

Discussion: Global Supply Chains in the Pandemic

by Barthélémy, Huo, Levchenko, and Pandalai-Nayar

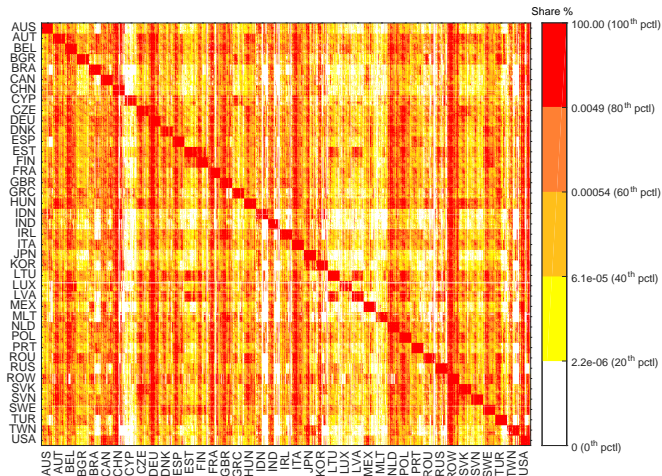
Lorenzo Caliendo
Yale University

21st Jacques Polak Annual Research Conference

November 6, 2020

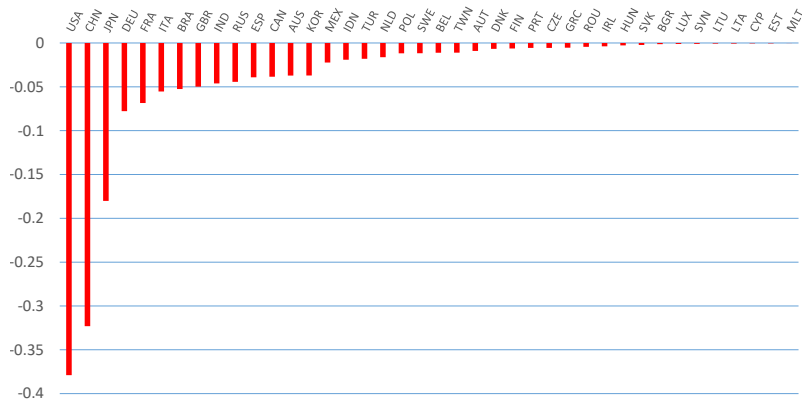
The Global Supply Chain

Figure: Global expenditure shares across sectors and countries in 2011



Source: figure from CPT (2018), data from WIOD, 40 countries, 35 industries

World's real GDP elasticity to a uniform disruption in national value chain



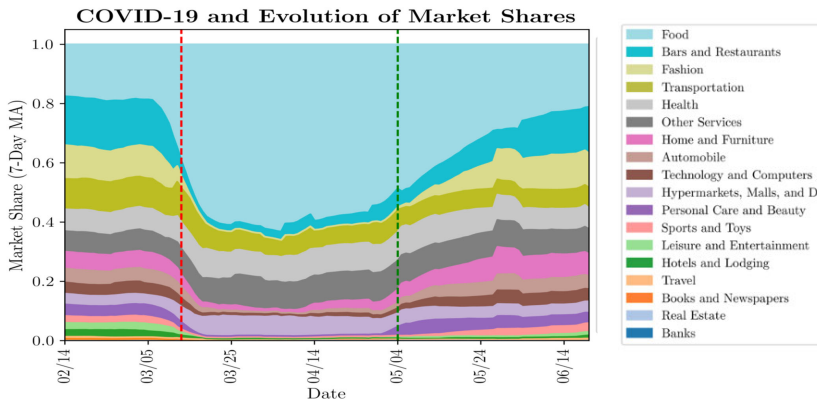
Source: Own calculations, following CPT (2018)

The Paper

- ▶ The paper addresses an important policy-relevant question
 - ▶ Among the most interesting Covid-19 papers I have read
- ▶ The paper quantifies the role of global supply chains on the impact of COVID-19 on real GDP across countries
- ▶ Uses the approach from Huo, Levchenko, and Pandalai-Nayar (2020)
- ▶ Key findings:
 - ▶ Real GDP downturn due to the lockdown is on average -29.6%
 - ▶ GVCs can insulate as well as expose countries to the effects of lockdowns
 - ▶ “Renationalization” of global supply chains makes countries less resilient to the decline in GDP induced by lockdowns
- ▶ I have only a couple of comments

Comment #1: the shock

- ▶ One of the most difficult challenges is to map the health shock into an economic model
 - ▶ Demand shock, Supply shock, transitory, permanent?



