# Trade in the Time of COVID-19

**Introductory course:**
**The Economics of COVID-19 in Developing East Asia and the Pacific**
**November 2021**

THE WORLD BANK
East Asia & Pacific · Chief Economist

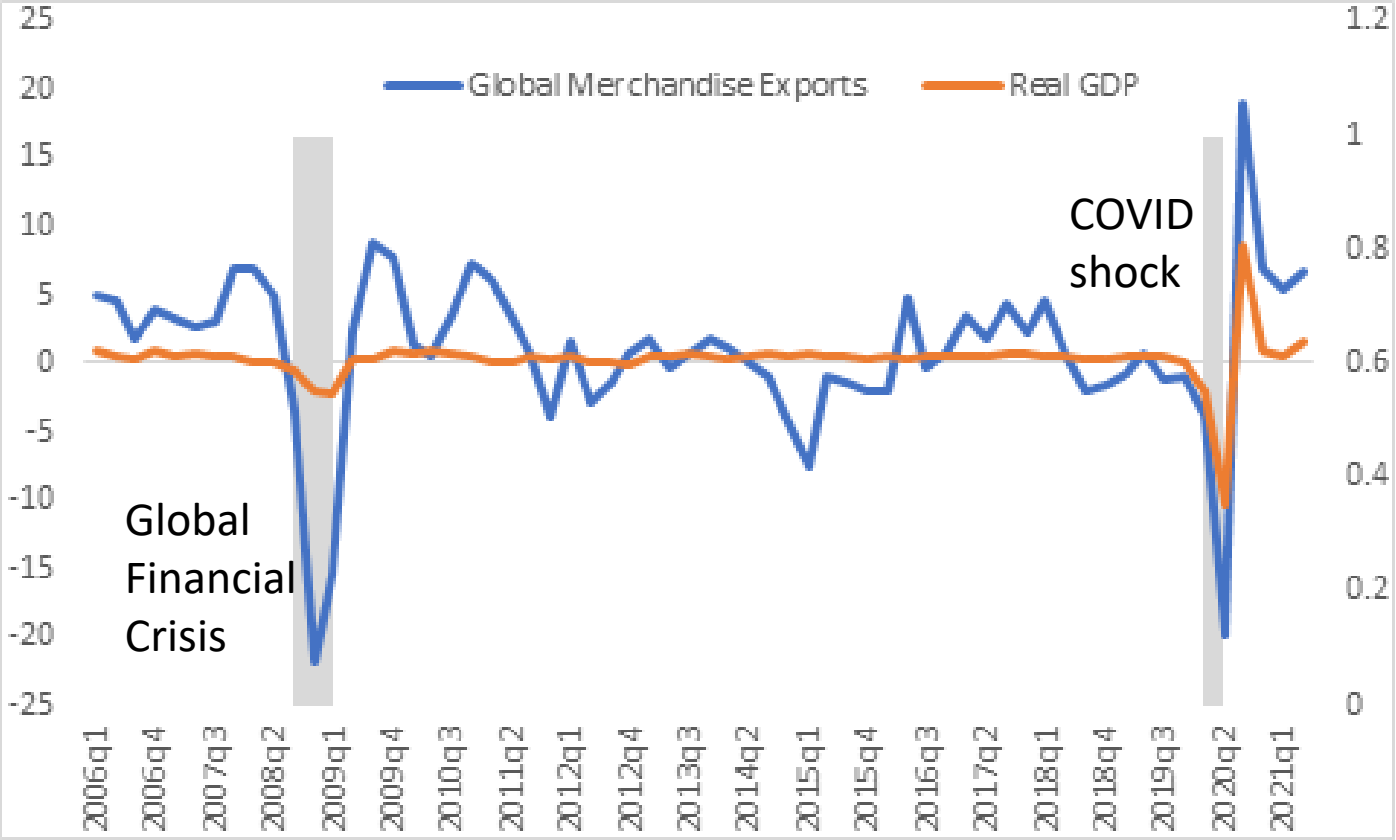
# Roadmap of the Presentation

- Understanding the short-term trade impact of COVID-19
- Anticipating the longer-term trade impact of COVID-19
- Designing trade policy in the COVID-19 era

# Short Term Impact

# Fact 1: Trade collapse

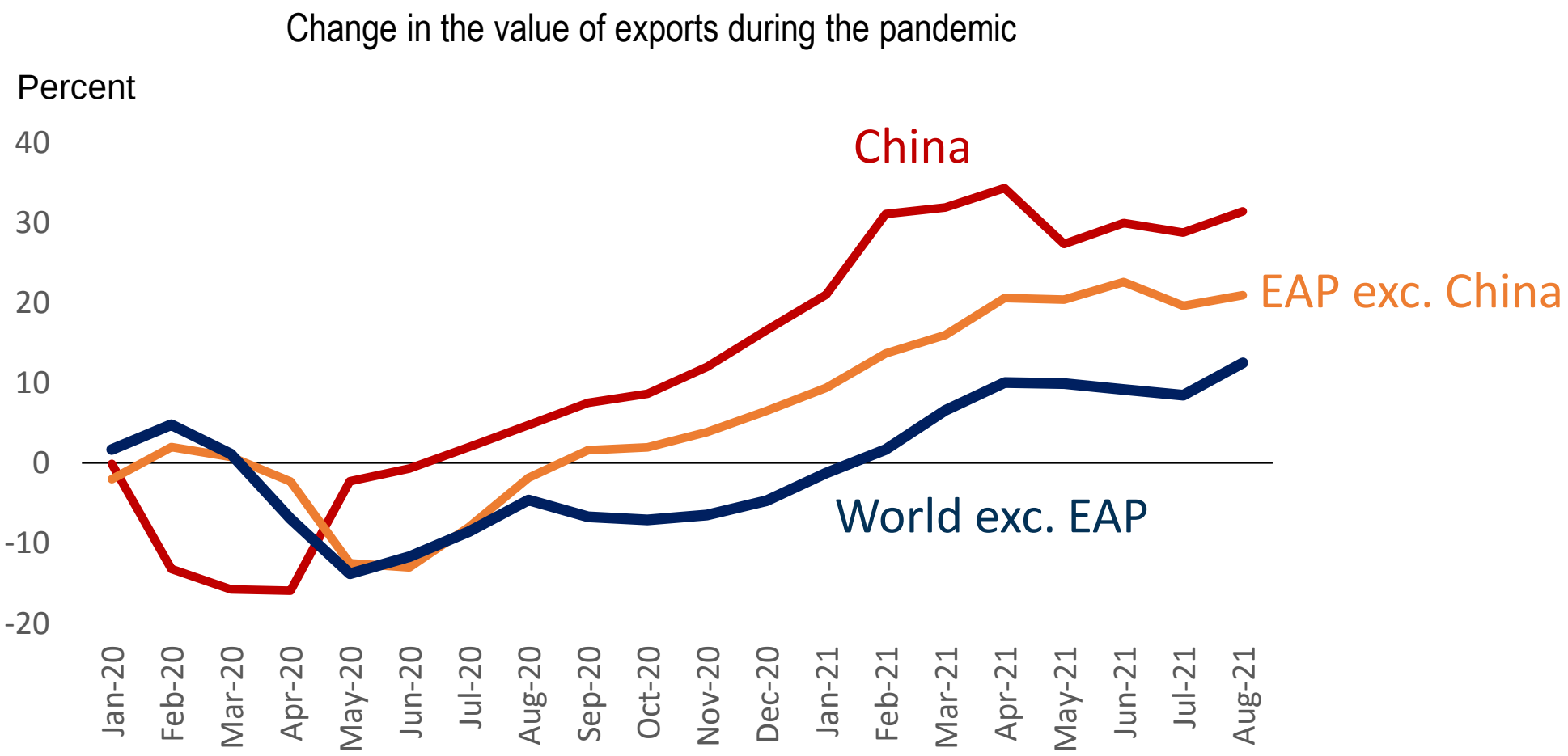
Trade contracted less relative to GDP because of the COVID-19 shock than during the Global Financial Crisis




