FIN-TECH: creating standards for fintech risk management

Motivation. Financial Technologies bring opportunities (competitive prices, improved user experience, wider inclusion) but also risks (credit risks, market risks, cyber risks), amplified by the interconnectedness of fintech platforms (systemic risks).

Aim. The Horizon2020 FIN-TECH project (2019-2021) aims at building fintech risk management standards, measuring risks to make fintech innovations sustainable.

Method. The aims are being achieved by: i) developing "benchmark" use cases in fintech risk management; ii) disseminating the use cases with researchers, regulators, supervisors, fintechs and banks.

What we do?

# Sustainable payments: network models to improve p2p lending

Branka Hadji Misheva
Paolo Giudici
Alessandro Spelta
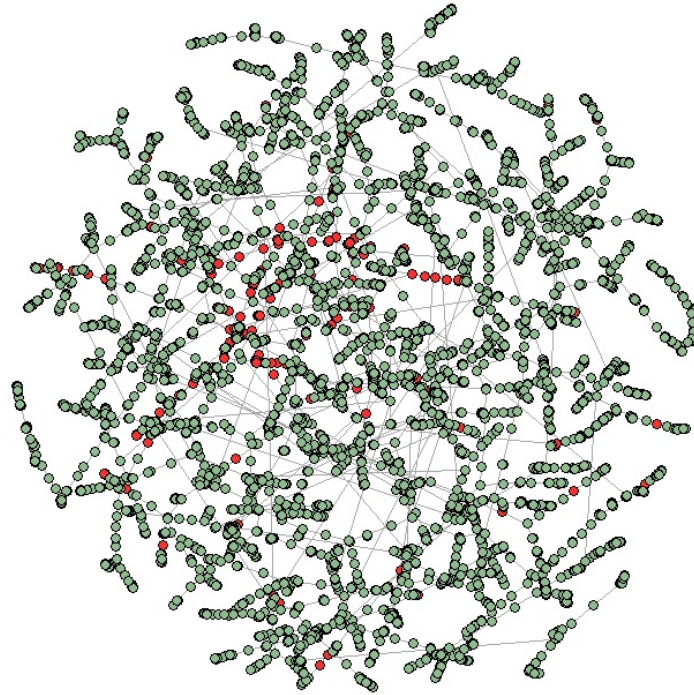
Minimal spanning tree representation of the borrowing companies networks. The tree has been obtained by using the standardized Euclidean distance between institutions features. In the figure, nodes are coloured according to their financial soundness, red nodes represent defaulted institutions while green nodes are associated with active companies.

# Sustainable lending: explainable AI in SME credit allocation

Niklas Bussmann
Paolo Giudici
Jimi Marinelli
Jochen Papenbrock
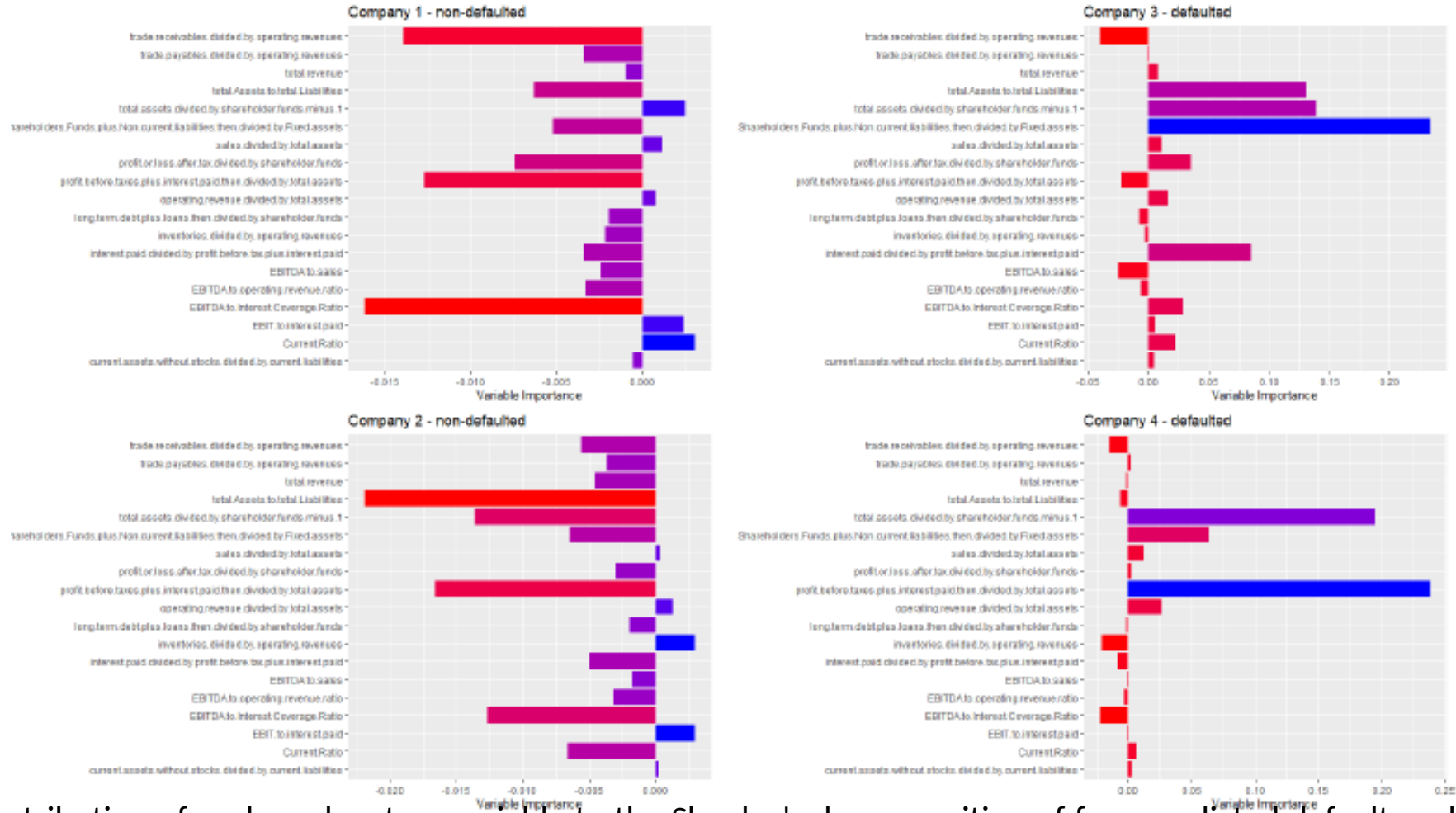
Contribution of each explanatory variable to the Shapley's decomposition of four predicted default probabilities, for two defaulted and two non defaulted companies. A red colour indicates a low variable importance, and a blue colour a high variable importance.

