QDR methodology: understanding bilateral trade flows in the European Union

Topic: Network and other analysis
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Trade asymmetries have been a well-known fact and there is extensive literature and many reports about the causes for those asymmetries. There is also a recognised effort made by trade statisticians for mitigating trade asymmetries over time. Notwithstanding the positive achievement that have been made so far, that is not enough to build a European Union Inter-Country Supply, Use and Input-Output tables (EU IC-SUIOT), i.e. trade asymmetries must have been removed completely and a balanced view of trade must be estimated as well.

Another problem is about the correct identification of the countries of origin and destination from the ownership perspective. The European Statistical System (ESS) has an extensive and rich amount of trade data and a lot of resources are devoted to measure trade flows. Nevertheless, the customs union of the EU adds another challenge regarding trade in goods statistics: Member-States declare imports/exports for customs or tax purposes without this Member State having acquired ownership of the goods, i.e. declare quasi-transit as well. While relevant for physical flow of trade, quasi-transit and re-exports distort the geographical economic relationship among Member-States and therefore they should be identified and taken into account in the framework of the EU IC-SUIOTs.

To solve these two problems, we have developed the so called QDR methodology in order to address the specificities of trade in goods in the EU by providing a way to estimate balanced trade flows, i.e. solving trade asymmetries, between two countries by three types of international trade: quasi-transit (Q), domestic exports (D) and re-exports (R). For quasi-transit and re-exports the intermediary country between origin and destination is also identified. The QDR methodology was used in the FIGARO project and it revealed very useful for identifying relevant trade relationships across countries.