Source: Global Economic Monitor

# Fact 2: Recovery

China and the EAP have led the recovery in goods exports

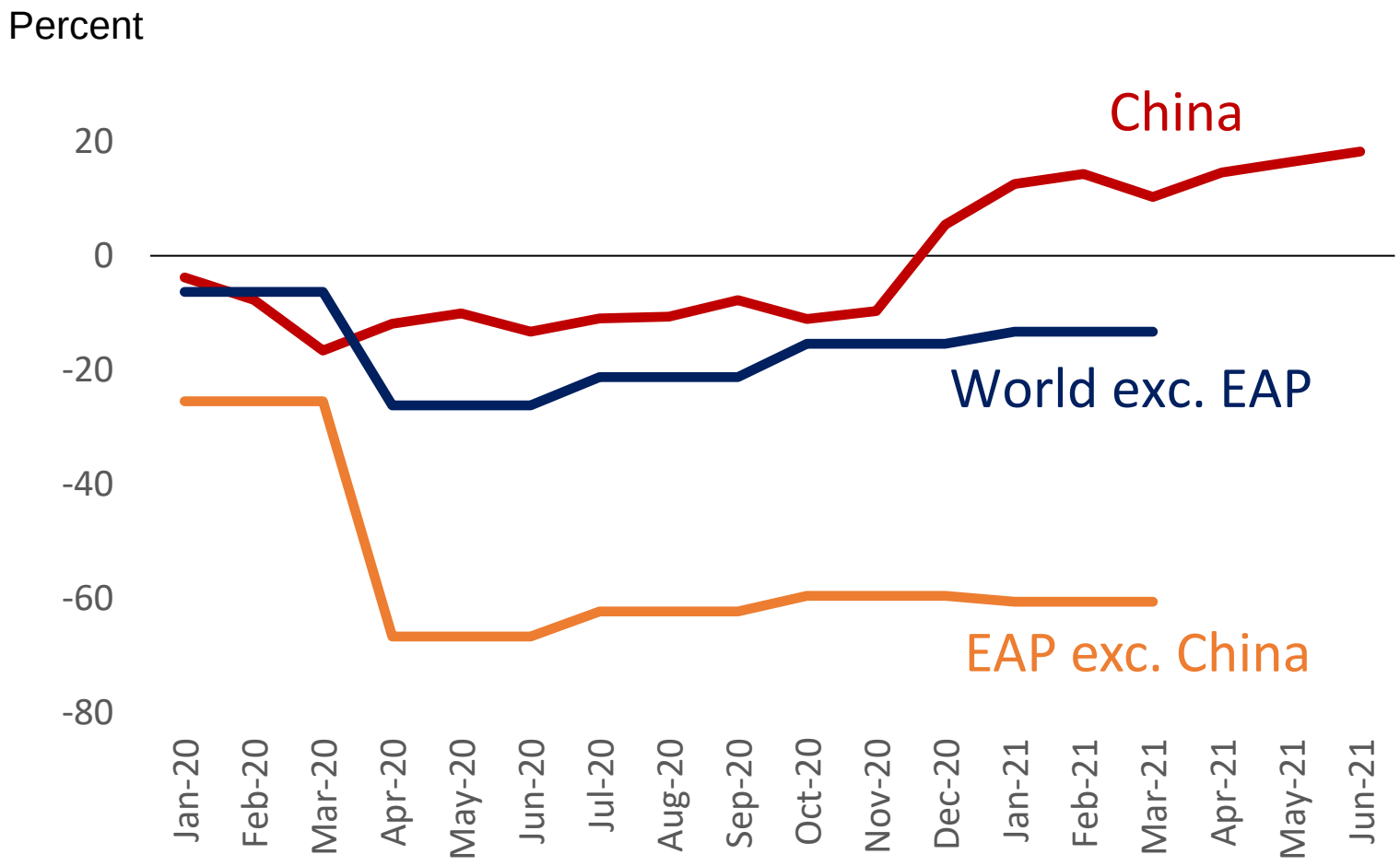





Source: EAP Update

# Fact 3: Lagging Services

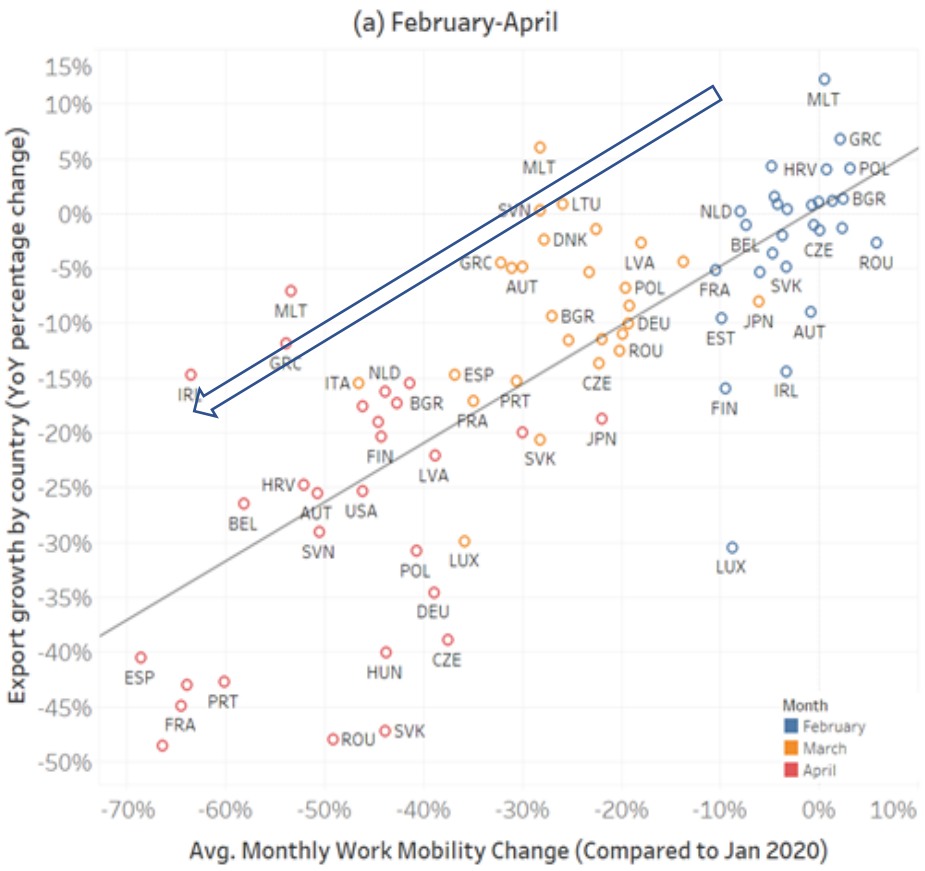
Services exports remain below pre-pandemic levels for most countries