# Sustainable finance: leveraging correlations to target investments

Peter Schwendner
Martin Schüle
Martin Hillebrand
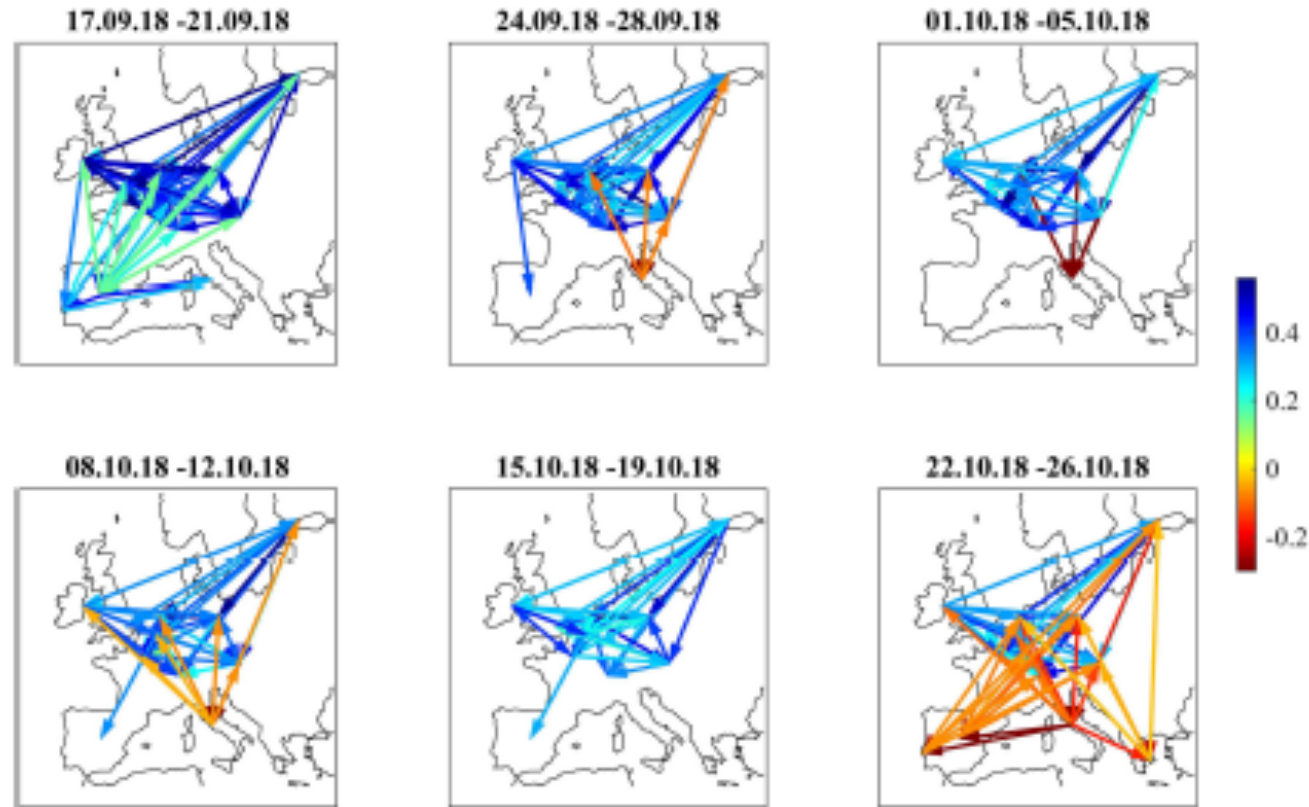
Filtered correlation influence networks during the weeks around the Brexit Referendum (23.6.2016).

