

Course at the Bank of Chile: “Econometric Analysis of Bipartite Networks”

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Topic:

Bipartite networks have numerous applications in economics, including buyer/seller interactions, trade models of export and import decisions, and models of wage determination based on matched employer-employee data. In this paper we review a number of econometric techniques to analyze bipartite networks. The main focus is on fixed-effects, random-effects, and discrete heterogeneity approaches in linear and nonlinear models. We also discuss how to account for endogenous link formation and network dynamics.

Course organization:

- 1 Linear models: the method of Abowd Kramarz and Margolis
- 2 Nonlinear models: identifying and estimating sorting in the presence of complementarities
- 3 Extensions: network formation and dynamics

References:

Abowd, J., F. Kramarz, and D. Margolis (1999): “High Wage Workers and High Wage Firms”, *Econometrica*, 67(2), 251-333.

Bonhomme, S., T. Lamadon, and E. Manresa (2016): “A Distributional Framework for Matched Employer-Employee Data,” appeared in *Econometrica*.

Bonhomme (2017): “Econometric Analysis of Bipartite Networks”, unpublished manuscript.