COVID-19 and its impact on global economies

Session organizers: Henk Zijm

The COVID-19 pandemic that became manifest early 2020 has led to a severe disruption of many industrial and service sectors due to illness of workers and containment measures, leading to severe capacity and supply problems. Roughly speaking, most countries showed surprisingly little resilience against these major disruptions, partly caused by the global scale of the pandemic, as opposed to local crises due to e.g. natural disasters. Despite good first attempts, more data are needed to clearly show what caused the spread of the pandemic, but in particular the economic consequences as a result of the timing of infections of different parts of the world in combination with the global character of many supply chains. This special session is an attempt to obtain a better picture of how disruptions propagate through the supply chain, the role of inventories and capacity flexibility, resulting changing demand patterns, price manipulation, and of course what remedies are needed to cope with these phenomena. Potential topics include, but are not limited to

- Data transparency on demand and price volatility due to the pandemic evolution
- Intersectoral influences and change effects in global supply chains
- Inventory management and capacity flexibility/adaptability
- Local-for-local production (reshoring) as opposed to global supplies
- Multiple sourcing strategies and product substitution to cope with shortages in both supply and demand
- Re-using materials and products/components (circular economy) as a remedy against materials shortages

but also logistics related to the fight against COVID-19, such as

- Logistics of different vaccination strategies, centralized versus local control
- Supply of needed PPE's (Personal Protection Equipments) such as (medical) mouth caps, but also ventilators, test kits, medicine and other other medical supplies
- Logistics related to the installation of more digital work environments
- Preventing the delay of non-COVID related urgent surgeries, due to capacity problems

If you are interested in joining these sessions, then please do the following.

- Send an email to Henk Zijm (<u>w.h.m.zijm@utwente.nl</u>) as well as to the ISIR secretariat so that we know that you will submit an abstract. If you are not sure whether your topic fits, then please send Henk an abstract based on which the session organizers can form an opinion.
- You submit your abstract via the ISIR conference website: https://2022.isirsymposium.hu/.

When you submit you can denote that you want to join the special session on COVID-19 and its impact on global economies.

Abstract submission deadline: 31 March 2022

Organizer: Henk Zijm (w.h.m.zijm@utwente.nl), University of Twente, The Netherlands