Deglobalization and reorganization of supply chains: effects on regional inequalities in the EU

Abstract:

After decades of globalization, many countries are now considering various measures to reduce their dependence on third countries and to incentivize domestic production. This paper analyses a policy toolbox encompassing trade, industrial, and public policies and their effects on the EU and its geographical regions. We develop a multi-sector, multi-region general equilibrium framework with imperfect competition, input-output linkages, and external economies of scale. Regional and supranational governments set policies and raise taxes and provide subsidies to fund these. We calibrate our framework using detailed data on 235 EU NUTS2 regions, with 54 sectors and input-output linkages both within and across regions. First, we disentangle the main transmission channels of trade, industrial, and public policy by simulating counterfactual policy shocks. Afterwards, we turn to optimal policy design. Using a deep learning–based optimization method, we solve for the welfare-maximizing levels of individual policies and their optimal mix. We find that, under the institutional constraint of a common external tariff, the EU's optimal trade policy is a zero tariff. Instead, by pairing tariffs with complementary instruments, the EU can impose positive trade barriers while redistributing resources through targeted subsidies and transfers to compensate regions that are most adversely affected.