

GFP Conference 2020
**Webinar 1: Global Value Chains, Vulnerability and RD in
Times of Structural Change and the Pandemic**

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The views expressed herein are those of the authors and do not necessarily reflect the views of Banco Central de Costa Rica.

Context

- ▶ During the last decades we have the growing importance of large firms in growth and productivity

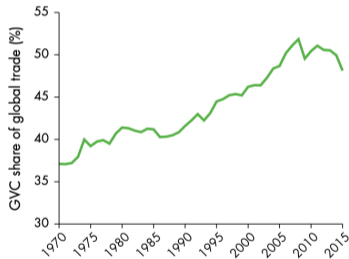
Firms at the global productivity frontier – defined as the most productive firms in each two-digit industry across 23 countries – are typically larger, more profitable, younger and more likely to patent and be part of a multinational group than other firms (Andrews, Criscuolo and Gal, 2015).

- ▶ Larger, more productive, drive exports, imports, production.

Context

- ▶ And within larger firms, GVCs are particularly relevant for international trade. Figure from Antràs, 2020.

Figure 2: The Importance of GVC Trade in World Trade



Source: World Development Report (2020, Chapter 1).

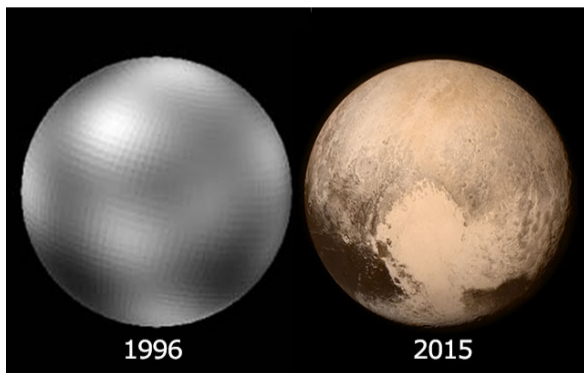
Note: Based on the GVC participation measure in Borin and Mancini (2019).

This webinar and current research

- ▶ Understanding the relevance of GVCs: impact on economies, local firms, reshaping of international trade.
- ▶ Progress in observing individual firms and global integration.

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Morlacco, 2020

- ▶ 1st: Context. Turbulent times in international trade. Brexit, US-China Trade War, Health Crisis.
- ▶ 2nd: Review of the literature on GVCs and shocks.
- ▶ 3rd: Main contribution: review of Alvarez et al. (2020) in which they set up a novel theory of bargaining in two-sided markets where importers and exporters are concentrated and have market power over the terms of trade.
- ▶ Main takeaway: intensive margin, granularity and market power.

Morlacco, 2020

Review of the literature on GVCs and shocks.

- ▶ Current approach (thanks to data) is to analyze firm behavior in GVCs:

"Only a few highly-productive firms find it profitable to engage in global sourcing. One direct consequence is that transactions within GVCs are very different from the type of anonymous, one-shot transactions that pervade traditional trade theories" (Morlacco, 2020).

- ▶ Relationships are sticky (Martin et al., 2020, Monarch, 2020, and Monarch and Schmidt-Eisenlohr, 2020).
- ▶ Firms are granular and have market power (Eaton et al., 2011, Freund and Pierola, 2015, Gaubert and Itskhoki, 2020, Kikkawa et al., 2019, and Morlacco, 2019).

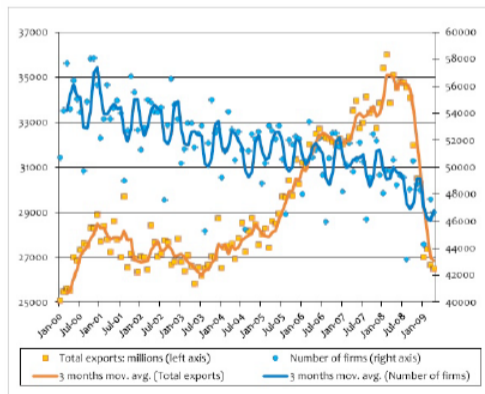
Morlacco, 2020

Review of the literature on GVCs and shocks.

- ▶ Consistent with Antràs (2020) description of how organizing value chains is extremely costly.
- ▶ Setting up the sourcing process is mostly a fixed cost: searching, designing and customization.
- ▶ In our own research (Alfaro Urena, Manelici, Vasquez, 2019), interviews and data show that more complex processes in multinational corporations are sometimes sourced to the same firms that travel with the main MNC, while less complex sourcing slowly happens within the recipient country.
- ▶ Uncertainty is key into slowing new relationships between firms. Intensive margin is the most relevant.

Morlacco, 2020

Figure 3: The margins of trade during the Great Recession (Bricongne et al., 2012)



Morlacco, 2020

Main contribution: novel theory of bargaining in two-sided markets.

