

Rete della ricerca socio-economica Ciclo di seminari 2014

Lunedì 10 febbraio 2014, ore 10:00 – 11:30
ISTAT - Piazza dell'Indipendenza, 4 - Sala Baffi

Network Analysis of World Trade Using the BACI-CEPII dataset

*Analisi di rete del commercio mondiale attraverso l'utilizzo
del dataset BACI-CEPII*

Luca De Benedictis
(Università di Macerata)

Silvia Nenci
(Università Roma III)

Gianluca Santoni
(Banque de France)

Lucia Tajoli
(Politecnico di Milano)

Claudio Vicarelli
(ISTAT - Servizio Studi econometrici e Previsioni economiche)

Discussant

Lorenzo Burlon *(Banca d'Italia)*

Nodo di ricerca: Internazionalizzazione delle imprese

Abstract

In this paper we explore the BACI-CEPII database using Network Analysis. Starting from the visualization of the World Trade Network, we then define and describe the topology of the network, both in its binary version and in its weighted version, calculating and discussing some of the commonly used network's statistics. We finally discuss some specific topics that can be studied using Network Analysis and International Trade data, both at the aggregated and sectoral level. The analysis is done using multiple software (Stata, R, and Pa.jek). The scripts to replicate part of the analysis are included in the appendix, and can be used as an hands-on tutorial. Moreover, the World Trade Network local and global centrality measures, for the unweighted and the weighted version of the Network, calculated using the bilateral aggregate trade data for each country (178 in total) and each year (from 1995 to 2010) can be downloaded from the CEPII webpage.