

Globalization in Crisis

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Road Map

A. Is Globalization in Crisis?

B. Causes of Crisis

- ☐ Perception that competition/trade has not been fair
- ☐ Increase in within-countries inequality
- ☐ COVID-19 ☐ Resilience of Global Supply Chains
- ☐ Invasion of Ukraine ☐ Geopolitics

C. Concluding Thoughts: Economic vs. Political Effects

Will draw on:

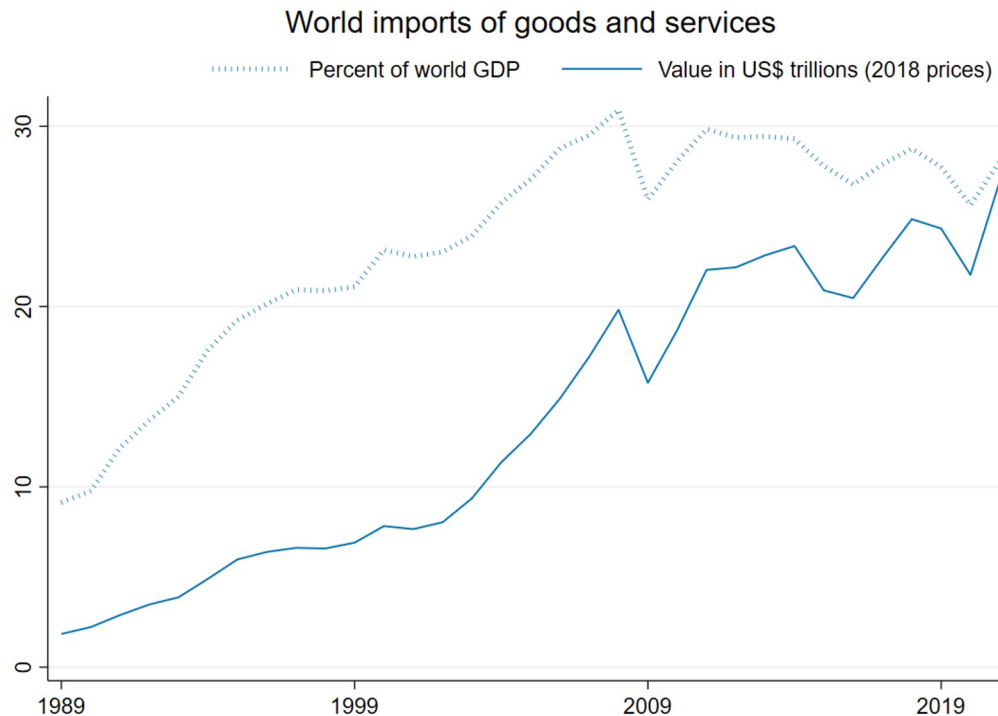
- Pinelopi K. Goldberg: *The Unequal Effects of Globalization*, MIT Press, August 2023.
- Pinelopi K. Goldberg and Tristan Reed: “*Is the Global Economy De-globalizing?*”, Brookings Papers on Economic Activity (BPEA), March 2023.

A. Is Globalization in Crisis?

Two Contrasting Trends:

❓ On one hand:

Aggregate Data: Slowdown but not reversal of trend



- Aggregate trend driven to a large extent by China and India.
- Regional and multilateral agreements in parts of the world, especially in Asia and Africa (ASEAN; RCEP; CPTPP; AfCFTA)

On the other hand:

- Emerging evidence on reallocation of GVCs at a more granular level
- Reversal of Decades-Old Liberalization Agenda and multilateralism in the US and UK
 - ❑ Brexit Vote: 2016
 - ❑ US Tariffs and US-China Trade War: 2018-present
 - ❑ Appellate Body Crisis and Paralysis of WTO since end of 2019 (but problems evident earlier)
 - ❑ Industrial Policy in the US (CHIPS Act; IRA)
 - ❑ Export Restrictions targeting China
 - ❑ Calls for Re- or Friendshoring.
- National Security takes precedence over Economic Welfare

Big Changes in Public Sentiment

- In 2018-19, public still viewed trade as beneficial to the economy, despite concerns about employment and wages
PEW Global Attitudes Surveys, see Dorn and Levell Chapter in Deaton Review:
<https://ifs.org.uk/inequality/trade-and-inequality-in-europe-and-the-us/>
- In 2022: Concerns about resilience; geopolitics; demands for re- and friendshoring. National security first-order concern



New Era!

Indicatively: Economists' Poll by Chicago Booth's IGM

- In March 2018, 100% of the respondents were against Trump tariffs:
<https://www.igmchicago.org/surveys/steel-and-aluminum-tariffs/>
- In January 2022, 76% of the respondents showed skepticism towards sourcing inputs from abroad:
<https://www.igmchicago.org/surveys/global-supply-chains/>

❑ We can debate what ***Deglobalization*** means

BUT:

❑ Globalization as experienced up to 2016 is over

❑ Different kind of “globalization”: Globalization and Fragmentation go hand in hand

B. Causes of Crisis

THREE Phases

	Years	Drivers/Concerns about	Consequences
Phase 1	2016-2020	Unfair competition b/w countries Labor market disruption Regional inequality	Brexit Trump Tariffs Trade: robust
Phase 2	2020-2022	Supply chain resilience Catalyst: COVID-19	None Trade: robust
Phase 3	2022-present	National security Resilience to geopolitical risks Catalyst: Invasion of Ukraine	Decoupling from Russia (in Europe and US) and China (in the US) Trade: ???

Phase 1

Drivers

See P. Goldberg: “*The Unequal Effects of Globalization*”, MIT Press, August 2023.

- Perception that competition b/w countries has not been fair
- Decline in *Global Inequality* has come at the expense of increase in *Within-Country Inequality* (Branco Milanovic 2016)

Unfair Trade?

- 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
- Rise of “behind the border” restrictions
- Most complaints targeted towards China