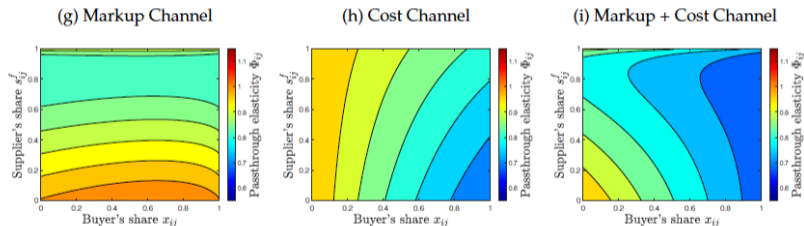
- ▶ A generic shock at the producer level (cost shifter) can be interpreted as an import tariff or an exchange-rate shock.
- ▶ The pass-through of this shock depends on the shares sales s_{ij}^f and quantities x_{ij} , partial elasticities of bilateral markups with respect to the supplier share (Γ_{ij}^s), partial elasticities of bilateral markups with respect to the buyer share (Γ_{ij}^x)

$$\Phi_{ij} = \frac{1}{\underbrace{1 + \Gamma_{ij}^s(\rho - 1)(1 - s_{ij}^f) - \Gamma_{ij}^x \varepsilon_{ij}(1 - x_{ij})}_{\text{markup channel}(+/-)} + \underbrace{\frac{1 - \theta}{\theta} x_{ij} \varepsilon_{ij}}_{\text{cost channel}(+)}}.$$

Morlacco, 2020

Main contribution: novel theory of bargaining in two-sided markets.

SYMMETRIC BARGAINING POWER ($\tilde{\phi}_{ij} = 1$)



Flach, 2020

Overview.

- ▶ Similar concerns of growing protectionism across the globe, even before the pandemic hit.
- ▶ This project: quantify direct and indirect effects of Covid-19 using a general equilibrium model that accounts for input-output linkages. Based on Steininger and Sforza (2020).
- ▶ Take into account the product and sector dependencies.
- ▶ The future of supply chains. Digitalization?

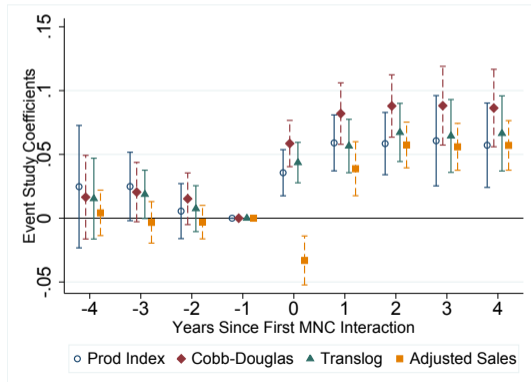
Flach, 2020

Main messages.

- ▶ Deglobalization: shock is worse in a less open world.
- ▶ More diversification better for weathering out bad shocks.
- ▶ Fast responses instead of long periods of uncertainty (e.g. Brexit)
- ▶ Institutional challenge for the future of globalization

Impact of MNCs in host countries. Suppliers to MNCs perform better after selling to MNCs (Alfaro-Urena, Manelici, Vasquez, 2019)

Summary of the Productivity Residual Results (General Returns to Scale, No Extensive Margin.)



Local economies have direct and indirect positive effects on wages.
 Estimating labor market imperfection parameters.
 (Alfaro-Urena, Manelici, Vasquez, 2020)

Retention-wage elasticity (η_l)	9.283*** (3.197)
Marginal Cost of Hiring and Training of First Hire ($\frac{c_h}{\bar{w}}$)	0.602*** (0.189)
Elasticity of Marginal Cost of Hiring and Training With Respect to the Number of Hires (α)	0.255 (0.216)
Observations	3,080,017
F-Statistic	8.02

▶ $\eta_l = 9.283 \Rightarrow$ “**markdown**” = $\frac{\eta_l}{\eta_l + 1} \approx 0.9$

▶ Average marginal hiring/training cost $\frac{c'_h(\bar{N})}{\bar{w}} = \frac{c_h}{\bar{w}} \times \bar{N}^\alpha \approx [0.60, 0.92]$

My reactions and concerns

- ▶ Covid-19 puts enormous weight into health systems across the globe.
- ▶ Economics consequences are ongoing, adjusting. Length and depth are yet to be confirmed, even when the first vaccines roll out.
- ▶ The pandemic could go on for more months or even years in locations where access to the vaccine is not guaranteed early coverage of population.
- ▶ GVCs have become crucial drivers of growth and productivity in the past decades.
- ▶ The sectoral and country specific impact of the reduction in global GVC trade is very heterogeneous.
- ▶ GVCs most likely react on the intensive margin, but what about aggregate consequences for countries and inequality?

My reactions and concerns

- ▶ **Strenuous** shock for developing countries.
- ▶ Developing countries have slim margin to provide health, employment insurance, business support than richer countries.
- ▶ Pandemic: increase inequality across countries, and particularly within countries.
- ▶ Likely to be the places with less bargaining power and more susceptible to reductions in the intensive margin.
- ▶ More work on measuring the effects on developing countries! We know the presence of GVCs contribute to host countries, but what are the benefits on hard times?
- ▶ Are there downsides because of lower bargaining power? Is more GVC presence better to reduce income volatility?

Thanks!

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