Resilient Supply Chains. Lessons from the Covid-19 Pandemic

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Abstract

As the world is confronted the war in Ukraine and the COVID-19 pandemic, we increasingly realise our dependence on globalized supply chains to improve food security or distribute vaccines. At the same time, the climate crisis creates new supply chain disruptions. With billions of dollars’ worth of investments being mobilized globally, supply resilience, as the capacity to rapidly recover from crisis, will continue to rise to the research and political agenda as a top priority. Information and data have been recognized as vital to improve resilience, and with the turn to digitalization and AI, new opportunities for better response and decision-making in complex supply chains arise. Yet, major challenges remain in rapidly identifying and analysing different data sources and develop from there meaningful and actionable information. Through case studies on Covid-19 and humanitarian disaster response, I will outline key resilience principles, highlight how data and information can be used to improve crisis response and supply chain management. Further, I will highlight the possible dilemmas arising given the different time frames of decision-making and outline directions for future research.