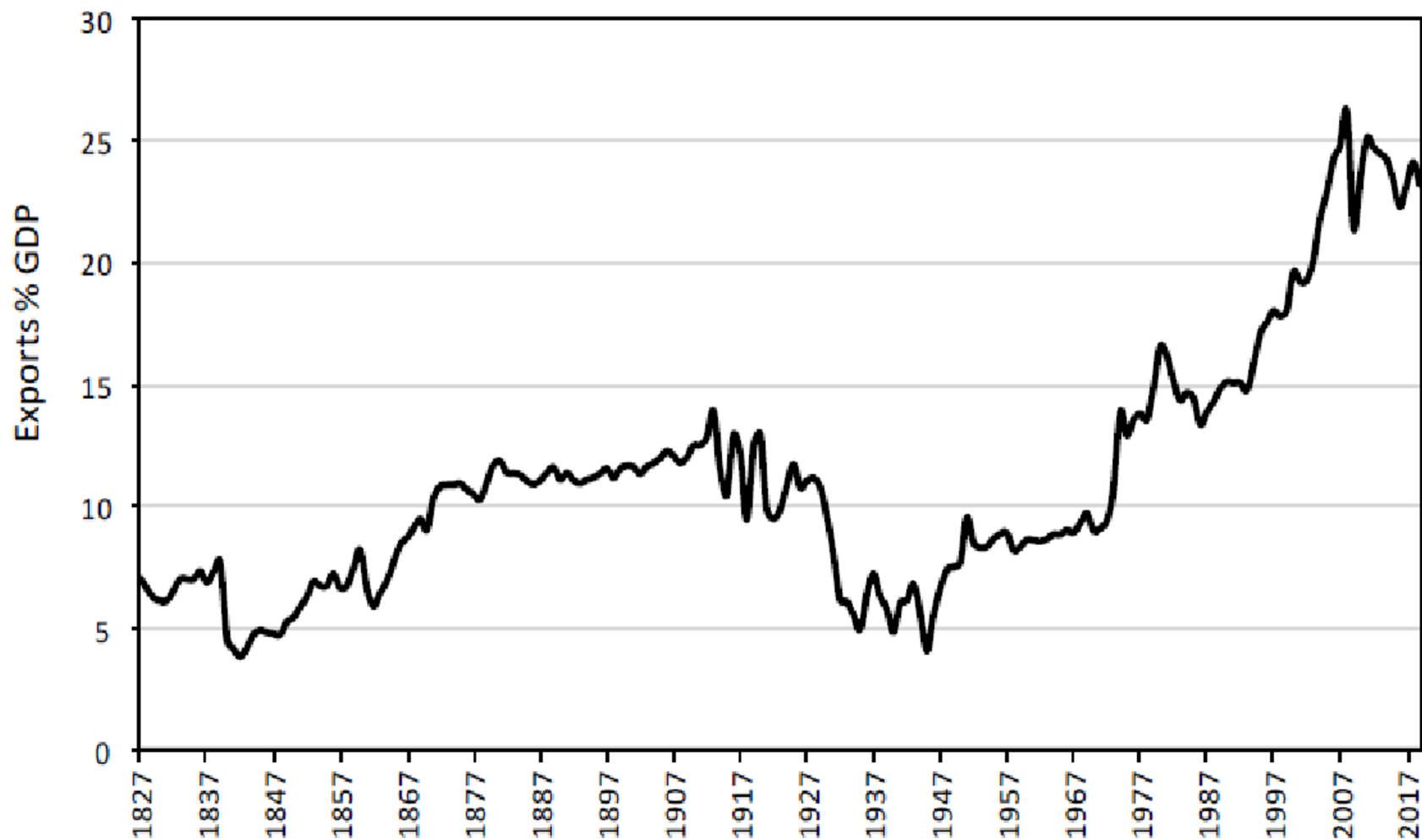
The Inequality “Tradeoff”

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 in global poverty reduction

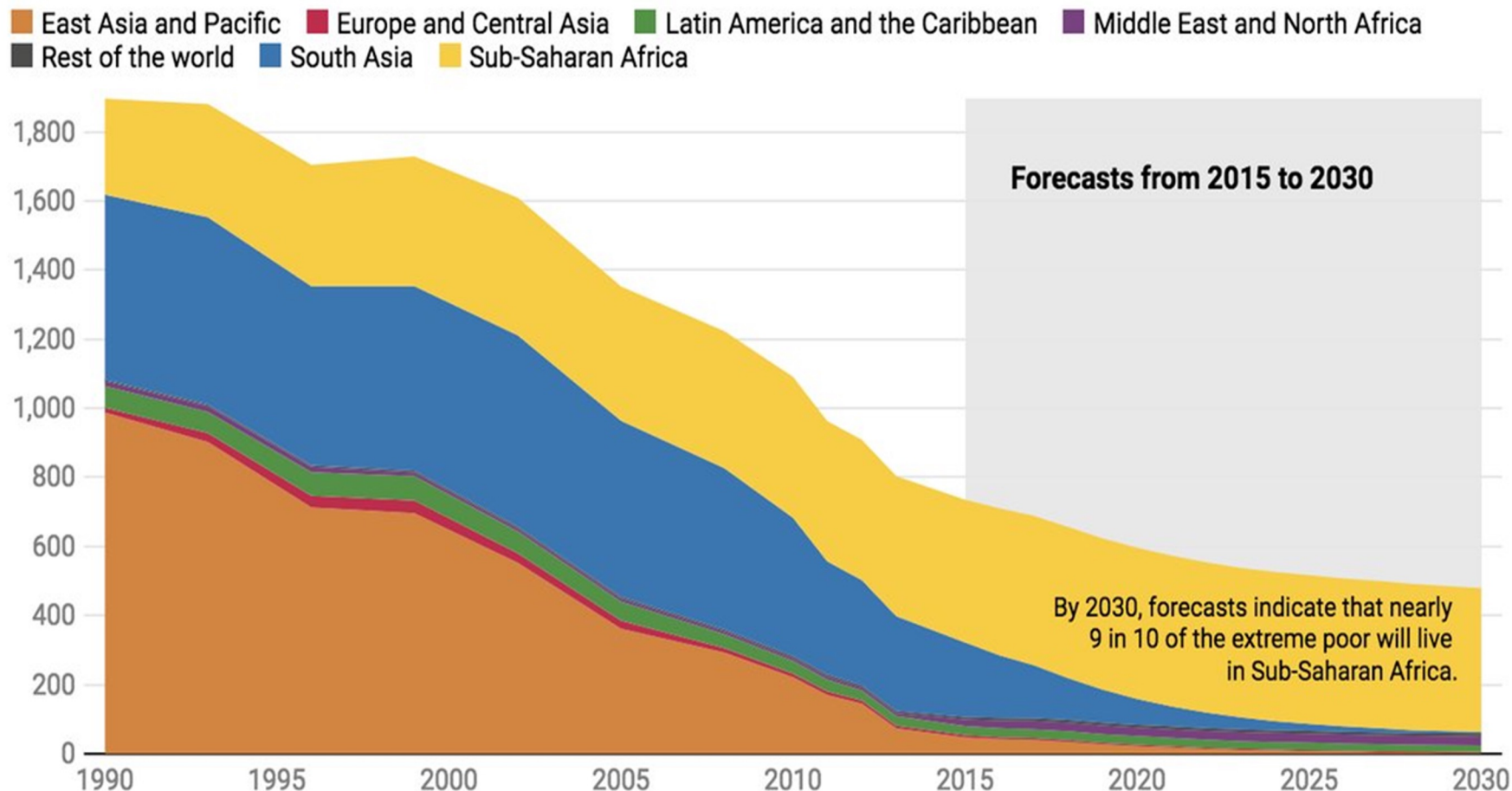
The Age of Globalization

World Exports as % of GDP, 1827-2019



The Decline in Global Poverty

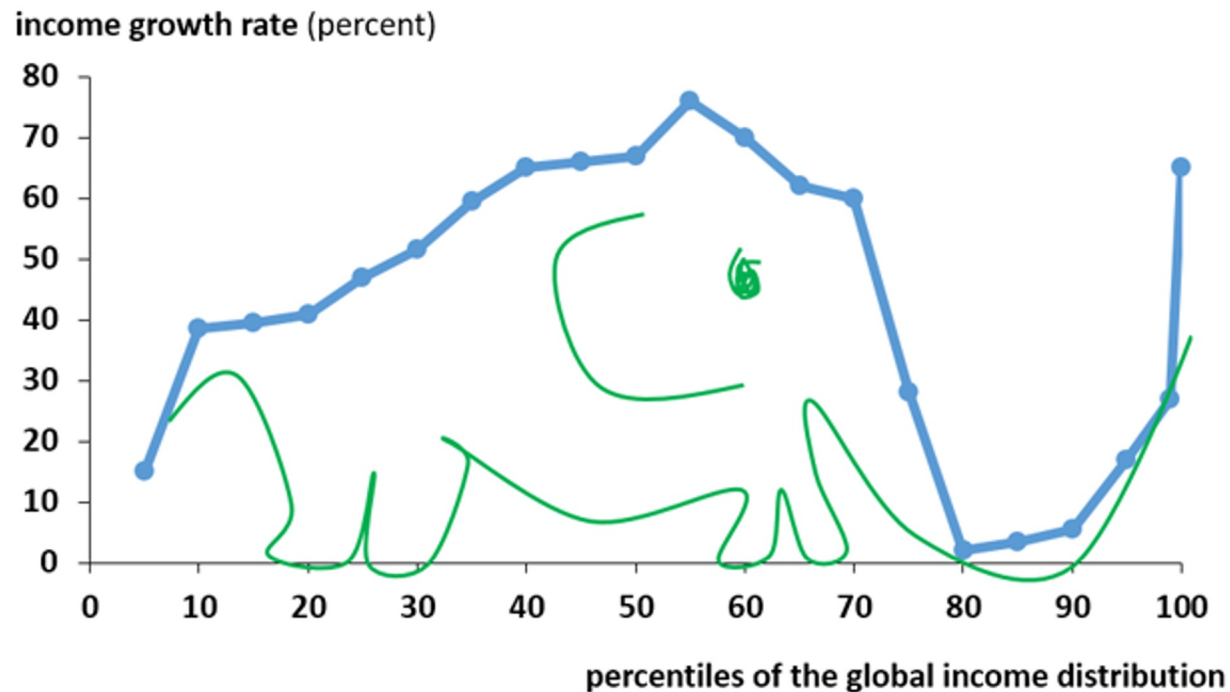
People in extreme poverty (millions)