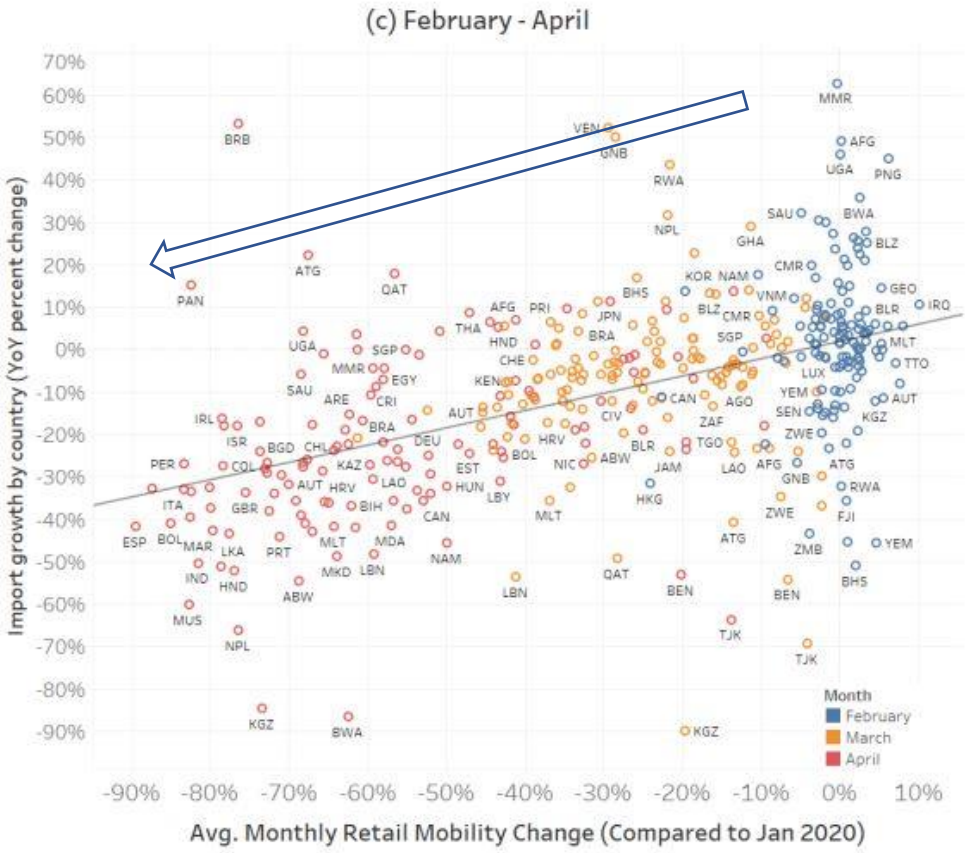

Source: EAP Update

# COVID-19 mobility restrictions affected trade patterns

Exports declined where and when work mobility was restricted



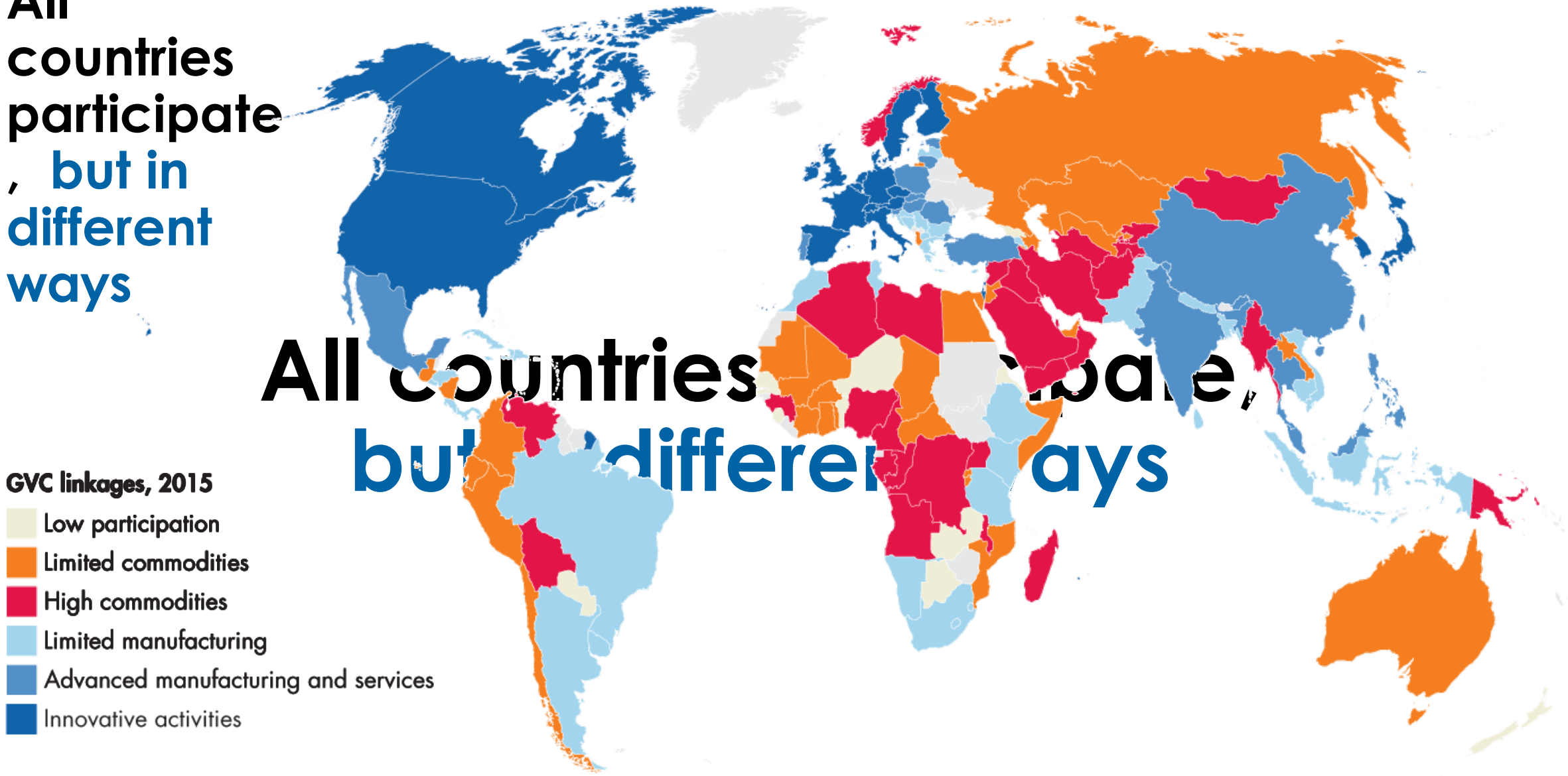

Imports declined where and when retail mobility was restricted




Source: Espitia et al. 2020.

# Long Run Impact

# All countries participate, but in different ways




All countries participate, but in different ways

# COVID-19 did not affect firms' immediate location choices

- Cost of relocation = $F$
- Per unit cost saving = $c$
- Expected output = $Q$

A firm will relocate if: $F < cQ$

COVID did not affect $F$ and $c$, but $Q \downarrow$

Therefore, COVID's immediate effect was to make relocation less likely!

# However, “dependence aversion” could increase due to COVID-19

Foreign input reliance (%) in 2015

| | USA | CAN | MEX | DEU | GBR | FRA | ITA | CHN | JPN | KOR | IND | ROW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USA | | 4.8 | 2.6 | 1.6 | .9 | .6 | .7 | 8.9 | 1.8 | 1.3 | .7 | 11 |
| CAN | 29 | | 2.2 | 1.8 | 1.3 | .8 | .8 | 9.9 | 1.7 | 1.3 | .6 | 18 |
| MEX | 28 | 2 | | 2.7 | .7 | .9 | 1 | 19 | 3.3 | 3.3 | 1.1 | 15 |
| DEU | 3.9 | .4 | .3 | | 2.8 | 4.1 | 3.3 | 6.3 | 1.4 | .8 | .7 | 35 |
| GBR | 5.6 | 1.2 | .2 | 6.3 | | 3.5 | 2.2 | 6.7 | 1.2 | .8 | 1 | 25 |
| FRA | 4.9 | .6 | .3 | 9.1 | 3.2 | | 4.1 | 5.7 | 1.1 | .6 | .7 | 31 |
| ITA | 3 | .4 | .3 | 7.7 | 2.2 | 4.9 | | 6.5 | .8 | .9 | .9 | 36 |
| CHN | 3.3 | .7 | .2 | 1.5 | .5 | .6 | .5 | | 2.9 | 3.8 | .5 | 21 |
| JPN | 3.6 | .6 | .2 | 1.1 | .6 | .5 | .4 | 8.9 | | 1.7 | .4 | 22 |
| KOR | 6.6 | .7 | .5 | 3 | 1.3 | 1.1 | .9 | 23 | 6.7 | | 1.1 | 35 |
| IND | 4.2 | .7 | .3 | 1.6 | 1.3 | .7 | .6 | 10 | 1.5 | 2 | | 37 |

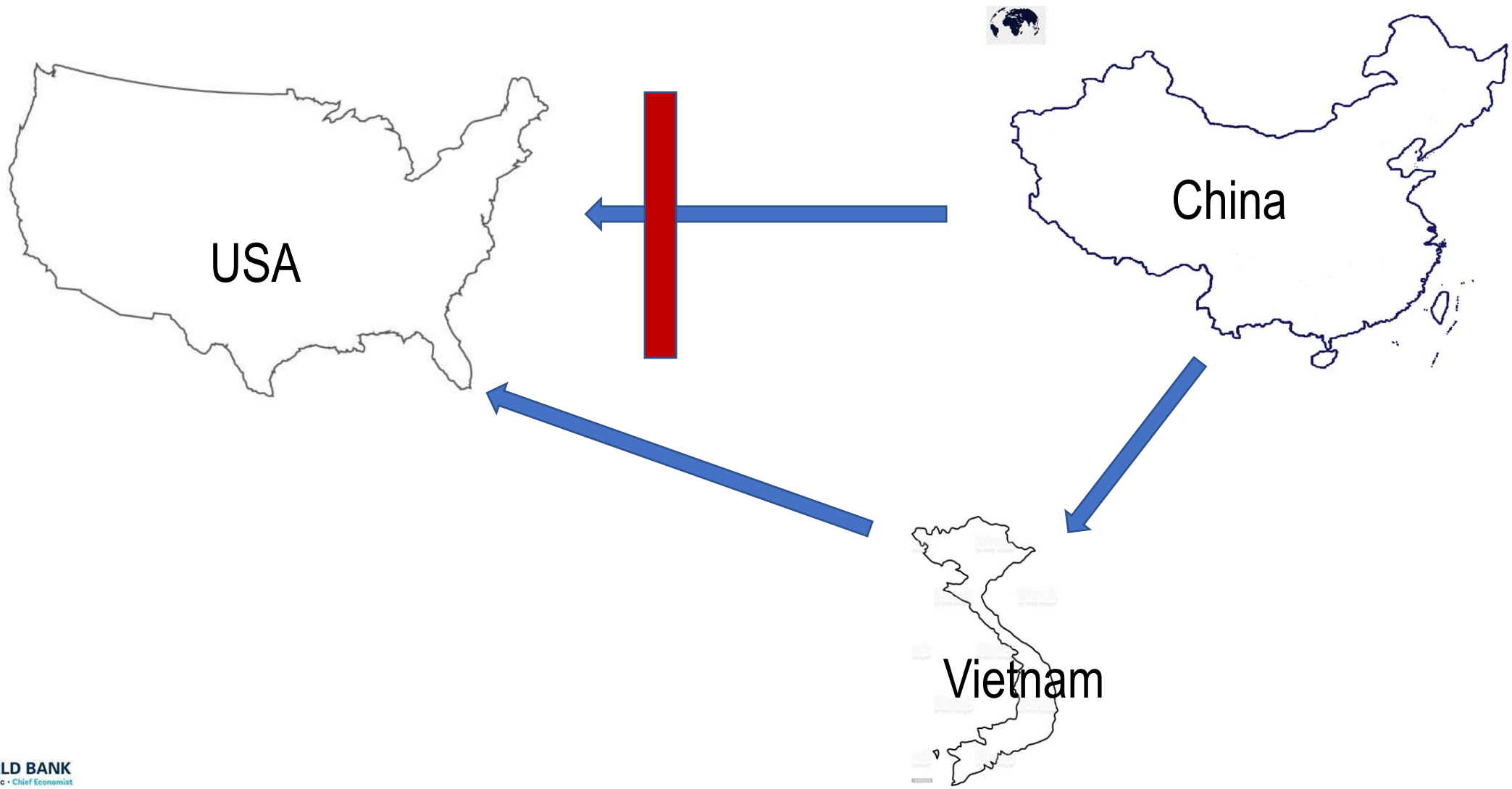
*Notes:* Colors indexed to share sizes; darker reds indicate higher FIR. Countries denoted by ISO-3 codes. ROW stands for rest of world. *Source:* Authors' computations based on OECD ICIO database 2018.

