2020

### a. United States

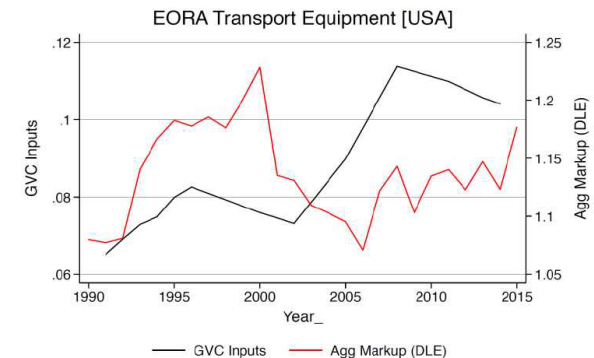
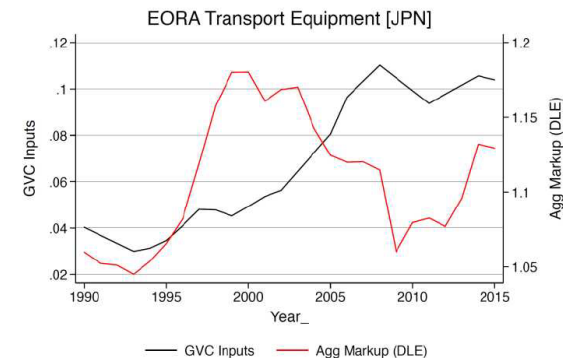
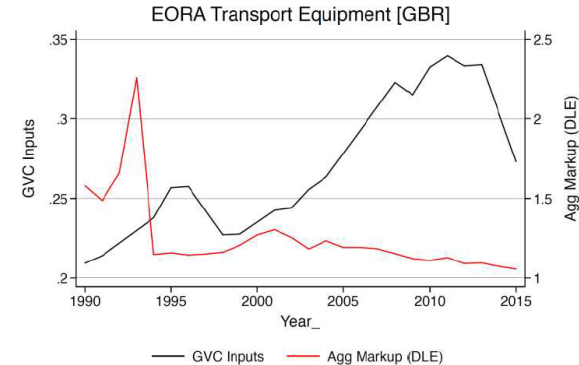
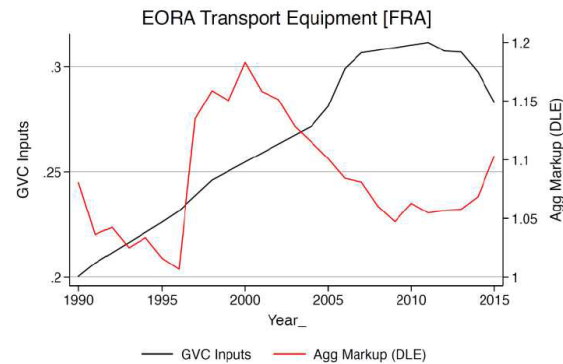
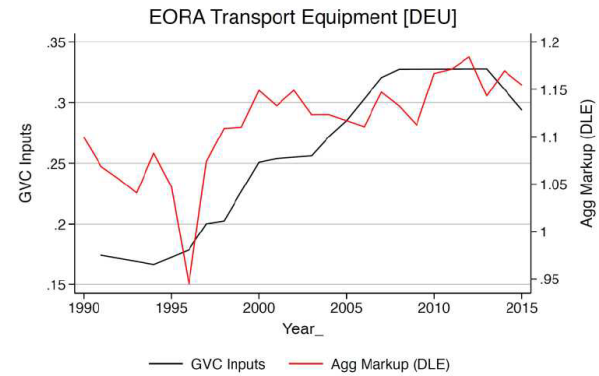
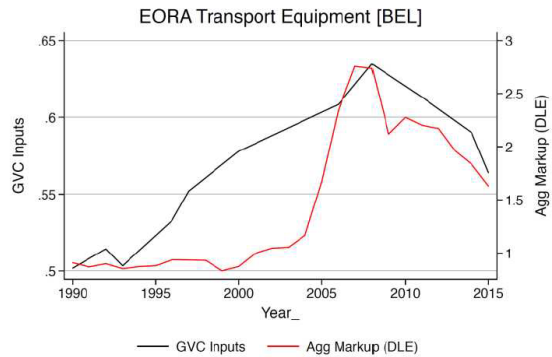


### b. India



# Global Value Chains and Markups (Transport)

## World Bank, World Development Report 2020



# Additional Evidence on Prices and Effects on Consumers

- Atkin, Faber and Gonzalez-Navarro (2018):
  - “Retail Globalization” in Mexico increases household welfare through lower prices and increased variety
  - But the richest households gain more
- Jaravel and Sager (2019):
  - Trade with China had led to large price declines
  - The price declines disproportionately benefit low-income consumers

# C. Conclusions and Policy Implications

- Globalization's effects have been uneven
  - Across countries
  - Across regions within countries
  - Across formal and informal workers
  - Across producers and consumers
- But statement: “Globalization has increased inequality” is unwarranted
- Depends on the dimension of inequality
- Globalization does cause disruption

# Conclusions (contd.)

## Policy Implications:

1. Need to focus on disruption and transitions rather than steady states
2. Recent findings offer potential justification for place-based policies
3. Rising firm profits, global value chains and emergence of global platforms raise important questions about taxation
4. International cooperation in areas other than trade needed more than ever

**THANK YOU!**



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