Source: [World Bank PovcalNet and Poverty & Equity Data Portal](#)

The (old) Elephant Curve

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

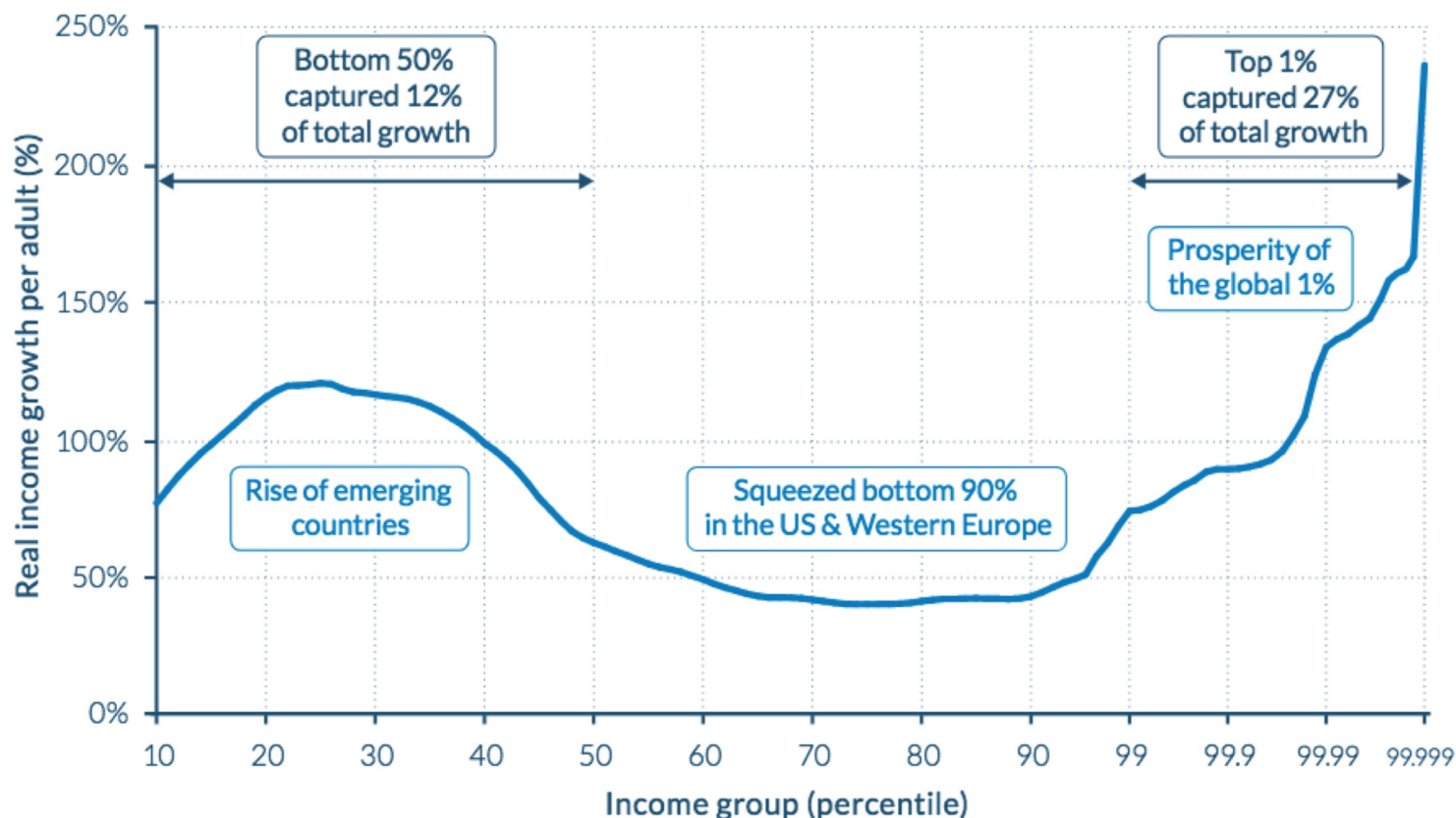


Source: Branko Milanovic and C. Lakner. Elephant added by C. Freund.

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 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.

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?