Possible responses:

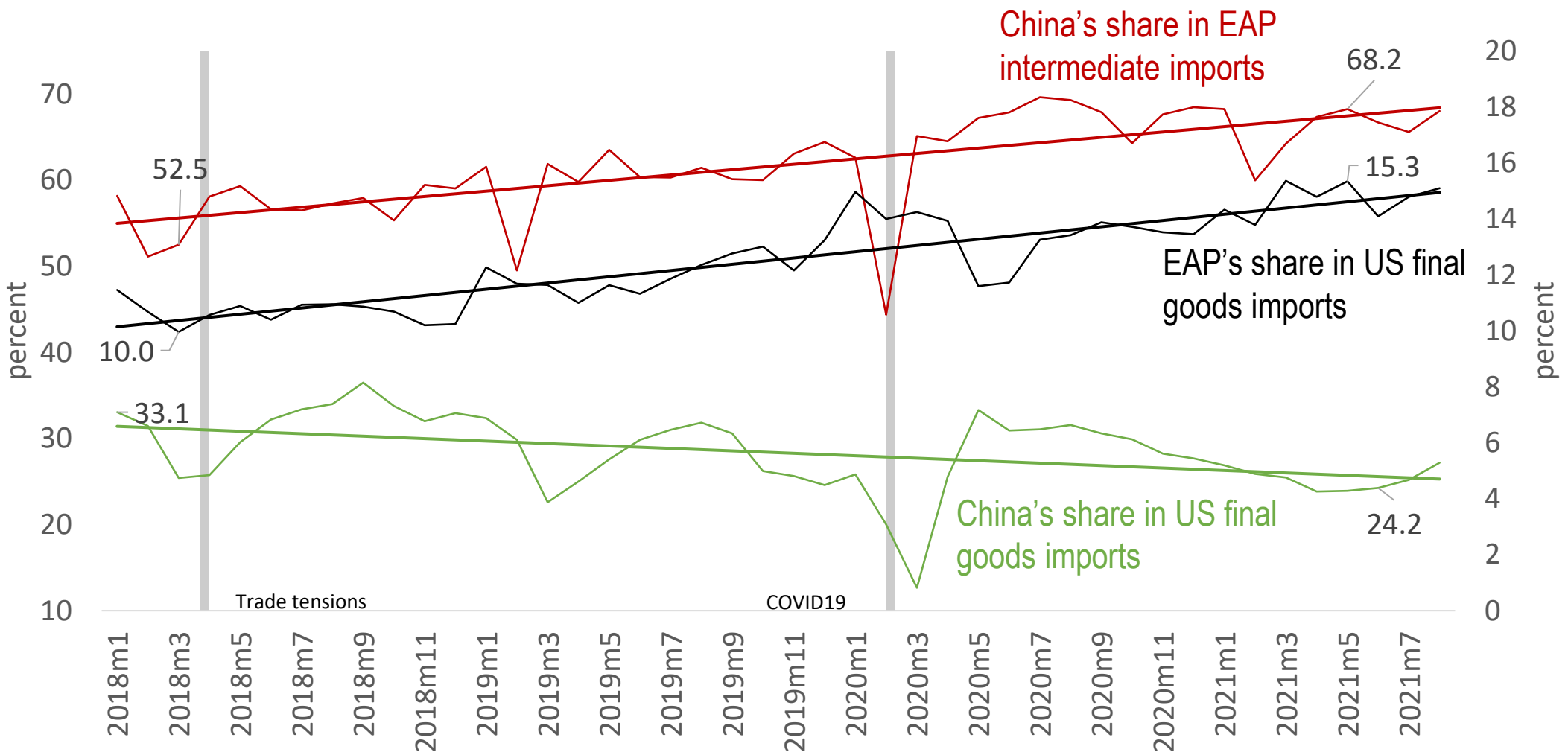
- Reshore
- Relocate
- Diversify
- Increase inventories

Source: Baldwin and Freeman 2021.

# Measures to reduce dependence on China could shift trade towards other EAP countries



# Some evidence already of value chain shifts from China to EAP countries



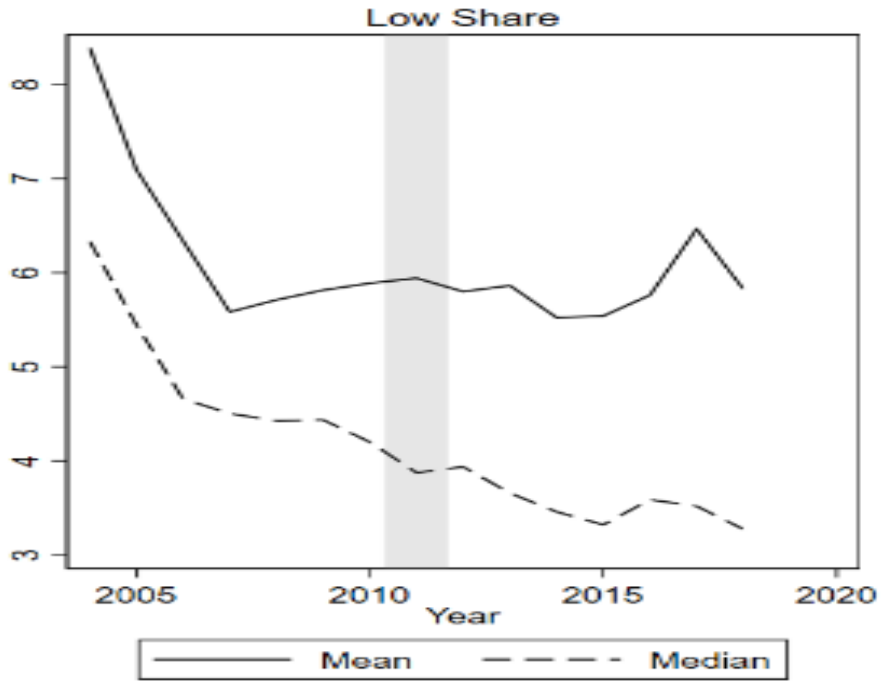

Source: Author's calculations based on customs trade data from China, European Union, Japan and the U.S.

# What do we learn from past shocks?

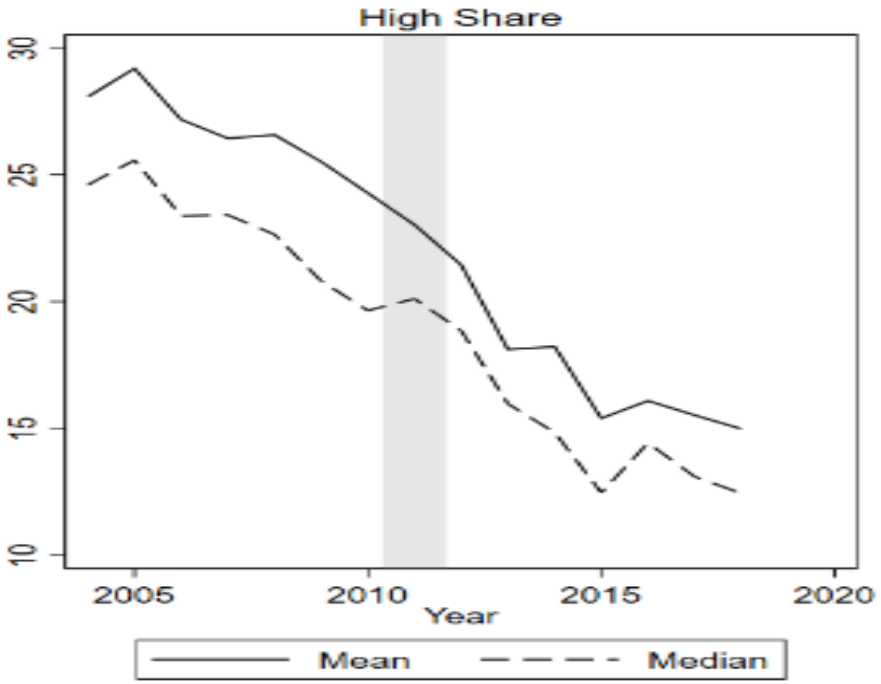
**Relocation in products on which dependence on Japan was high after the 2011 Tōhoku earthquake**

