EFFICIENCY AND RISKS IN GLOBAL VALUE CHAINS IN THE CONTEXT OF COVID-19

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Renewed debate on cost and benefits of GVCs in the context of Covid-19

- **Disruptions in the supply** of few 'essential' goods but also in supply chains of some manufacturing industries have highlighted the interconnectedness between countries through GVCs (including the ability to cushion shocks)
- **Efficiency gains stemming from GVC participation are well established**
- Yet, recently, **questions raised about whether these gains are worth the associated risks and instability**

Efficiency – risk trade off?

Stylised CGE model-based counterfactual analysis to evaluate the purported trade-off between efficiency and risk management in GVCs

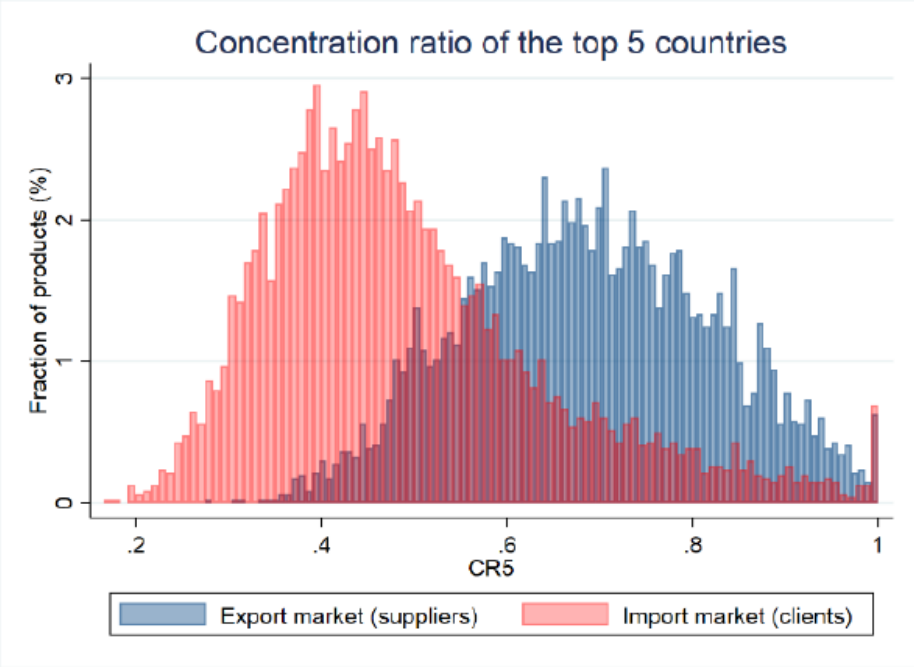
Bottom line:

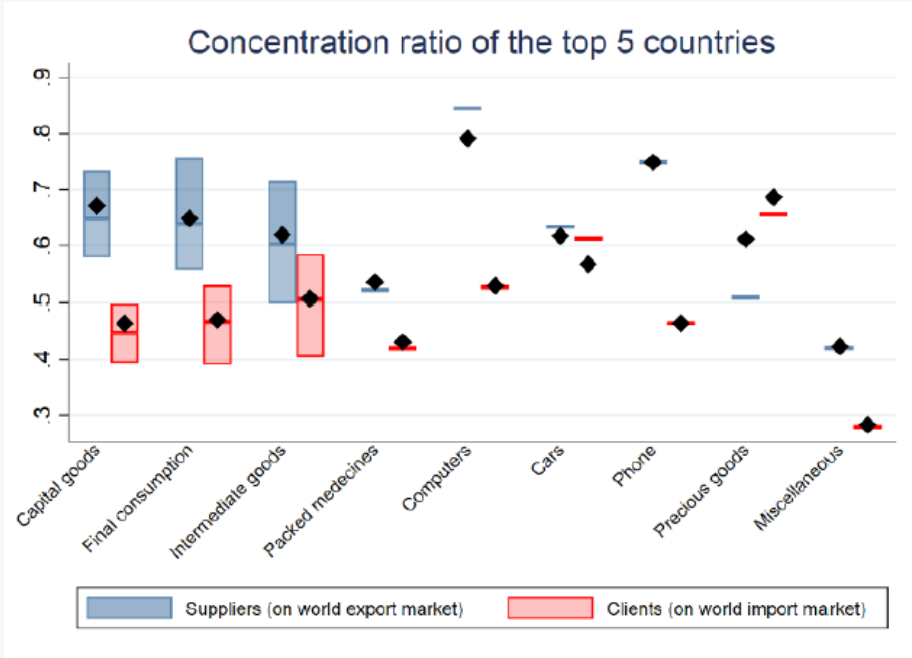
- A 'localised' regime, where economies are less interconnected via GVCs, has significantly lower levels of economic activity and lower incomes.
- The 'localised' regime is more - not less - vulnerable to shocks, with greater instability of key economic variables such as real GDP.