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

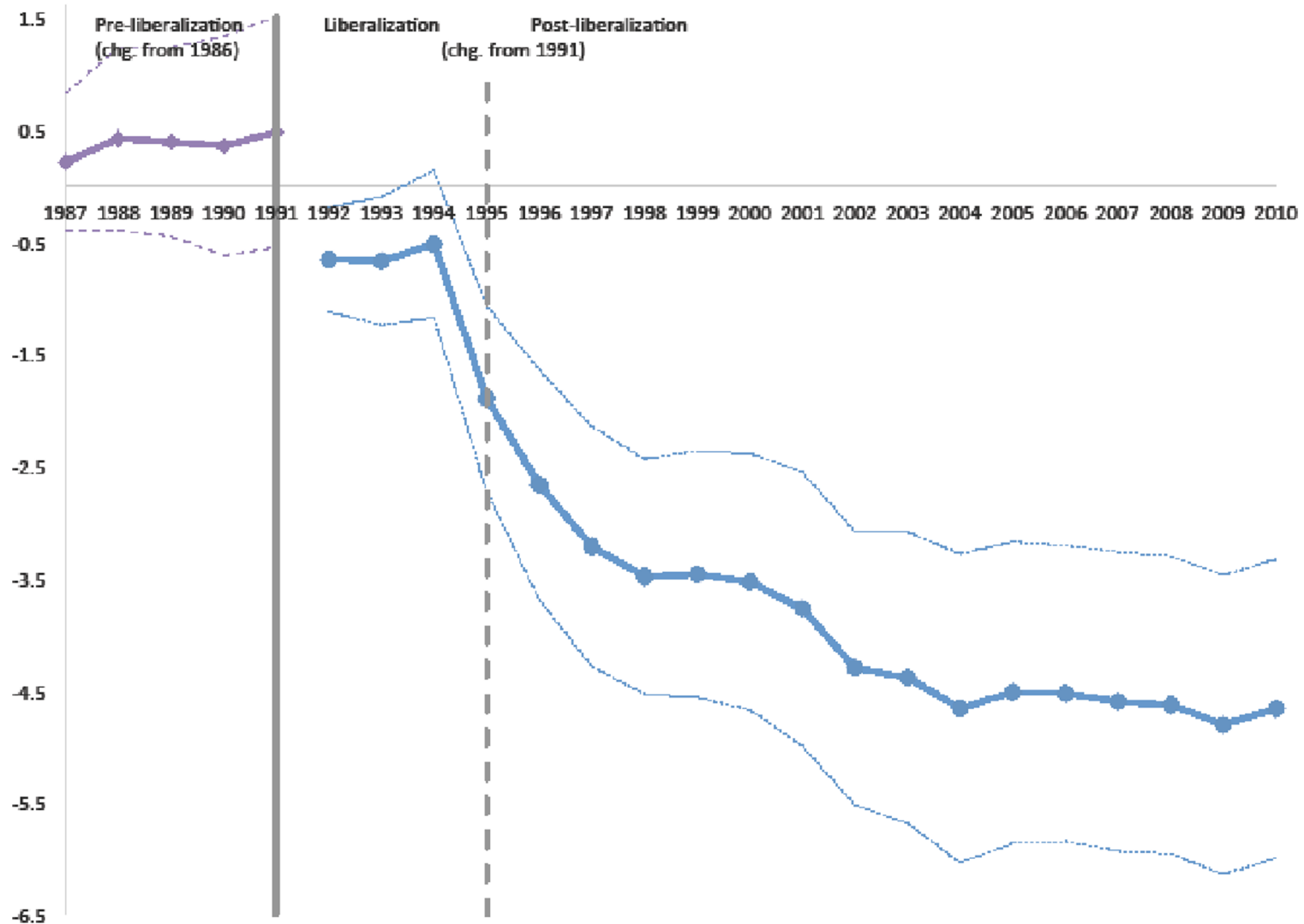
Shifting Consensus in the 2000s

- Trade is a potentially important driver of inequality
- Why?
 - China
 - Shift of focus from Skill Premium to Spatial Inequality

The Significance of Spatial Inequality

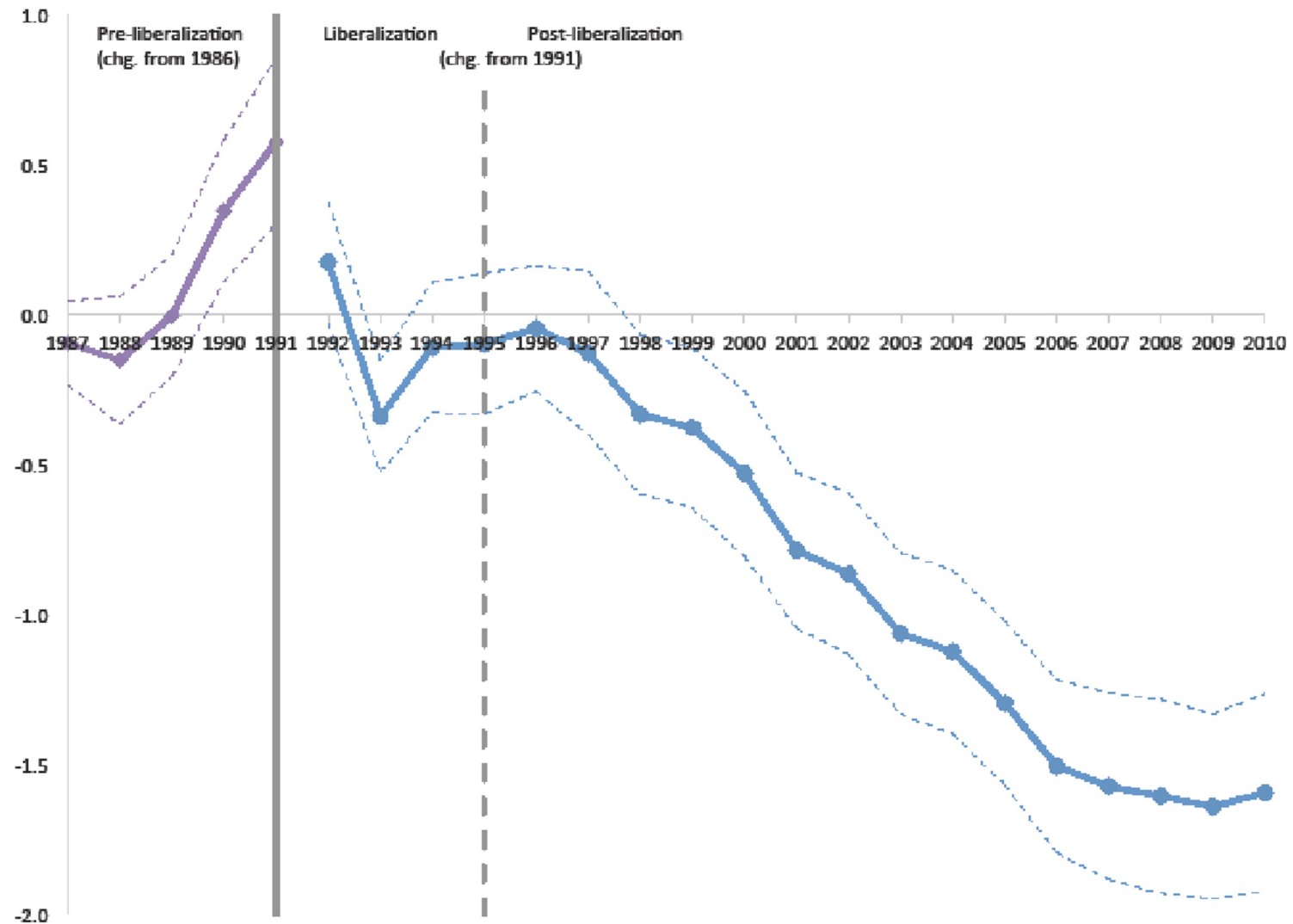
- Evidence from developing countries (Topalova, Dix-Carneiro and Kovak)
- In the US:
 - Autor, Dorn and Hanson focus on the China shock and inequality across commuting zones.
 - Choi, Kuziemko, Washington and Wright on NAFTA and counties.
- In several European countries:
 - Dorn and Levell (Deaton Review, 2021): Effects differ across countries (US, UK and Spain vs. Germany or Switzerland).

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



Effects of Brazilian Trade Liberalization on Earnings

(Dix-Carneiro and Kovak, 2015)



Main Insights

- Effects are not short-lived. They persist.
- The “long-run” is very long (up to two decades)
- Effects are not confined to labor markets
 - Adverse effects on education; child labor; crime

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 limited.
- Two questions of interest:
 - Do prices respond to trade barriers?
 - If so, do price changes affect households in different parts of the income distribution differently?

Do Prices Fall (Rise) when Trade Barriers Decline (Increase)?

Evidence from Developing Countries:

De Loecker, Goldberg, Khandelwal and Pavcnik (ECMA 2016):

- ☐ Trade Liberalization reduced prices
- ☐ It increased quality
- ☐ Led to greater product variety
- ☐ But increased firm profits. Reason:
- ☐ Cost reductions were not passed through fully to prices
- ☐ Benefits to consumers in the form of lower prices smaller than predicted by models of perfect competition or constant markups

Evidence from the US:

☐ Recent Trade War b/w US and China

(Amiti et al; Carvalho et al; Fajgelbaum et al)

☐ Prices increase one for one with tariffs

☐ In contrast to India (incomplete passthrough), here complete passthrough

Conclusion: Prices do respond to tariff barriers, but not always in full proportion

Differential Effects on Low- vs. High-Incomes?

- 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 (2023):
 - ❑ Trade with China had led to large price declines
 - ❑ The price declines disproportionately benefit low-income consumers
- Dorn and Levell (Deaton Review, 2022):
 - ❑ Brexit and the China “shock” had price effects, but they were uniform across the income distribution.