Change in Japan's share of imports of electronic components

Low dependence on Japan

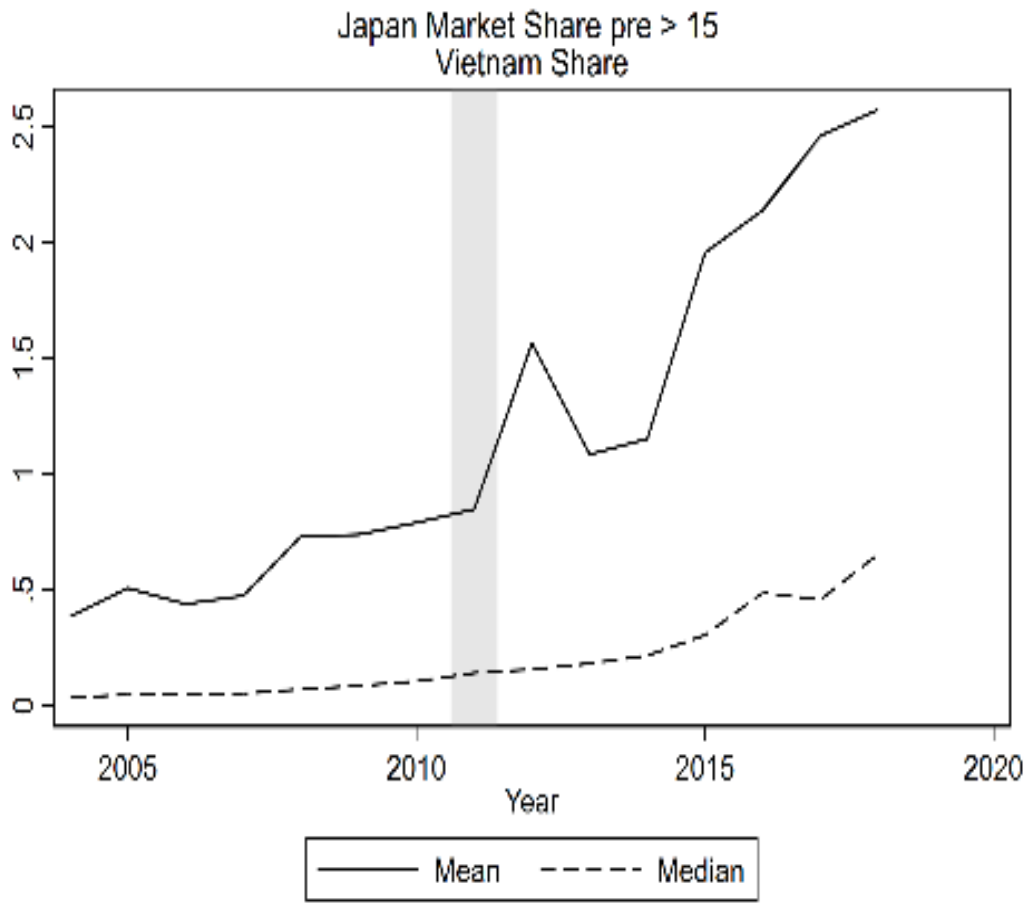


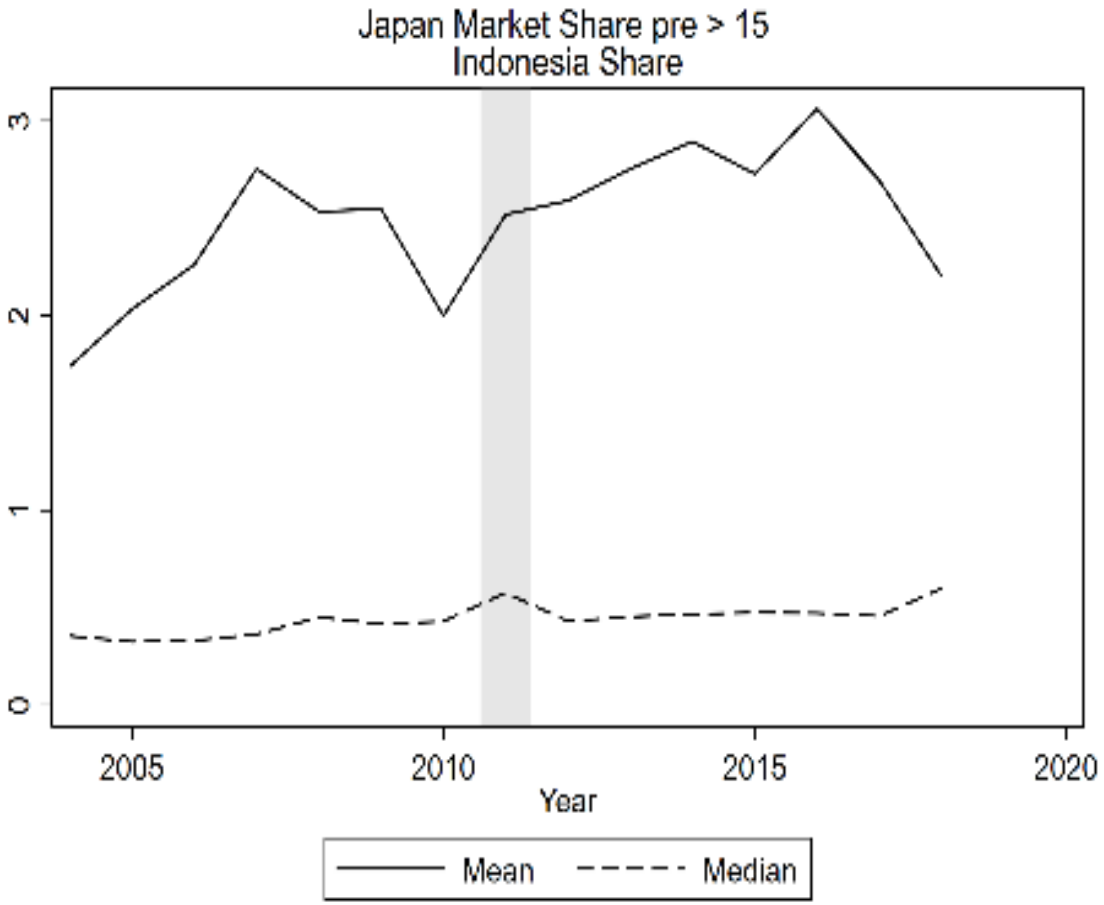

High dependence on Japan




*Source:* Freund, Mattoo, Mulabdic, Ruta (2020).

# Relocation to countries with more trade friendly conditions



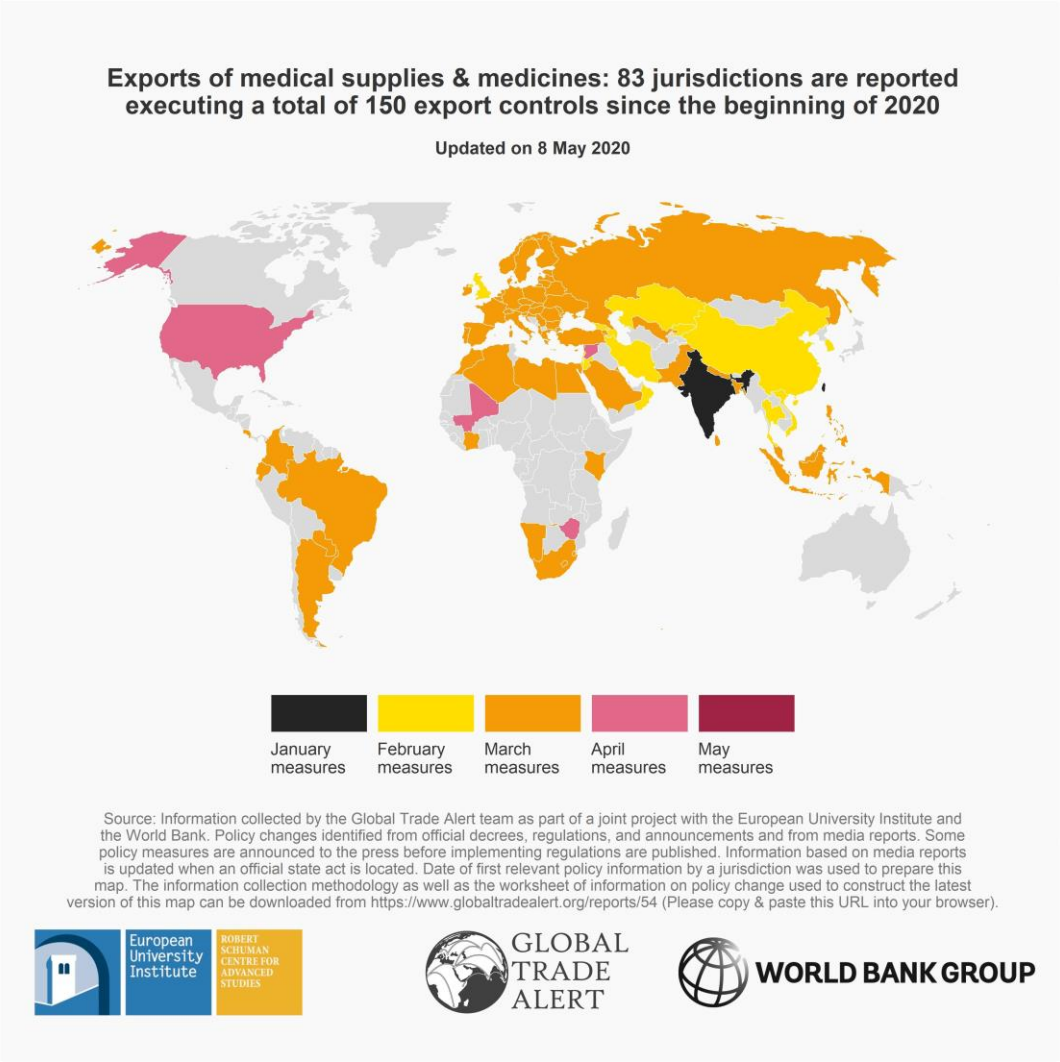




Source: Freund et al. (2020)
Note: The figures plot each country's mean and median market share in country-products in which Japan had an average market share greater than 15 percent (right panel "High Share") calculated over the 2004-2010 period

