

# **DIGITAL FINANCE CHAIR**

Academic partner(s): Télécom Paris, University Paris Panthéon Assas

Financial partner(s): Groupement des Cartes Bancaires CB, INSEE and Caisse des Dépôts

Scientific director(s): David Bounie et Marianne Verdier

Website: https://digital-finances.com/

#### **RESEARCH PROGRAM DESCRIPTION**

The deployment of services based on digital technologies is leading to a profound change in the financial sector. Digital technologies are transforming access to information, verification, transmission, storage and processing of financial data. All services traditionally provided by financial intermediaries are evolving, whether payment, lending, financial advice or transaction recording. This change results in the entry of new players into the market, new forms of competitive interactions and regulatory developments.

The objective of the Digital Finance chair is to conduct research on all innovations, services, products or organizations linked to digital technology, likely to change financial intermediation.

The Chair covers four main areas:

- High frequency data, nowcasting, environment and climate
- Alternative data, territories, firms and public statistics
- Financial inclusion and economic development
- Blockchain, digital currencies and AI in banking and insurance

#### **RESEARCH TEAM**

#### Researchers

- David Bounie, Télécom Paris Marianne Verdier, University Paris Panthéon-Assas
  - Yackolley Amoussou-Guenou, University Paris Panthéon-Assas
- Arash Aloosh, EMLV, Paris
- Thierry Bonneau, University Paris Panthéon-Assas
- Bertrand Crettez, University Paris Panthéon-Assas
- Abel François, SciencePo Strasbourg
- John Galbraith, McGill University
- Winston Maxwell, Télécom Paris
- Lisa Morhaim, University Paris Panthéon-Assas
- Marie Obidzinski, University Paris Panthéon-Assas
- Mariana Rojas-Breu, University Paris Panthéon-Assas
- Patrick Waelbroeck, Télécom Paris

#### **Postdoctoral Researchers**

- Youssouf Camara, Télécom Paris and McGill University
- Gabrielle Gambuli, INSEE and University Gustave Eiffel

#### **PhD Students**

- Quentin Durand, Télécom Paris
- Chloé Breton, Télécom Paris
- Leonardo Leone, Télécom Paris
- Ivan Shchapov, Télécom Paris

#### Interns

• Davi Marim, University Paris Dauphine-PSL

#### PUBLICATIONS OF THE YEAR DIRECTLY RELATED TO THE RESEARCH PROGRAM

# Published

- Sara Biancini, Marianne Verdier, Bank-platform competition in the credit market, International Journal of Industrial Organization, Volume 91, 2023, 103029, ISSN 0167-7187, <u>https://doi.org/10.1016/j.ijindorg.2023.103029</u>.
- David Bounie, Y. Camara and J. Galbraith, Consumer Mobility and Expenditure during the COVID-19 Containments: Evidence from French Transaction Data, *European Economic Review*, 2023, Volume 151.
- Bertrand Crettez (Université Paris Panthéon Assas) and Marie Obidzinski, « The Choice of Titling System in Land and the Blockchain», Forthcoming American Review of Law and Economics.
- Marianne Verdier, Digital Payments and Bank Competition' (2024), Journal of Financial Stability.
- David Bounie, A. Dubus and P. Waelbroeck, Competition and the Two Margins of Privacy, International Review of Law & Economics, forthcoming.

#### **Under review**

 David Bounie, A. Dubus and P. Waelbroeck, Collecting and Selling Consumer Information: Selling Mechanisms Matter, International Journal of Industrial Organization, Revise and Resubmit,

- David Bounie, Y. Camara and J. Galbraith, Consumer Mobility, Offline and Online Regional Trade: Evidence from High-Frequency Transaction Data, submitted to *International Economic Review*,
- David Bounie, Y. Camara and J. Galbraith, Consumer Product Returns: High-Frequency Tracking using Transaction Data, submitted to *Management Science*
- David Bounie, Y. Camara, F. Daniele, M. Segu, and P. Warnes, Bike-friendly cities: an opportunity for local businesses? Evidence from the city of Paris, submitted to *Journal of the European Economic Association*.
- Noé Ciet and Marianne Verdier, Cyber Security and Cloud Outsourcing of Payments.

# Working papers

- Cyril Monnet, Asgerdur Petursdottir and Mariana Rojas-Breu, Central-bank account for all: efficiency and stability.
- David Bounie, Y. Camara and J. Galbraith, Economic activity around extreme events: tracking consumption and mobility dynamics at fine scales
- David Bounie, A. Dubus and P. Waelbroeck, Competition and Mergers with Strategic Data Intermediaries.

# Reports, books, press articles, etc.

• Marianne Verdier participated in the elaboration of the yearly report of the High Council for Financial Stability. The topics related to the blockchain regulation and the transformation of the business models of financial intermediaries are analyzed very carefully by the HCFS.

# MAJOR COMMUNICATIONS RELATED TO THE RESEARCH PROGRAM

Major academic conferences, invited speaker, etc.

- Marianne Verdier, December 2023: Conférence Monnaie Economie et Droit, Banque de France: 'Cybersecurity and Cloud Outsourcing of Payments'
- Marianne Verdier, November 2023: The Blockchain and Digital Assets Conference, HEC, keynote speech
- Marianne Verdier, November 2023: Comité Scientifique de l'ACPR 'Bank Platform Competition in the Credit Market'
- Marianne Verdier, May 2023: Symposium in Honor of Jean-Charles Rochet, Geneva 'Competing Digital Monies'
- Marianne Verdier, March 2023: 14th Digital Economics Conference, Telecom ParisTech 'Cybersecurity and Cloud Outsourcing of Payments'
- Marianne Verdier, March 2023: Risk Forum 'Competing Digital Monies'.

# Events organized and financed by the program

- Conference on law and economics (CRED): Matthieu Bouvard, Catherine Casamatta, and Rui Xiong, "Lending and monitoring: Big Tech vs Banks", TSE Working Paper, n. 22-1386, November 2022.
- Webinars jointly organized by the Chair and ACPR/Banque de France:
  - Septembre 2023, IA et souveraineté.
  - June 2023, ChatGPT, Large Language Models : Les modèles de fondation.
  - o April 2023, Vers une IA auditable
  - Mars 2023, L'humain (où) dans la boucle?

# OTHER HIGHLIGHTS

Awards, scientific recognition, organization of calls for projects, involvement in master's courses, PhD program visiting researchers, etc...

- Marianne Verdier teaches various courses at the University Paris Panthéon Assas related to the program:
  - Blockchain economics (Master 2 Finance)
  - Innovations in banking (Master 2 MBA)
  - Regulation of New Technologies (including blockchain, artificial intelligence and finance)(Master 2 Law and Economics)
- David Bounie teaches courses on Digital Finance at Télécom Paris (Mastère Régulation de l'Economie)
- Visiting researcher at Télécom Paris:
  - John Galbraith, McGill University
  - o Antoine Dubus, ETH Zurich
- Visiting researcher in the University Paris Panthéon-Assas:
  - o Maarten Van Oordt (March 2023)