Structure of Control in Financial Networks: an Application to the Brazilian Stock Market

Mariana Piaia Abreu¹, Rosanna Grassi², Renata R. Del-Vechio³

¹ Universidade Federal Fluminense
² Università Degli Studi di Milano-Bicocca
³ Universidade Federal Fluminense

The financial architecture of a company can be understood through the ownership network, in which the firms are linked together by property relations, forming complex patterns. The structure of the ownership of a company reflects the structure of economic power or financial control. In this work, following a similar approach as in Glattfelder and Battiston [1] and Rotundo and D’Arcangelis [2], we formalize the Brazilian financial control using complex networks, considering direct and indirect control. Data are provided by BM&F BOVESPA, with 416 listed companies and 1670 autonomous agents, updated on July 2017.

References