# Policy

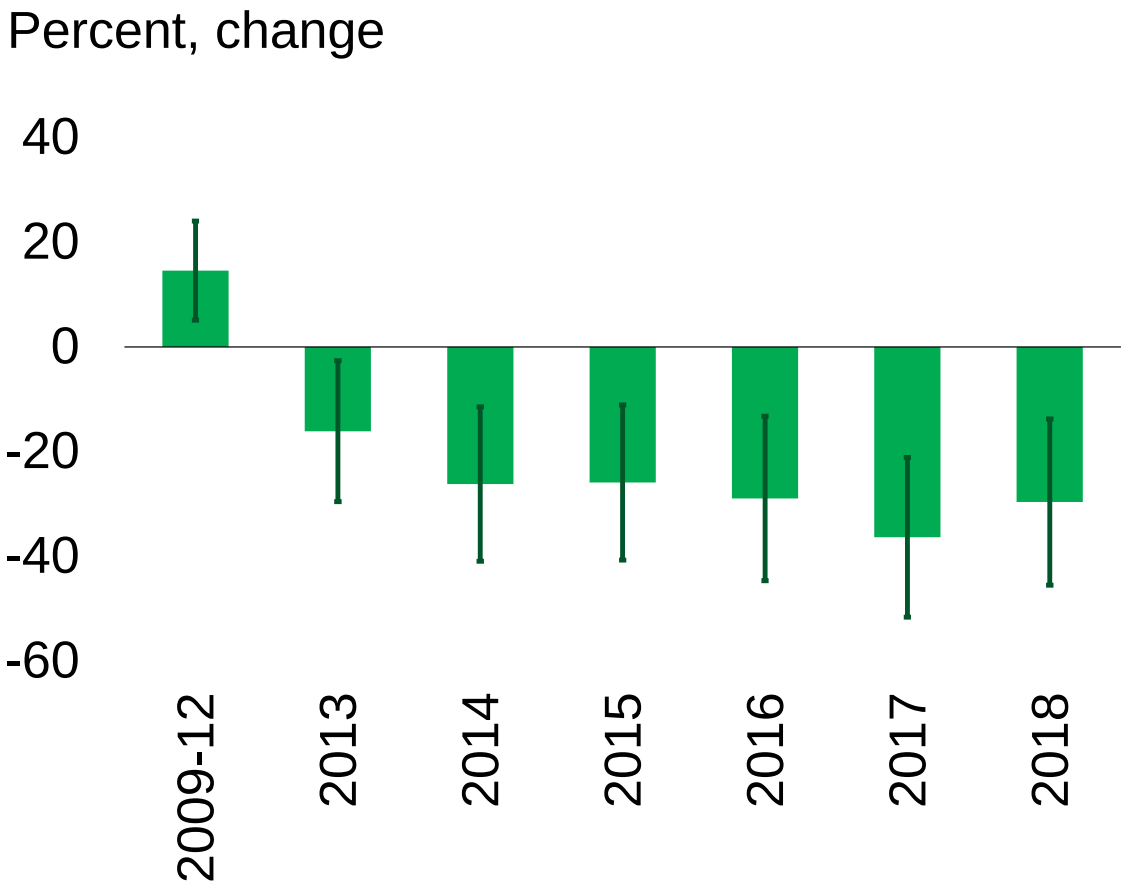
# Trade policy: An evolving response to covid-19

- China-US trade tensions preceded COVID-19
- Initial response to COVID-19: export controls
- Longer term: policies to change location choices - subsidies, tariffs, restrictive regulation



# Export restrictions can cause buyers to permanently shift away from restrictive exporters

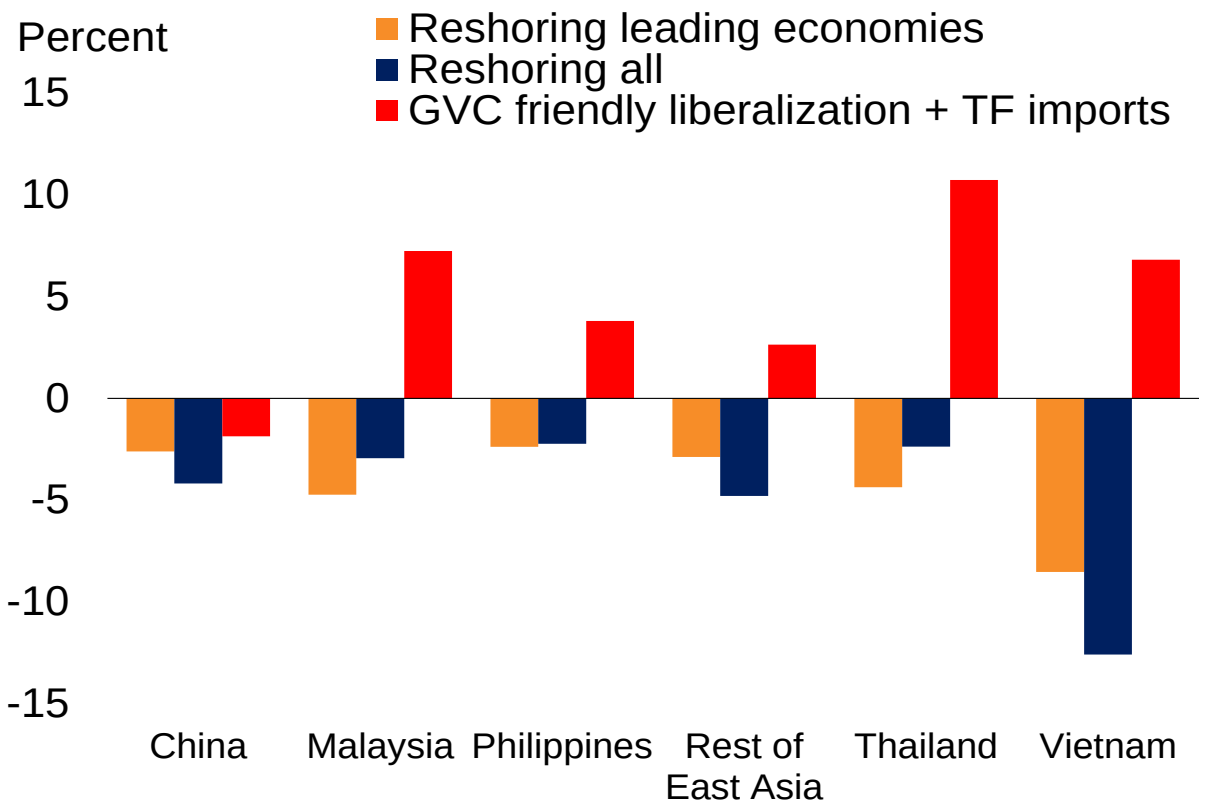
Dynamic bilateral trade effect of Temporary Export Restrictions




Source: Islamaj et al. 2020.

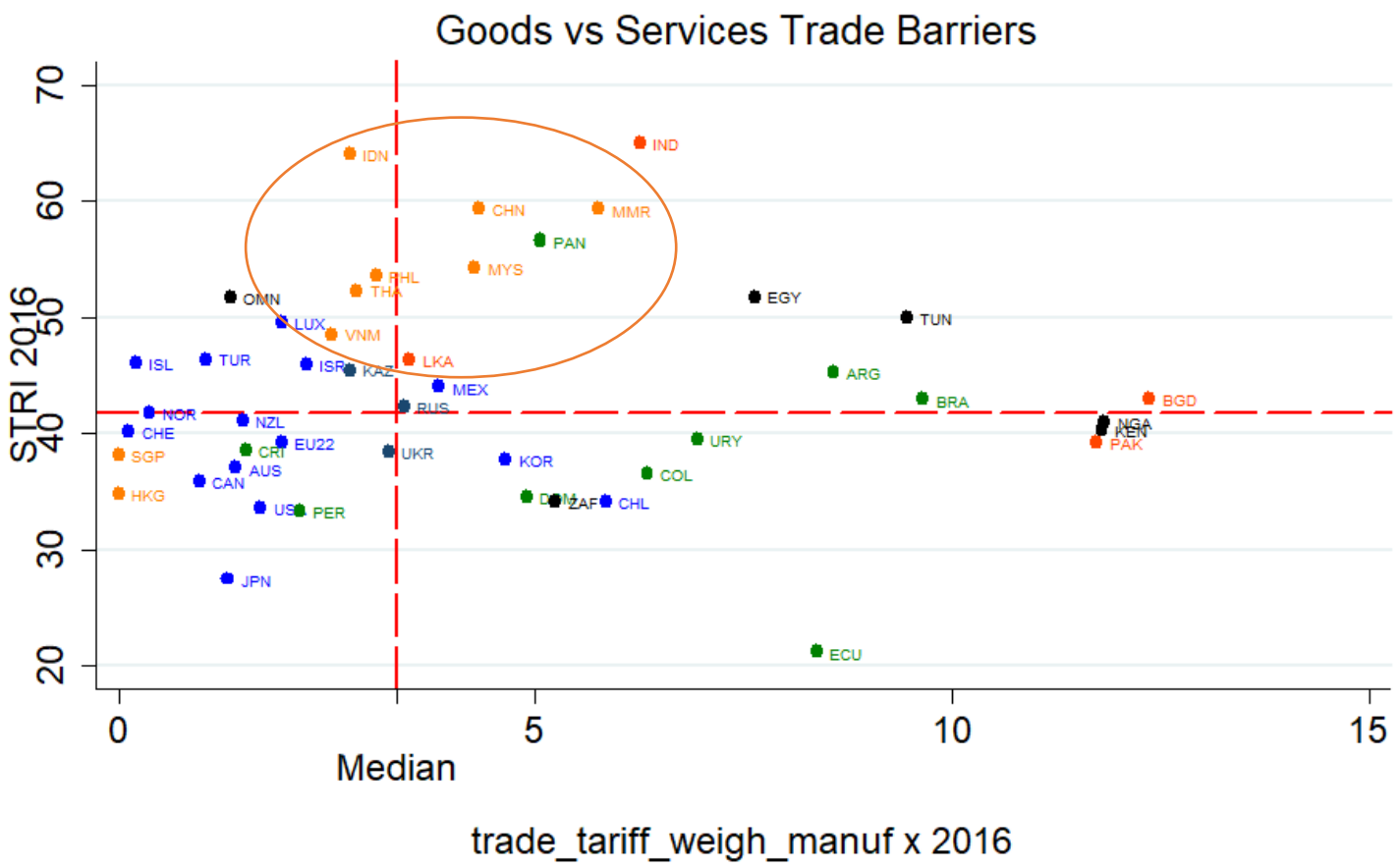
# What is the optimal response to reshoring policies?