In Conclusion

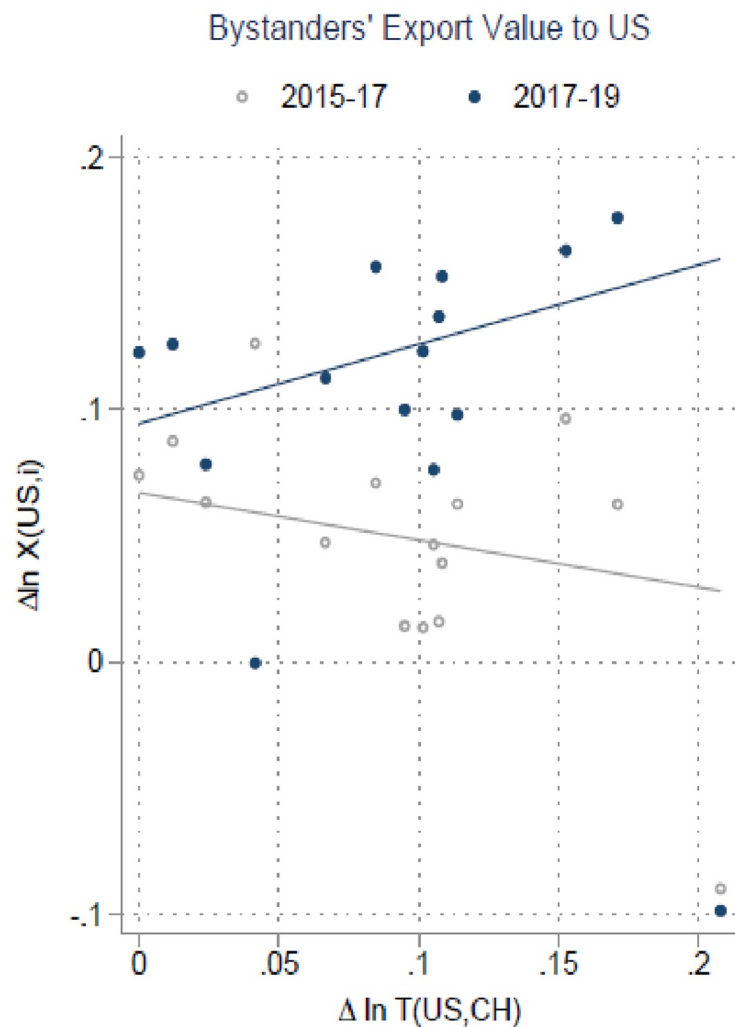
- Evidence on distributional effects of prices mixed.
- But agreement that price effects are present
- These are more likely to affect low-income households given that these save less (spend a higher fraction of their income on consumer goods)
- But at any rate:
Price Effects Less Salient than Employment and Wage Effects
- Even if households have benefited from trade in the form of higher REAL wages, perception that they were hurt by trade dominant.
- **AND: Spatial Effects Large and Persistent!**

Phase 1

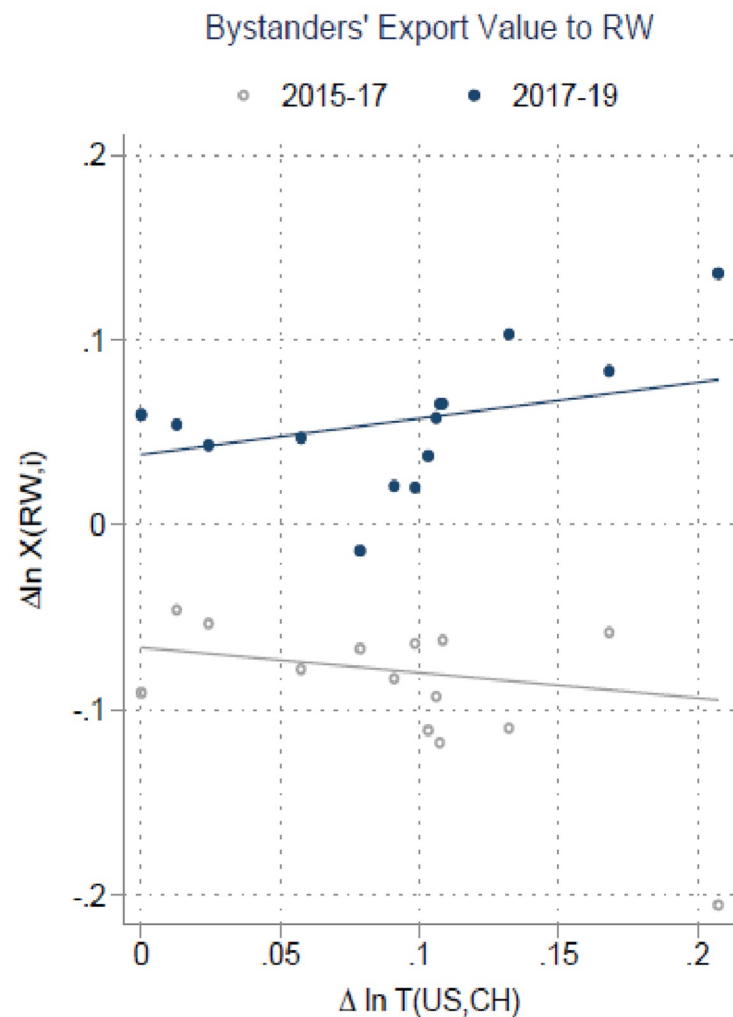
- **Consequences**
 - Brexit
 - US-China Trade War

Effects of US-China Trade War on Global Trade Flows

Fajgelbaum et al (2023)

