

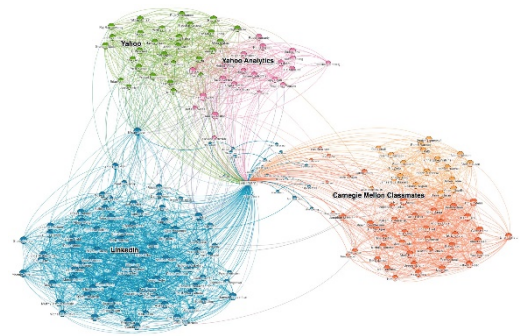
Industry Networks and Economic Development

In this course, we study industry networks with a focus on macroeconomic networks. We study in particular how networks shape countries' GDP, their export competitiveness, and their development opportunities.

The course begins with a primer on networks and graphs where we study basic ideas and concepts, and then turn to the visualization of networks. In the second part of the course, we look at several examples of how networks are modelled in macroeconomics. In the third and fourth part, we develop the workhorse model that we will use in the remainder of the course.

Course Content

1. A Primer in Network Theory
 - a. Basic Concepts and Ideas
 - b. Visualizing Networks
2. Industry Networks in Economics
 - a. Networks based on Input-Output Tables
 - b. The New-Keynesian Model with Intermediate Goods
 - c. The "Product Space" and Economic Development
 - d. Capability Linkages
3. Modern Ricardian Trade Theory
 - a. A Canonical Model
 - b. Estimating The Gravity Equation
 - c. Globalisation and the Distance Puzzle
 - d. Capability Linkages (cont.)
4. A Model of Industrial Policy
5. Topics in Industrial Policy
6. Topics in Development Economics



There are no formal requirements for students to take this course but some basic knowledge of Stata would be helpful. A written exam is offered at the end of the semester and at the beginning of the following semester. Optionally, students may obtain bonus points for short presentations (15 min) during the course.

Literature

- Matthew O. Jackson (2010) "Social and Economic Networks" Princeton University Press.
- Newman, Barabasi, Watts (2006) "The Structure and Dynamics of Networks" Princeton University Press.
- Newman (2010) "Networks, An Introduction" Oxford University Press
- Wasserman, Faust (1994) "Social Network Analysis" Cambridge University Press.

I will announce additional literature during the lectures.

Office Hours and Contact

- Lecture: Tuesdays 3:00pm – 6:00pm. Bergheimer Straße 58, Room 01.030
- Office: Bergheimer Straße 58, Room 01.020a
- Office Hours: Tuesdays 11am -12am by appointment (if you cannot make it at that time please write me at thomas.eife@awi.uni-heidelberg.de)