Real income change under reshoring by leading economies, by all countries, and in the GVC-friendly scenario in 2030 (deviations from the L-shape COVID recovery, percent)




Source: Chepeliev, M., M. Maliszewska, I. Osorio-Rodarte, M. Filipa Seara e Pereira, and D. van der Mensbrugghe (2021, forthcoming).

# Persistent barriers especially in services are an impediment to GVC participation




Notes: Blue = OECD; navy = ECA; orange = EAP; dark orange = SAS; green = LAC; black = SSA or M
For Myanmar, Sri Lanka, Panama, Peru and Thailand 2015 tariff data are used.
Average STRI 2016 used for 22 EU member states.





Source: Borchert et al (2019)

# Conclusion

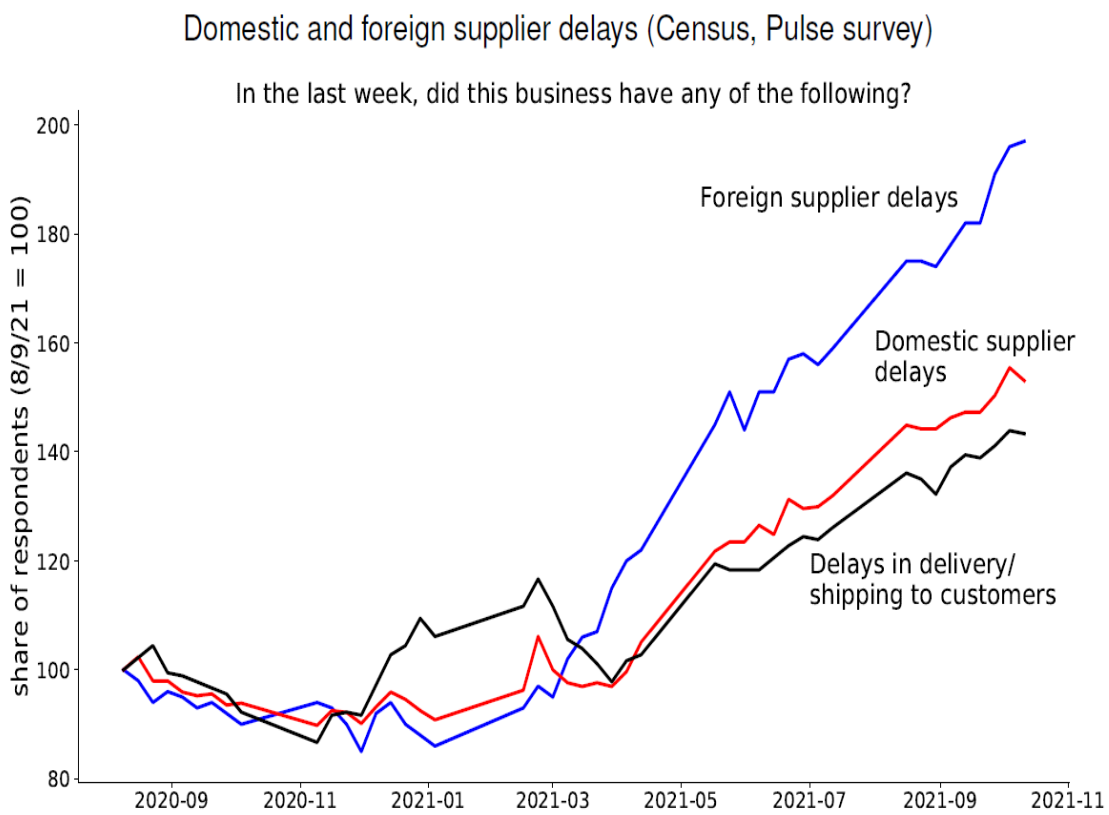
- COVID19 had large short-run trade and trade policy effects
- Long-run effects will depend on trade policy and cooperation
- In general, own trade-promoting policies are welfare-improving

# References

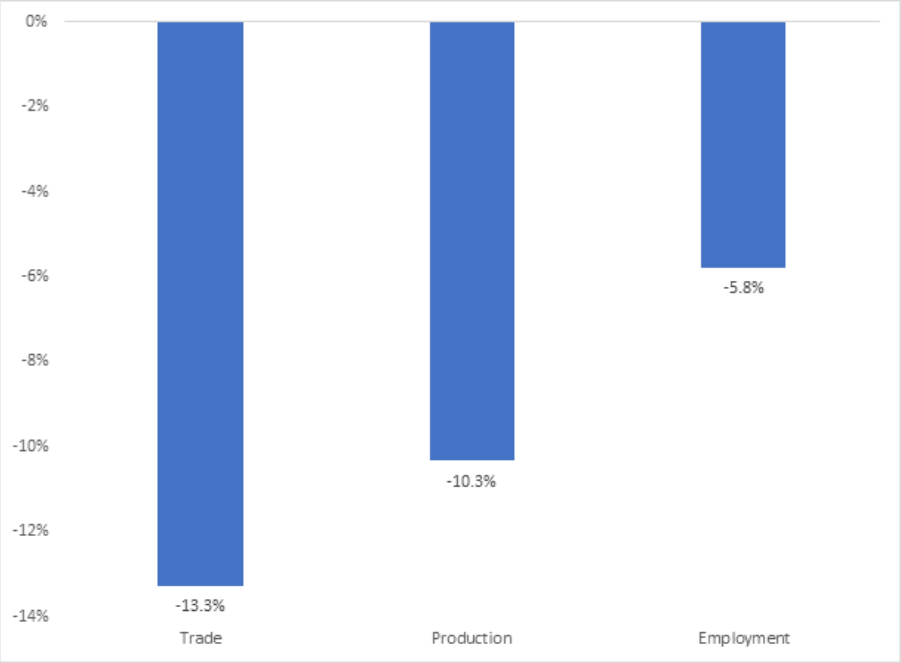

- Antràs, Pol, and Davin Chor, 2021, Global Value Chains, Handbook of International Economics, 5th edition, upcoming.
- Baldwin R, Freeman R. 2022. Risks and Global Supply Chains: What We Know and What We Need to Know. Annu. Rev. Econ. 14: Submitted. DOI: 10.1146/annurev-economics-051420-113737
- Chepeliev, M., M. Maliszewska, I. Osorio-Rodarte, M. Filipa Seara e Pereira, and D. van der Mensbrugghe. 2021. "Globalization Not Localization Key to Covid-19 Recovery and Poverty Alleviation," WB Policy Research Working Paper (forthcoming).
- Espitia, A., Mattoo, A., Rocha, N., Ruta, M. and Winkler, D. (2021), Pandemic trade: COVID-19, remote work and global value chains. World Econ.
- Freund, Caroline, Mattoo, Aaditya, Mulabdic, Alen and Ruta, Michele, (2020), The supply chain shock from COVID-19: Risks and opportunities, ch. 1, p. 303-315 in Djankov, Simeon and Panizza, Ugo eds., COVID-19 in Developing Economies, vol. 1, Centre for Economic Policy Research, https://EconPapers.repec.org/RePEc:cpr:ebchap:p330-22.
- Grossman, Gene, Helpman, Elhanan, Lhuilllier, Hugo, (2021), Supply Chain Resilience: Should Policy Promote Diversification or Reshoring? NBER Working Paper 29330.
- Islamaj, Ergys, Shafaat Yar Khan, and Aaditya Mattoo (2021), The Durable Trade Effects of Temporary Export Restrictions: A Study of the 2008-2011 Food Crisis, World Bank (forthcoming).