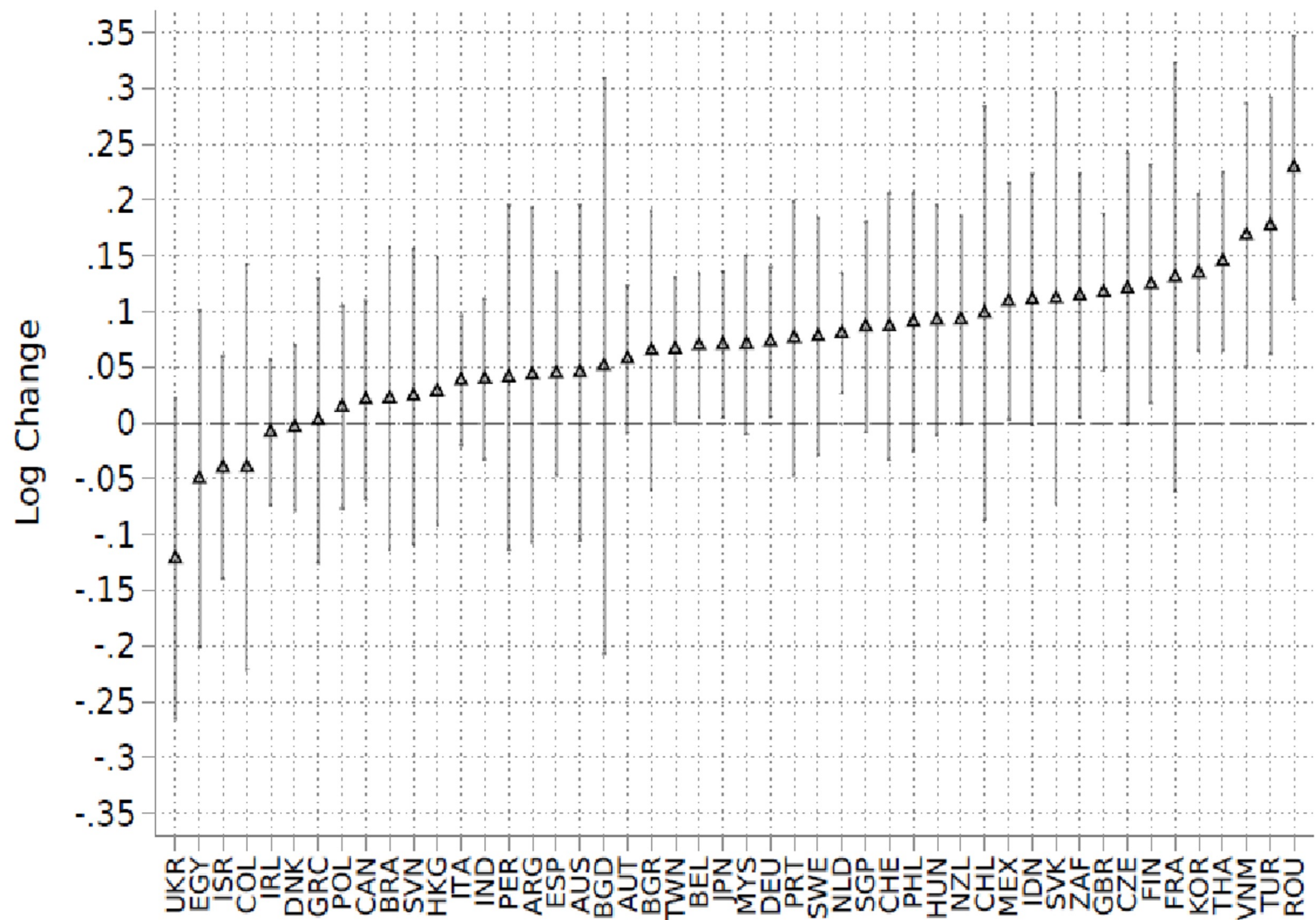


Pre-period: $\beta = -0.19$ (0.10). Post-period: $\beta = 0.31$ (0.10).



Pre-period: $\beta = -0.14$ (0.08). Post-period: $\beta = 0.20$ (0.08).

“Winners” of the Trade War



Consequences

- Strong rhetoric and heightened uncertainty
- BUT: little effect on actual trade
- In fact, the US-China trade war *increased* global trade in the targeted products
- Perhaps most important effect: Stepping Stone
Laid the groundwork for subsequent shift in policy.

Phase 2

Drivers

Novel argument: Fragility of Global Supply Chains

- ☐ A chain is as strong as the weakest link
- ☐ Made before (Japan Earthquake 2011)
- ☐ But gained new significance: Demand for Resilience

Evidence at odds with this argument

But what is “Resilience”?

Markus Brunnermeier (2021), *The Resilient Society*:

“Bend but not Break”

(Reed vs. Oak)

- ❖ But how do we operationalize this notion?
- ❖ And how do we benchmark it? What is the desired level of resilience?

❓ Conceptual Issues

Resilience can only be evaluated with respect to specific shocks

- Supply, Demand, or Both
- Sector- , Country-specific, or Both
- Idiosyncratic or Systemic

Note that COVID-19 was:

- ☐ Both supply and demand shock
- ☐ Global (though not synchronized across countries)
- ☐ Arguably, the largest global shock post World War II.

Judged by the “bend but not break” criterion, the world economy proved incredibly resilient during 2020-22 and international trade contributed to this resilience!

Resilience and Trade during COVID-19

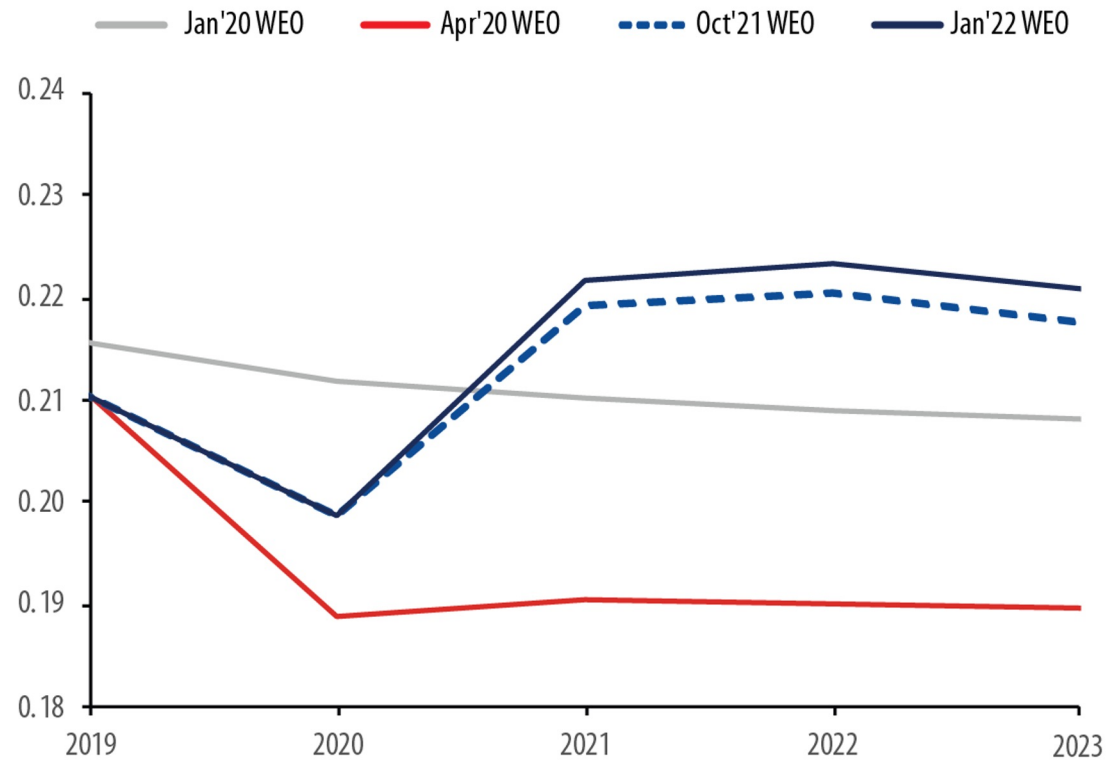
- Trade volumes declined during 2020, but rebounded in 2021
- Firm-to-firm import relationships were not disrupted though import volumes declined (Goldberg and Reed 2023)
 - Imports were bent but not broken
- Because COVID waves were not synchronized across countries, imports of PPE eased domestic bottlenecks.

According to the IMF:

