Pattern recognition of financial institutions’ payment behavior

Comments

Pedro Elosegui
Central Bank of Argentina

October 29, 2020

The views expressed herein are those of the author and are not necessarily those of the Central Bank of Argentina.
Contributions

- Interesting and challenging application of Artificial Neural Network to analyze banking payment behavior
- Focused in individual (and systemic) bank behavior and applied to the Colombian large value payment system (LVPS)
- A methodology that simplify the analysis of the interaction of banks and other financial companies/different payment types/time...a large dimension problem
- Network metrics and systemic impact features result very relevant in the analysis
- Important an interesting tool to detect anomalies in complex and large systems like LVPS
Comments

- As results may (should) depend on the main characteristics of the banking system under analysis
  Description of the main features of the underlying payment network for the period (basic and/or network statistics, concentration, large banks,..)

- Some questions
  a) Analysis with the Central Bank in the system (Monetary Policy implementation)
  b) Freeriding problem: anomalies such as delay payment behavior of particular banks