# Appendix

# The implications of recent supply chain delays

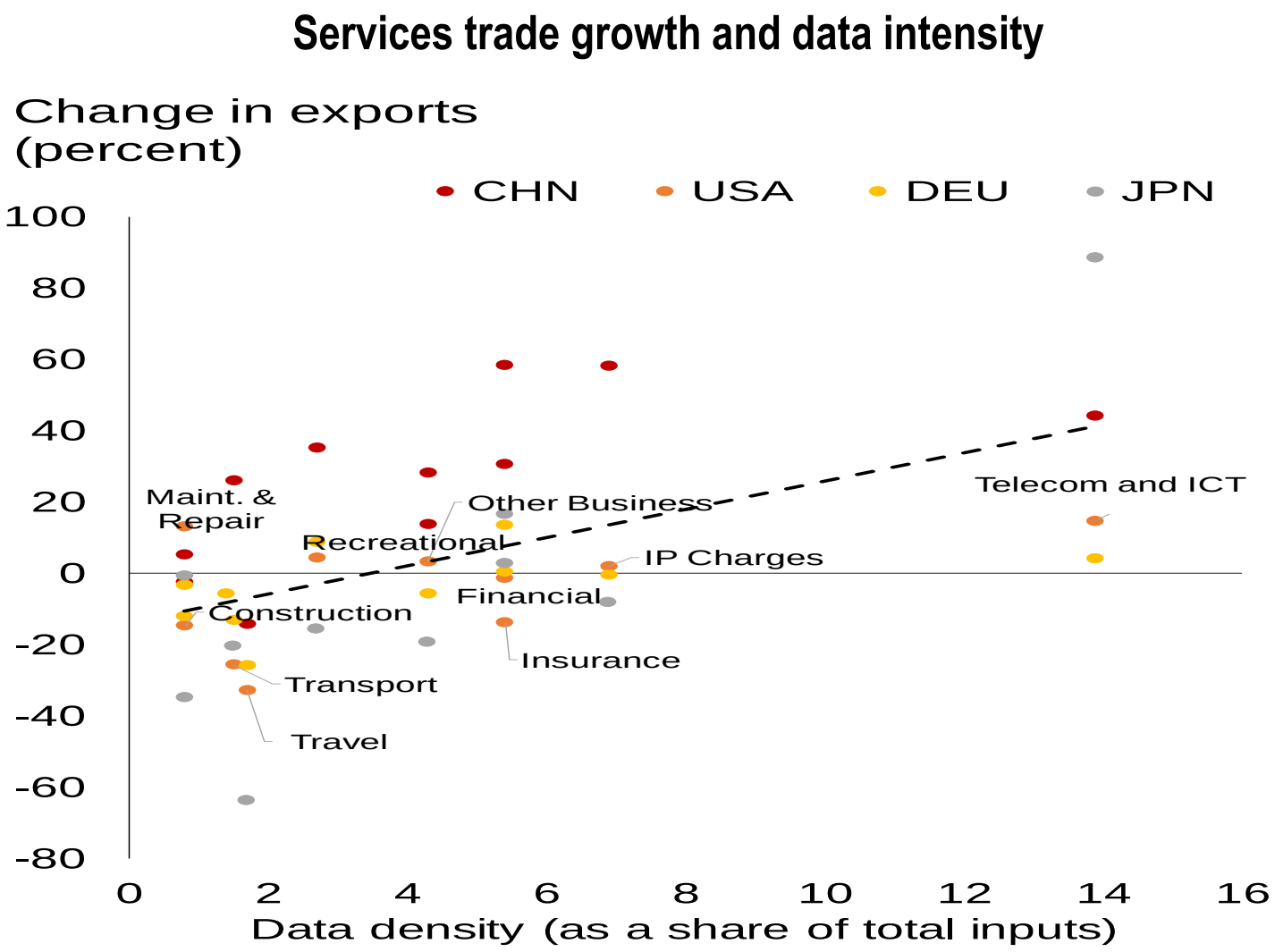



The impact of delivery delays on manufacturing production, consumption and employment




Source: Alessandria et. al. (2021, forthcoming)

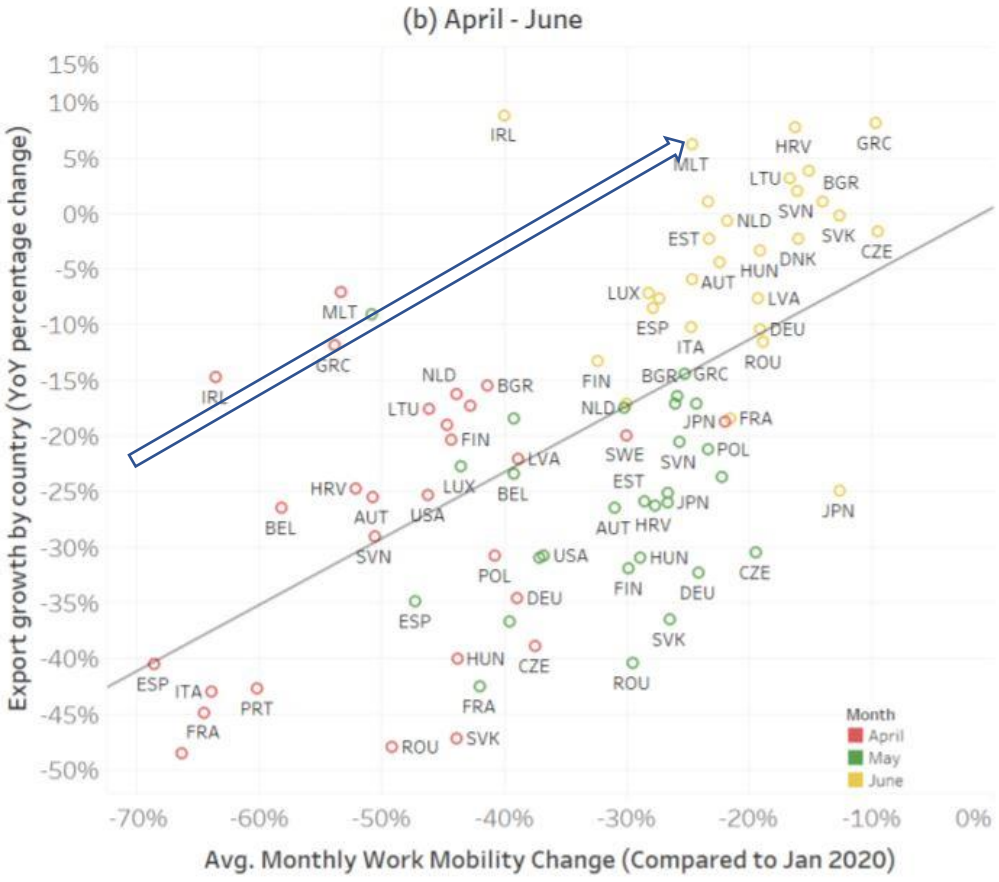
# **Services trade** is being durably changed by the COVID shock



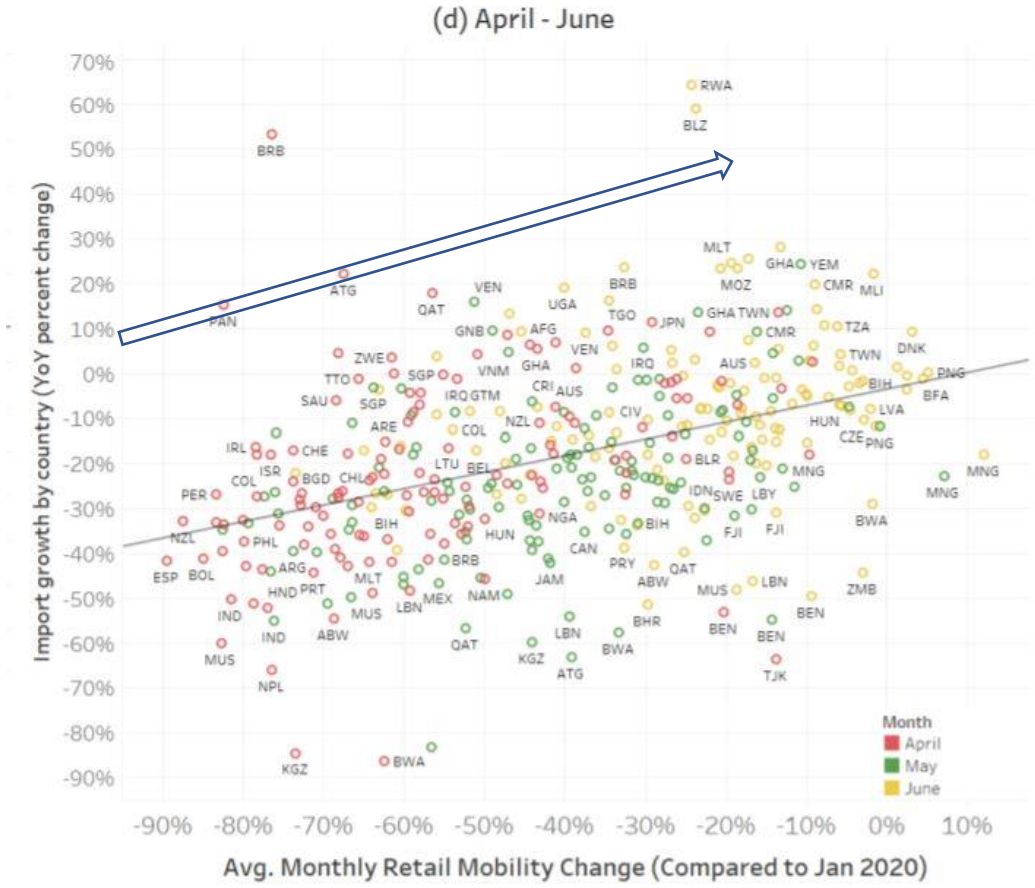

Source: Mattoo and Taglioni (2020)

# Exports and imports recovered when mobility restrictions were relaxed

Exports recovered when work mobility was allowed




Imports recovered when retail mobility was allowed




Source: Espitia et al. 2020.