Post-pandemic trade relative to GDP

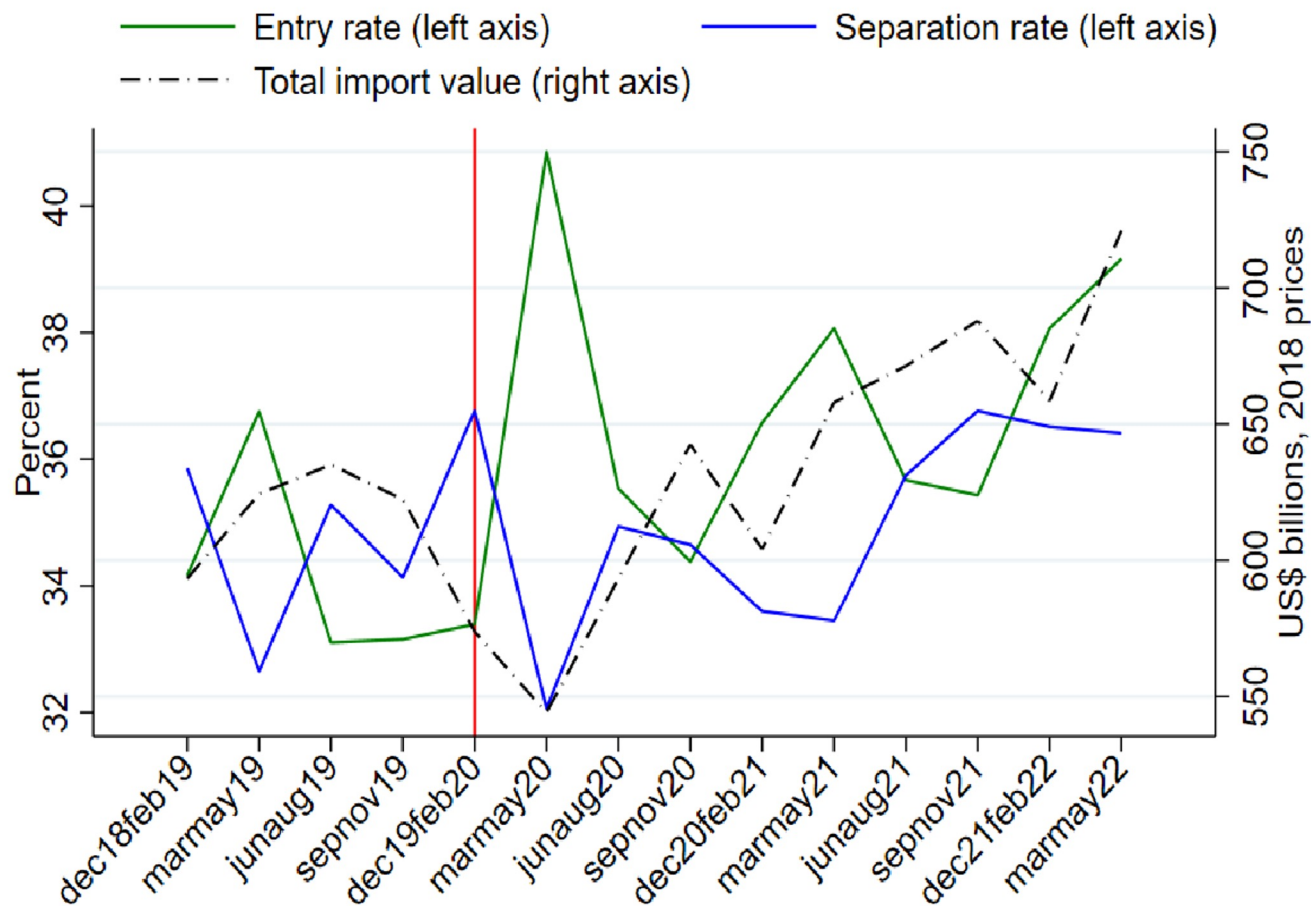
Even calculating trade as a share of world economic output, the initial projections were overly pessimistic.

(value of imported goods globally/nominal GDP, fraction)



Source: IMF, *World Economic Outlook* (WEO).

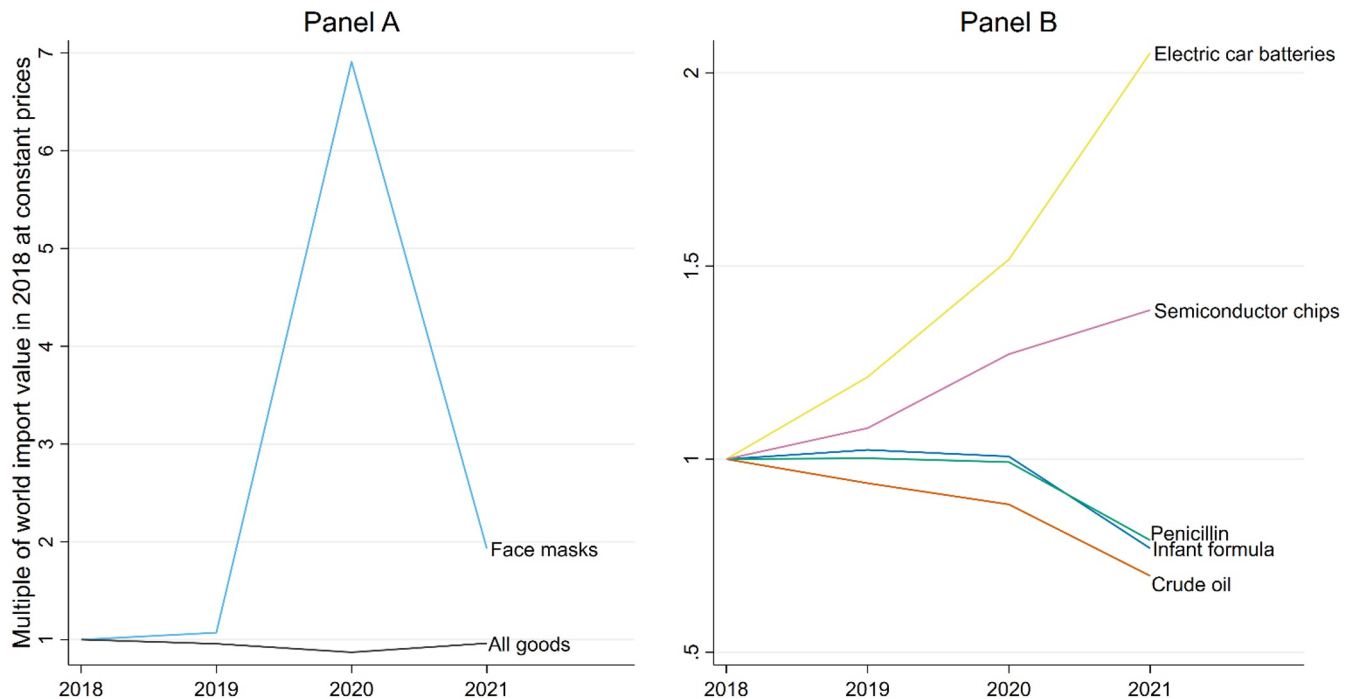
U.S. Firms' Relationships With Foreign Suppliers During COVID



Source: Panjiva, US Census, BLS

Notes: The vertical red line indicates the quarter before the Covid-19 pandemic begins. The entry rate measures the percent of suppliers that are new in the current period, and the separation rate measures the percent of suppliers from the last period that no longer supply in the current period. Total import value is the value of goods imports (not seasonally adjusted) reported by the Census deflated by the import price index for all commodities.

Imports of some critical goods during COVID-19



Source: COMTRADE, U.S. Bureau of Labor Statistics (BLS)

Additional Evidence on Resilience and Trade

- Khanna, Morales and Pandalai-Nayar (2022): Firm-to-firm relationships were less disrupted in India when products were complex
- Stumpner (2022): Regional lockdowns in China (with the exception of the one in Shanghai in April 2022) had no effect on international trade
- Bonadio et al (2021):
 - For 64 countries, GDP drops by 29.6% on average during the pandemic
 - But only a small fraction (less than a quarter) can be attributed to foreign shocks
 - Contraction would have been much worse without international trade (reason: domestic inputs were also affected!)
- World GDP contracted by 3.2% in 2020 , but increased by 5.9% in 2021
 - GDP bent, but not broken

Evidence consistent with a point made by Caselli, Koren, Lisicky, and Tenreyro (*QJE* 2020):

- Does trade make an economy more or less resilient to shocks (in the sense of being exposed to volatility)?
- Answer depends on whether the shock is country- or sector-specific
- In recent decades, country-specific shocks dominate the data
- As a result, trade has made economies MORE resilient

☐ Resilience cannot be judged without reference to the type of shock!

Consequences

- Not consequential. Trade rebounded in 2021!
- If it had not been for the invasion of Ukraine, we may have gone back to normal
- BUT: A Further Stepping Stone

**Attitudes towards trade are shifting.
International Specialization can be a liability.**

Phase 3

Drivers: ???

But: Catalyst=Invasion of Ukraine

- ❑ Exposed fragility of trade to geopolitical risk
- ❑ Risks of excessive international specialization, i.e., concentration in the imports of critical products (European energy imports from Russia)
- ❑ *By analogy*: The US may be equally vulnerable to risks associated with China.
- ❑ National Security: Primary Concern!
 - ❖ Focus on Dual Goods: Goods that have both military and civilian use

Question: How Concentrated Are Markets for Imports?

