

# **Effect of COVID-19 on Global Value Chains and Future Prospects**

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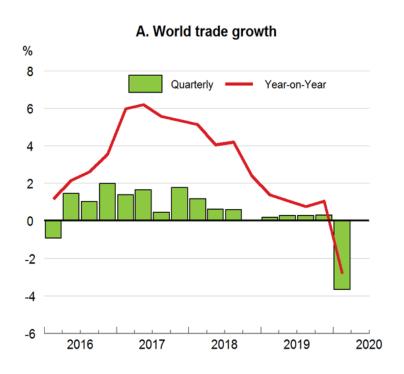
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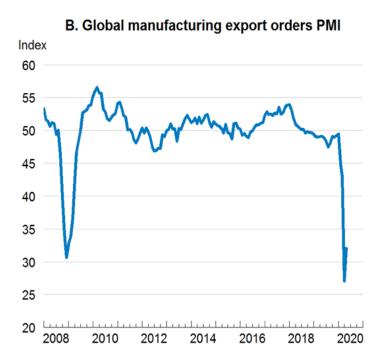






## The COVID-19 crisis has led to a collapse in world trade and disruptions to many GVCs





Source: OECD Economic Outlook, June 2020 and Markit.





## The surge in demand for face masks has triggered concerns about global value chains

The face mask value chains and its main bottlenecks during COVID-19

Raw materials Processed inputs 1

Processed inputs 2

Assembly line

Sterilisation

Testing and packaging

Distribution

Petroleum oil Metal Paper pulp (Cotton) Polypropylene
Nylon spandex
Aluminium
Galvanised iron
or steel
Cardboard

There was a shortage of melt-blown polypropylene manufactured by a limited number of companies

Nonwoven fabric

Metal strips
Ear loops
Boxes for
packaging
(Other fabric)

[Ultrasonic welding]

While ultrasonic welding is used in a variety of industries, assembly lines for face masks are very specific and were in shortage. Other machines can be used but requiring some adjustments

Most countries
manufacturing face masks
have put in place export
bans or equivalent
measures.
Distribution was more
complicated in the
context of the shortage

Source: OECD (2020). https://read.oecd-ilibrary.org/view/?ref=132\_132616-l4i0j8ci1q&title=The-Face-Mask-Global-Value-Chain-in-the-COVID-19-Outbreak-Evidence-and-Policy-Lessons





### GVCs and COVID-19: re-assessing the evidence and policy implications

- GVCs have been rather resilient when it comes to the supply of essential goods
  - Limited disruptions in food supply chains and pharmaceuticals
  - A major shortage for key medical supplies but due to an unanticipated surge in demand – shortages have been addressed through GVCs (face masks, test kits, etc.)
- The debate on 'reshoring' and 'shorter supply chains' is disconnected from the issues to be solved:
  - How to address a surge in demand? Buffer stocks, stockpiling, more agility and reactivity in supply chains
  - How to diversify supply and address bottlenecks? Stress tests, transparency in the value chain, measuring concentration in supply, rising risk awareness, long term relationships with suppliers
  - Focusing on domestic supply reduces the channels for adjusting to economic shocks, limits the options for increasing production and leads to less diversified sourcing – higher risks and less resilient value chains





#### Robustness versus resilience in GVCs

- Robustness is the capacity to continue to produce during a crisis
  - Achieving robustness is generally more costly (and during a pandemic, this 'cost' involves exposing workers to risks)
  - Robustness is an objective for the production of essential products or activities that cannot be easily stopped
- Resilience is the ability to return to normal operations in an acceptable period of time after being disrupted
  - Some firms accept risks (and prefer to not invest to be robust) they focus on the time to recover in their risk management strategies
- Complex value chains (with production in multiple countries) are generally less robust but more resilient (i.e. they recover more quickly)
- Single sourcing is a strategy focusing more on resilience while the redundancy in suppliers is a strategy aiming more at robustness
- Some risk management strategies are common to robustness and resilience





#### Improving robustness in GVCs

- Traditional steps in risk management:
  - Information and risk assessment
  - 2. Choice of risk management strategies
  - 3. Reactivity and agility
- Redundancy in suppliers and supplier diversification (implies more offshoring)
- Generally a combination of local production and international sourcing
- Role of governments:
  - During the crisis: Maintaining the functioning of key infrastructure, adapting regulations
  - Anticipating crises: Be as prepared as companies, contingency plans (e.g. to scale up production of essential goods)





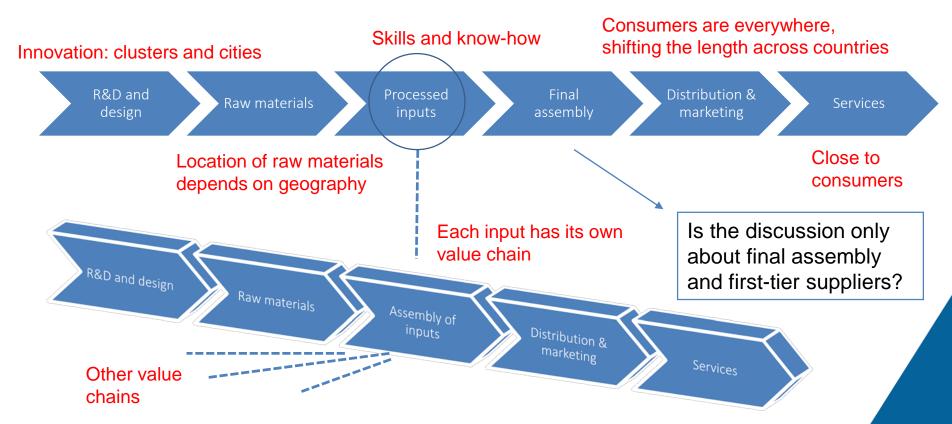
#### Improving resilience in GVCs

- End-to-end visibility in the value chain: supply chain and demand
- Assessment of time to recover
- Single sourcing and long-term relationships with suppliers
- 'Just-in-time' versus 'just in case'
- Role of governments:
  - Creating a stable regulatory environment (i.e. reducing policy risk)
  - Raising risk awareness





#### What part of the value chain can be reshored?







### What policies can influence the organisation of value chains?

- Trade policy: barriers to trade can create costs that discourage firms from producing internationally
- Investment policy: investment screening and measures to discourage outward FDI
- Industrial policy: subsidies and government control or ownership
- Fiscal policy: incentives (tax rebates) or threats (taxation of offshore profit)
- Labour and environmental standards: lowering standards to encourage firms to produce locally? Risk of race to the bottom (as with tax measures)
- ... such policies lead to economic distortions and trigger retaliations across countries – lower income and a threat for the recovery from the crisis





#### The way forward?

- Policies for GVCs need careful consideration
  - The benefits of new GVC policies should outweigh the risks
  - Experimenting with new trade and investment policies is risky in the middle of a deep economic crisis and growth of protectionism
- A 'soft' version of a 'reshoring strategy' would need to build on a sound business rationale for firms to engage in reshoring, e.g. scope for competitive domestic production, improved risk management, consumers ready to pay a premium, niche markets, responsible business conduct, etc.
- Supportive policies for such a strategy would include improvements in business conditions, including investments in education and skills, innovation, infrastructure, collaboration, market integration, etc.



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