https://issuu.com/oecd.publishing/docs/metro-gvc-final

Exports are more concentrated than imports – intermediates less concentrated than final goods

Exports tend to be concentrated more than imports, but exports of intermediate products are concentrated less than final products





Source: ECO/CPE/WP1(2020)17

Counterfactuals with OECD METRO: **'interconnected' vs. 'localised' regime**

Interconnected

- Global trade as seen today (incorporates effects of the demand and supply changes during the COVID-19 crisis)

Localised

- Global rise in import tariffs on all traded products to 25% in all region
- Domestic Subsidies (1% of GDP) directed to labour and capital in domestic non-services sectors
- Lower substitutability of inputs

What properties do the two regimes have in terms of both: efficiency and stability?

Stylized shocks in ‘interconnected’ and ‘localised’ regime

Trade cost shocks (10%)

Symmetric, uncorrelated and one region at a time

Interconnected

Global trade as seen today (incorporates effects of the demand and supply changes during the COVID-19 crisis)

Localised

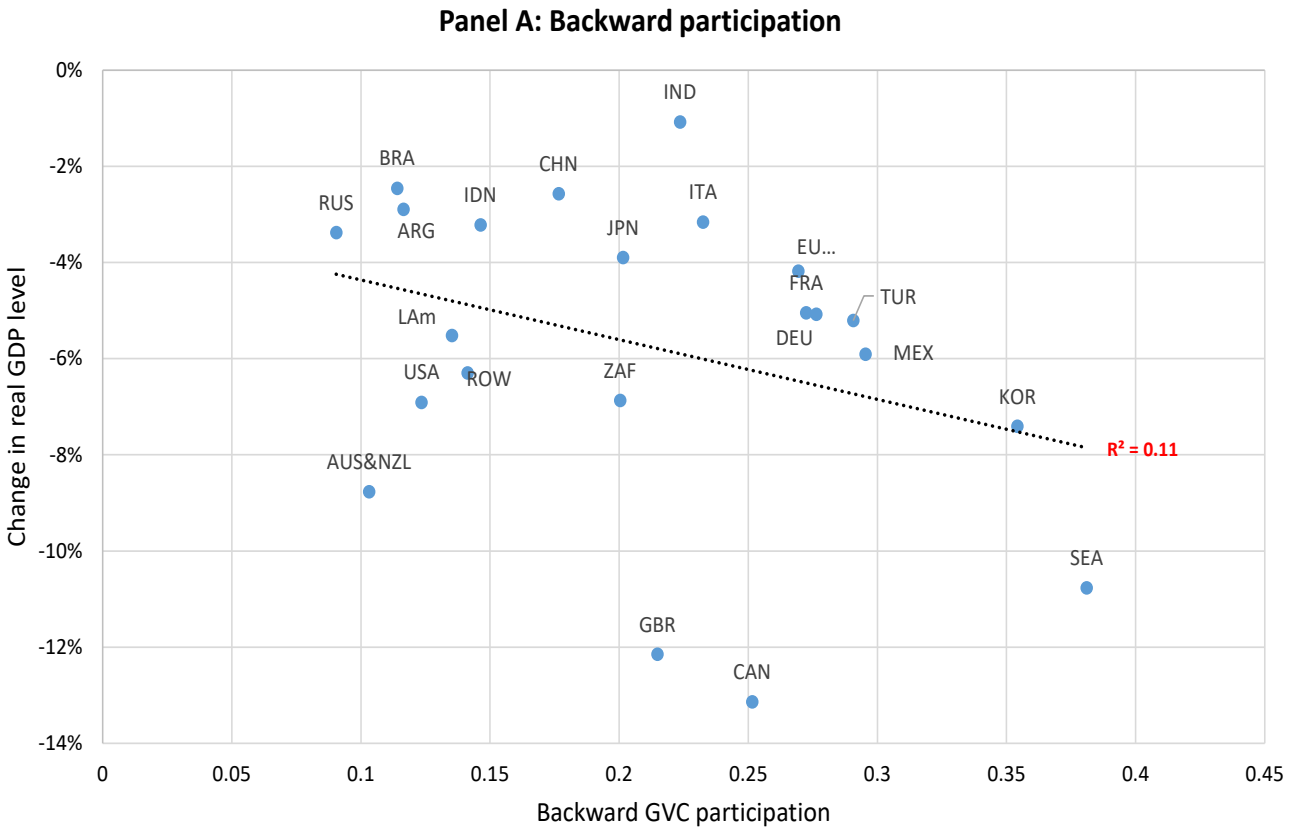
Global rise in import tariffs on all traded products to 25% in all region

Domestic Subsidies (1% of GDP) directed to labour and capital in domestic non-services sectors

Lower substitutability of inputs

What properties do the two regimes have in terms of both: efficiency and stability?