Source: Carvalho et. al 2020

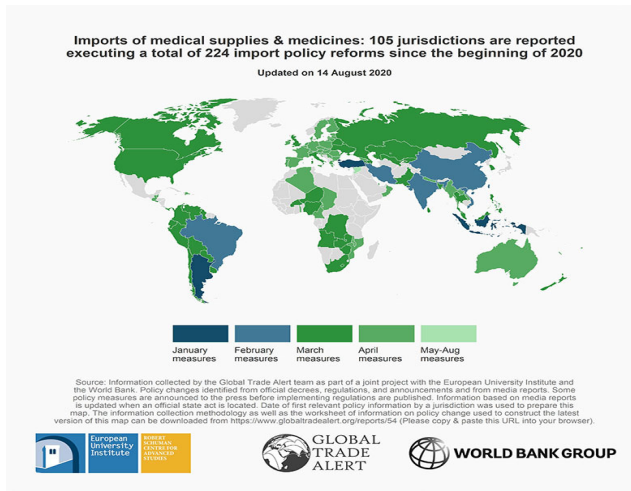
Comment #1: the shock

- ▶ Paper models shock as a permanent shift in labor supply
 - ▶ A country-occupation-specific permanent shock
- ▶ Disciplined by the fraction of work in a sector that can be done from home and how stringent the lockdown measures
- ▶ Same shock is applied to two economies, one with GVC and one with no GVC
- ▶ However,
 - ▶ fraction of work in a sector that can be done from home might be related to how integrated the country is to the GVC
 - ▶ how stringent are lockdowns might be a function of how the country is integrated to the GVC
- ▶ The paper has the possibility to teach us about how optimal lockdown policy might depend of GVC
- ▶ The paper could also consider dynamic labor supply decisions

Comment #2: Policy induced renationalization

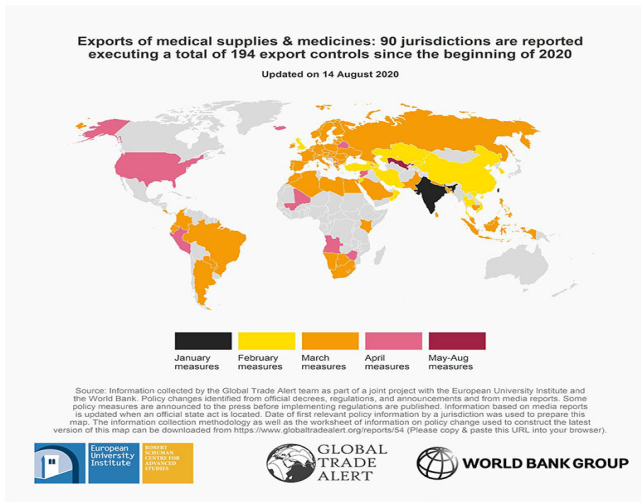
- ▶ Non-coordinated policies might in fact induce renationalizing value chains
- ▶ Consider the case of essential goods to deal with Covid-19
 - ▶ PPE “Personal Protective Equipment”. masks, gloves, etc.
 - ▶ Medical equipment: respirators, etc.
 - ▶ PCR test, and more
- ▶ Due to Global Value Chains, countries have specialized in the production of these goods
 - ▶ 20% of countries are net exporters, all the rest importers
- ▶ Policy response:
 - ▶ Importers: unilaterally reduce import restrictions
 - ▶ Exporters: increase export restrictions

Comment #2: Policy induced renationalization



Example: Resolution 2020/05/001/60/104, 24rd of March, Uruguay allowed tariff free the import of 23 products in response to COVID-19

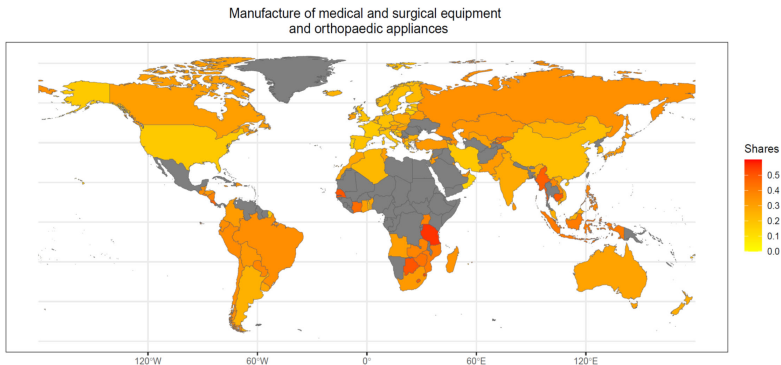
Comment #2: Policy induced renationalization



Example: Decreto 301/2020 – Argentina, export restrictions to equipments for oxygen therapy, parts and accesories

Comment #2: Policy induced renationalization

What is the percentage of world imports of medical equipment affected by restrictive policies? On average **30%**!



Own calculations. Source: World Bank

Comment #2: Policy induced renationalization

- ▶ Export restrictions could induce countries to impose countervailing duties
 - ▶ The production of medical equipment requires imported intermediate inputs from other sectors and across countries
- ▶ Policy makers might be thinking about other policies to renationalize production
 - ▶ Biden plan: “implement fundamental reforms that shift production of a range of critical products back to U.S. soil, creating new jobs and protecting U.S. supply chains against national security threats.”

Comment #3: Why do GVC's exist?

- ▶ GVC's are a cost efficient way to organize production conditional on factor markets, technologies, policies and frictions
 - ▶ How should world production be organized under frequent aggregate shocks (like a pandemic)?
 - ▶ How should world production be organized under frequent uncorrelated country shocks?
- ▶ Moving production across countries is costly
 - ▶ Not clear that a one time exposure to a rare event should induce a relocation of production
 - ▶ But policies to deal with the rare event, might

Summary

- ▶ This is a great paper!
- ▶ It shows clearly the importance of GVC's and how economically, and policy relevant, it is to continue studying the effects of Covid-19

► Thank you!