Answer:

- Markets For Critical Goods Are Very Concentrated
- But imports are already coming from “friendly” countries
- Friends: In government surveys, more than 50% of Americans classify the country as a “friend” or “ally”. High overlap with voting on UN resolutions.

Question: How Concentrated Are Markets for Imports?

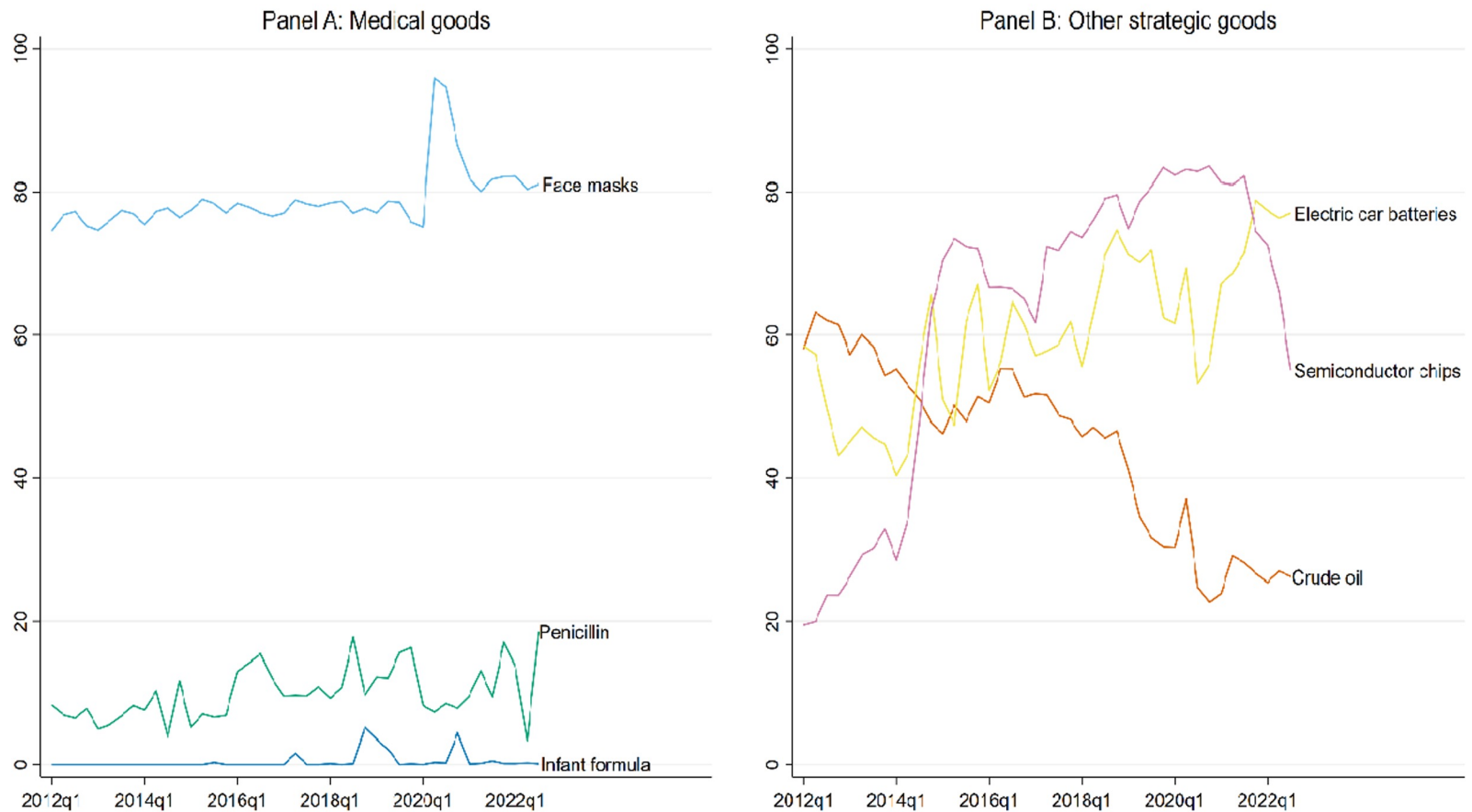
Answer: Markets For Critical Goods Are Very Concentrated

Table A1: Top Five US Import Sources for Strategic Goods in 2022

Partner	Percent of Imports	Value of Imports (US\$ millions)	Partner	Percent of Imports	Value of Imports (US\$ millions)	Partner	Percent of Imports	Value of Imports (US\$ millions)
Infant formula (630790)			Penicillin, put up in measured doses (300410)			Electric car batteries (850760)		
IRL	45.2	101.2	IND	25.3	89.2	CHN	65.2	6,537.7
MEX	30.3	67.9	SWE	18.2	64.1	ROK	9.3	931.9
AUS	7.2	16.2	ITA	17.2	60.8	JPN	7.6	762.5
GBR	6.4	14.3	AUT	12.6	44.4	HUN	3.3	328.4
NZL	4.3	9.6	CHN	5.4	19.2	POL	3.3	326.1
Crude oil (270900)			Face masks (HS 190110)			Semiconductor chips (854231)		
CAN	58.1	92,565.7	CHN	72.6	3,541.6	MYS	46.3	8,682.2
MEX	10.5	16,754.3	MEX	9.5	465.1	TWN	10.3	1,930.6
SAU	7.9	12,614.3	VNM	3.8	186.1	VNM	9.4	1,772.3
COL	4.0	6,443.9	IND	2.9	140.5	IRL	7.8	1,464.8
IRQ	3.7	5,912.8	DOM	1.3	61.1	CHN	6.5	1,212.2

Source: US Census Bureau (2022).

Percent of US Imports from 'non-friendly' countries



Source: YouGov (2017). US Census Bureau (2022).

Notes: Countries are classified as unfriendly if less than 50 percent of Americans believe country is a friend or ally. Imports are identified with six-digit Harmonized System (HS) codes: face masks (630790), penicillin (300410), infant formula (190110), crude oil (270900), electric car batteries (850760), and semiconductor chips (854231).



Valid Arguments for Diversification!

BUT:

- China (80% import share in masks) alleviated shortages during COVID-19
- Decoupling from China may imply resilience to geopolitical risk, but not resilience to a health shock
- Main import sources are often “friendly” countries (e.g., Canada and Mexico for Crude Oil; Ireland and Mexico for Infant Formula)
- Problem with “Dual Goods”: Every good can be dual (Clothes for soldiers? Food?)

Further Issues

- “Friendliness” is not constant over time.
- Cultural bias
- Example: In the US, Indonesia, Vietnam and Malaysia are currently perceived as “unfriendly.” Strong pro-European bias in survey responses.
- Use of goods and national security threats cannot be easily verified without security clearance.
- As economists/social scientists we are trained to judge policies based on their welfare, efficiency, inequality effects.... Not based on their implications for national security.

In general: Any policy that is justified by appealing to concepts that are not well defined/benchmarked (i.e., resilience) or not easily verifiable by non-government agents (i.e., national security) should make academics and independent thinkers more generally highly uncomfortable!

C. Concluding Thoughts: Consequences

- Globalization survived the financial crisis, Trump Tariffs, US-China Trade War, COVID-19
- Slowdown of trend, but not reversal
- But now we are at the dawn of a new era
 - ❓ New Cold War with Trade as the Weapon!
- Invasion of Ukraine was the catalyst. But real drivers?
 - ❓ Rise of geographical inequality within advanced countries a likely cause
- Uncharted territory. But history suggests reasons to be alarmed ❓ pre-belligerence period before World War II
- Economic effects real but manageable ❓ Fragmentation will reduce global efficiency
- But political effects potentially much more severe. Trade and peace go hand in hand. Wars (economic or military) do not contribute to prosperity.

THANK YOU!