Incomplete specialization and trade in parts and components

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Abstract

Within a higher-dimensional incomplete specialization Heckscher-Ohlin framework, we first develop a gravity model that views bilateral gravity equations as statistical relationships constrained on countries' multilateral specialization patterns. Second, we test our model empirically by using a uniquely detailed and large European data set. We show that trade in the parts and components of capital goods is driven by supply-side country differences relative to the rest of the world, compatible with models of incomplete specialization and trade. We take our results as evidence of the existence of international production networks in Europe, driven by trade-offs between wages and coordination costs.