







# FINANCIAL STABILITY: CHALLENGES AND INSIGHTS FROM NEW TOOLS

June 11th, 2018

**OFCE** - Observatoire Français des Conjonctures Economiques 10, Place de Catalogne - 75014 Paris

The workshop will address the relations between the architecture of financial networks and their ability to amplify shocks both in a static and in an endogenous link formation setting. The results are relevant for pricing the impact of systemic effects on the obligation of financial counterparties and to evaluate the contribution of investors to financial stability. Furthermore, while most central banks' mandate is focused on price stability, a major legacy from the Great Recession has been that price stability requires one to look also at financial stability, and from a systemic point of view. The workshop will discuss how financial network and agent-based models can usefully be employed to analyze the impact of financial stability and macro-prudential policies, and what challenges regulators must address in terms of both data and concepts.

The workshop will include interventions of central bankers and of academic scholars working on the relations between financial networks, agent-based models, systemic risk and macro-prudential policies.

## Program

**9:00-9:15** Introduction : *Xavier Ragot (OFCE President)* 

#### **SESSION I: Financial Networks**

Chair: Sérafin Jaramillo (Banco de México)

- **9:15-9:45** Pathways to instability in financial networks
  - Guido Caldarelli (IMT Lucca)
- **9:45-10:15** Endogenous money in financial networks *Mauro Napoletano (OFCE-Sciences Po)*

Stefano Battiston (University of Zürich)

- 10:15-10:45 The price of complexity and multiple equilibria in financial networks
- **10:45-11:15** Macropru beyond banking: the case for life insurance companies and asset managers?
  - Laurent Clerc (Banque de France)
- 11:15-11:30 Coffee Break

### **SESSION II: Agent-Based Models**

Chair: Xavier Ragot (OFCE-Sciences Po)

11:30-12:00 Winter is possibly not coming: Mitigating financial instability in an agent-based model with an interbank market

Lilit Popoyan (Scuola Superiore Sant'Anna, Pisa)

**12:00-12:30** Balance-sheet based and unconventional policies in an agent-based model *Mattia Guerini (OFCE-Sciences Po)* 

**12:30-14:00** *Lunch* 

**14:00-14:30** Some unstable feedback loops in financial markets

Jean-Philippe Bouchaud (Capital Fund Management and Ecole Polytechnique)

## **SESSION III: Financial Networks and Central Banking**

Chair: Stefano Battiston (University of Zürich)

**14:30-15:00** Financial interdependences and asset values: theory and some empirical applications

Marco Bardoscia (Bank of England)

**15:00-15:30** Some network applications at the Mexican central bank *Sérafin Jaramillo (Banco de México)* 

**15:30-16:00** Applications and usage of network-based tools for financial stability analysis at the ECB Christoffer Kok (European Central Bank)

**16:00-16:15** Coffee Break

**16:30-18:30** Chair: Mauro Napoletano (OFCE-Sciences Po)

Challenges for monetary and macro-prudential policies: how can new models be useful? Olivier De Bandt (Banque de France and ACPR), Xavier Ragot (OFCE-Sciences Po), Sérafin Jaramillo (Banco de Mexico), Christoffer Kok (European Central Bank), Laurent Clerc (Banque de France), Jean-Philippe Bouchaud (CFM and École Polytechnique)

18:30-18:45 Concluding Remarks

**20:00** Dinner (on invitation only)

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