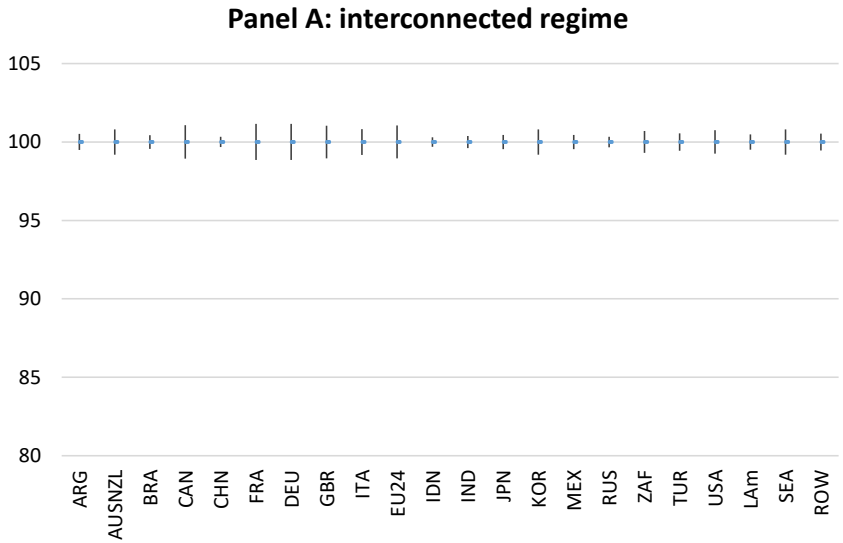
All economies shrink in the localised regime

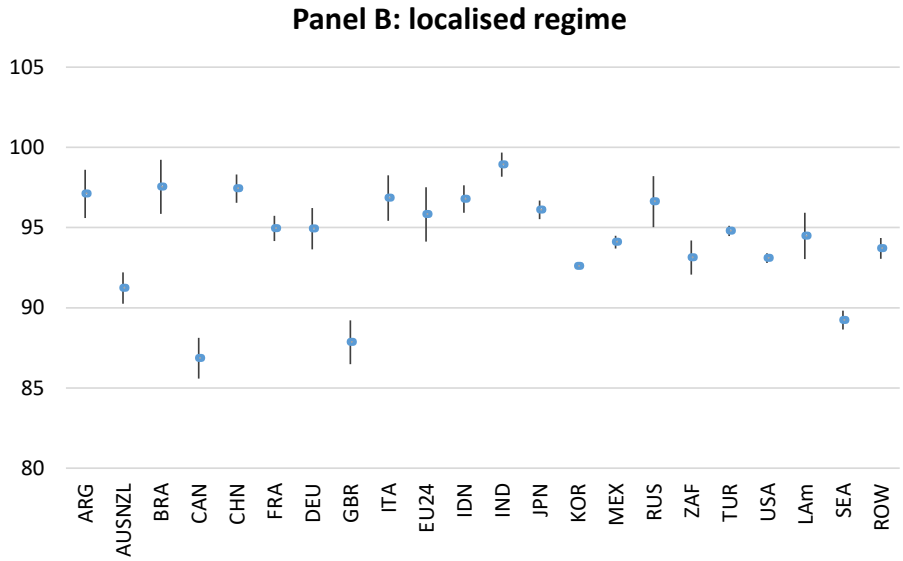


- World GDP drops by 5%
- Reshoring is more costly if country is specialised more downstream (high backward participation)
- Prices of production inputs go up

