Production Network and International Fiscal Spillovers

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Abstract

In a context of a liquidity trap, fiscal policy remains an efficient tool to deal with fluctuations of economic activity. In open economies, the multiplier effect of this fiscal policy may be associated with an international spillover effect. The literature highlights large multiplier and spillover effects of fiscal policy whereas these effects remain small in the theoretical literature. Considering international production networks, this papers develops a theoretical explanation consistent with the size of fiscal spillover effects suggested by the empirical literature. We proceed in two steps. First, we develop a two-country general equilibrium model with production network and financial frictions based on Saki Bigio and Jennifer La'O (2016) where labour is not mobile between countries. We show analytically that in a symmetric two-country world, the network does not influence the size of multiplier and spillover effects when the fiscal policy is symmetric. However, in this symmetric world, when public spending increases in only one of the two countries, international production network matters for multiplier and spillover effects. The more connected nodes are, the lower the multiplier effect. The spillover effect is first increasing with the connection of the network and then decreasing.

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Contrasting with Daron Acemoglu and Vasco M. Carvalho and Asuman Ozdaglar and Alireza Tahbaz Salehi (2012), we get both upstream and downstream effects following a fiscal shock. Because of labour immobility between countries, this fiscal shock leads to a terms of trade adjustment, driving contagion.

References

Bigio S. and Jennifer La'O (2016) "Financial Frictions in Production Networks", *NBER Working Papers.*

Acemoglu D. and Vasco M. Carvalho and Asuman Ozdaglar and Alireza Tahbaz Salehi (2012),"The Network Origins of Aggregate Fluctuations",*Econometrica, 2012, 80, 5,1977-2016.*