

The role of network linkages in the propagation of asymmetric shocks in the European Monetary Union

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This paper analyzes how asymmetric shocks propagate through the supply chain of the European Monetary Union (EMU). It is shown that the Chinese trade penetration shock is both sufficiently large in size and asymmetric in nature to make it a suitable shock to analyze the effects on European regional labor markets. Given the integrated nature of many of Europe's industries, our econometric model allows for the possibility that shocks propagate between domestic and foreign industries by relying on input output linkages. The WIOD database is used to construct these network shocks. The analysis provides several novel insights. 1.9 million jobs were lost as a result of the Chinese net import penetration shock in the EMU. The interaction of the industrial specialization and the network structure of its industries is important in driving this effect. Additionally, the network propagation of shocks causes considerable differences in the extent to which countries were affected by the Chinese trade penetration shock. The strong industrial ties of some of the small, open economies at the center of the EMU ensured that they gained from their supply of goods to that part of the German industry that benefitted from China's emergence at the world stage. Peripheral and larger countries only weakly imported shocks from abroad and had domestic industrial networks which exacerbated the negative effects of the Chinese trade penetration shock. One of the key findings of the paper is that the current industrial structure of the EMU exacerbates asymmetries rather than mitigates them. This would suggest that the constrained set of tools that policy makers at the European level have at their disposal are insufficient to combat asymmetric shocks.