Source: OECD METRO database and simulations

No gain in GDP stability from localising production

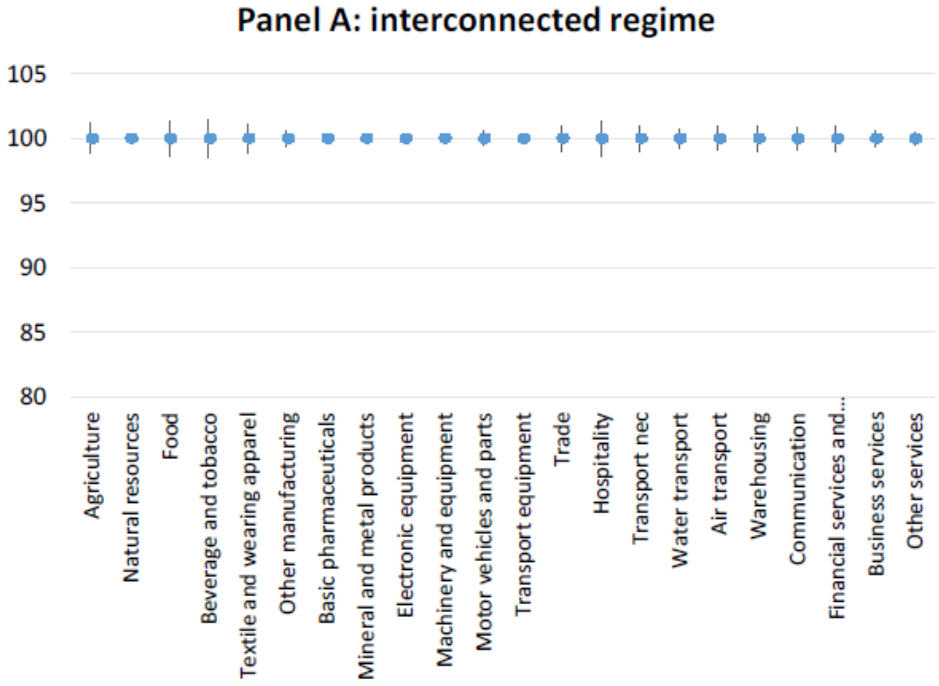


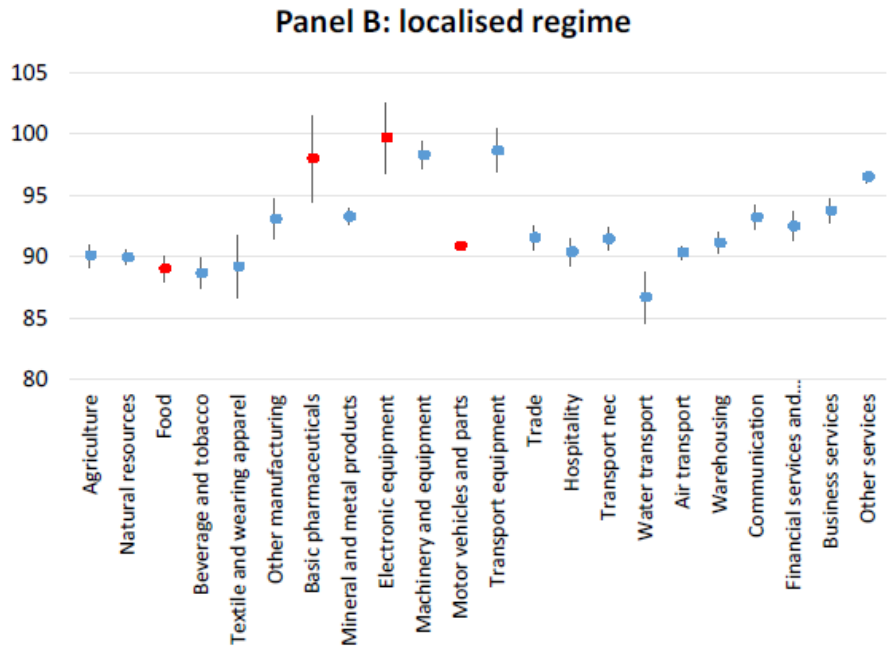


Note: All changes in variables are relative to the level of the interconnected regime base scenario which is set to equal 100. Blue dots show the base in the given regime relative to the interconnected base, and whiskers show average deviations for negative and positive trade cost shocks.
Source: OECD METRO database and simulations.

In the localised regime, shocks result in lower levels and lower stability of real GDP for most countries

Industrial production is not more stable under re-localisation





Note: All changes in variables are relative to the level of the interconnected regime base scenario, which is set to equal 100. Blue dots show the base in the given regime relative to the interconnected base (red dots for four 'strategic' sectors), and whiskers show average deviations for negative and positive trade cost shocks.
Source: OECD METRO database and simulations

In the localised regime, shocks result in lower levels and lower stability of production in most sectors

Conclusions and policy recommendations

- The economic case for a significant 'reshoring' of GVCs is weak
- Improving 'resilience' is a challenge for business
- But governments care about 'risks to availability' and so they have a role to play

- Governments and businesses can work jointly to improve risk preparedness:
  - identifying range of potential threats to essential activities
  - mapping the players involved in some essential chains
  - collecting and sharing information on potential bottlenecks
  - calibrating more optimally stockpiles of essential goods

- Governments can facilitate adjustments with current trade relations by:
  - creating a predictable regulatory, trade, and investment policy environment
  - reducing trade cost due to heterogeneous standards and regulations
  - facilitating movements of goods:
    - allowing simplified procedures for essential activities
    - reviewing transport, logistics and border processes to enable flexible responses to disruptions