Blockhain research – standardization content for the knowledge exchange platform .

Three main topics : #Cryptocurrency markets   #Blockchain   #Regulatory/governance
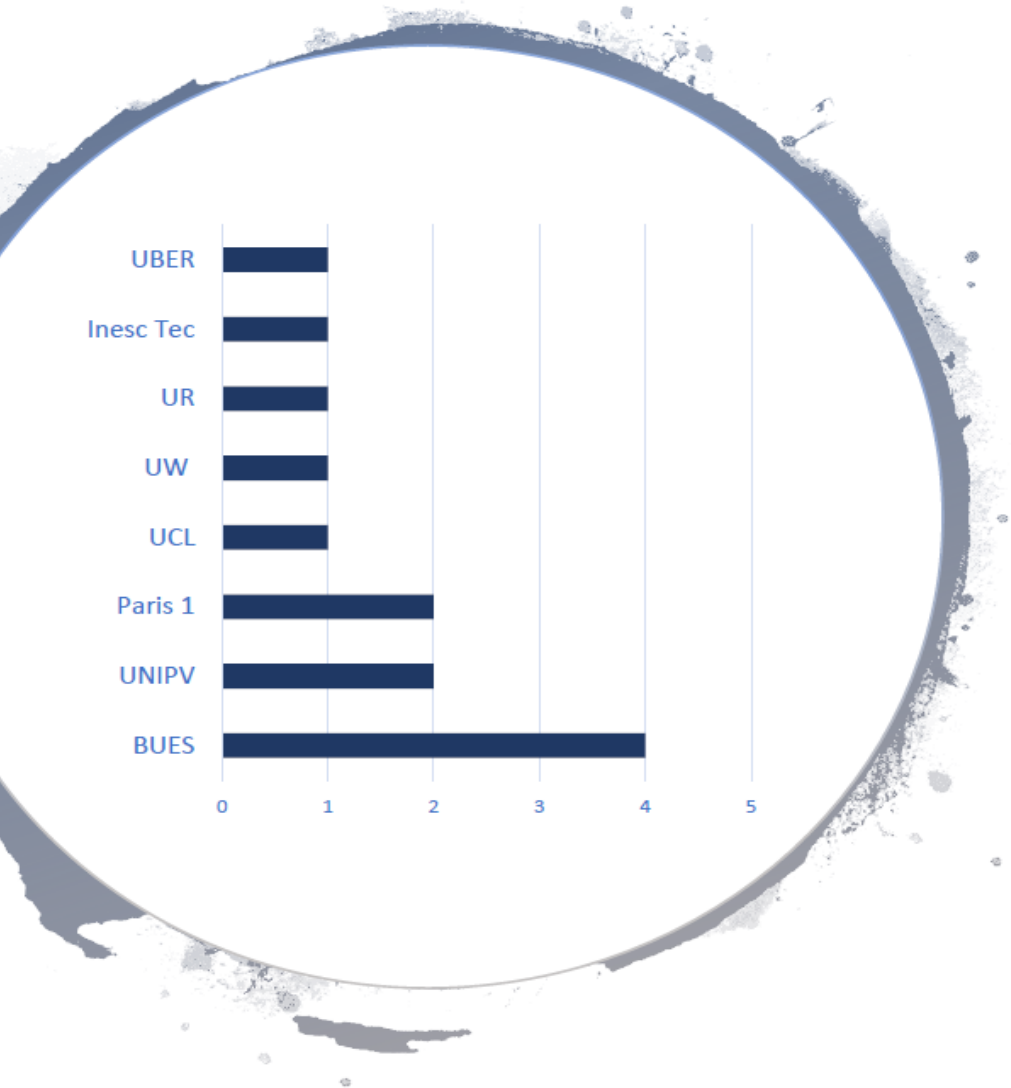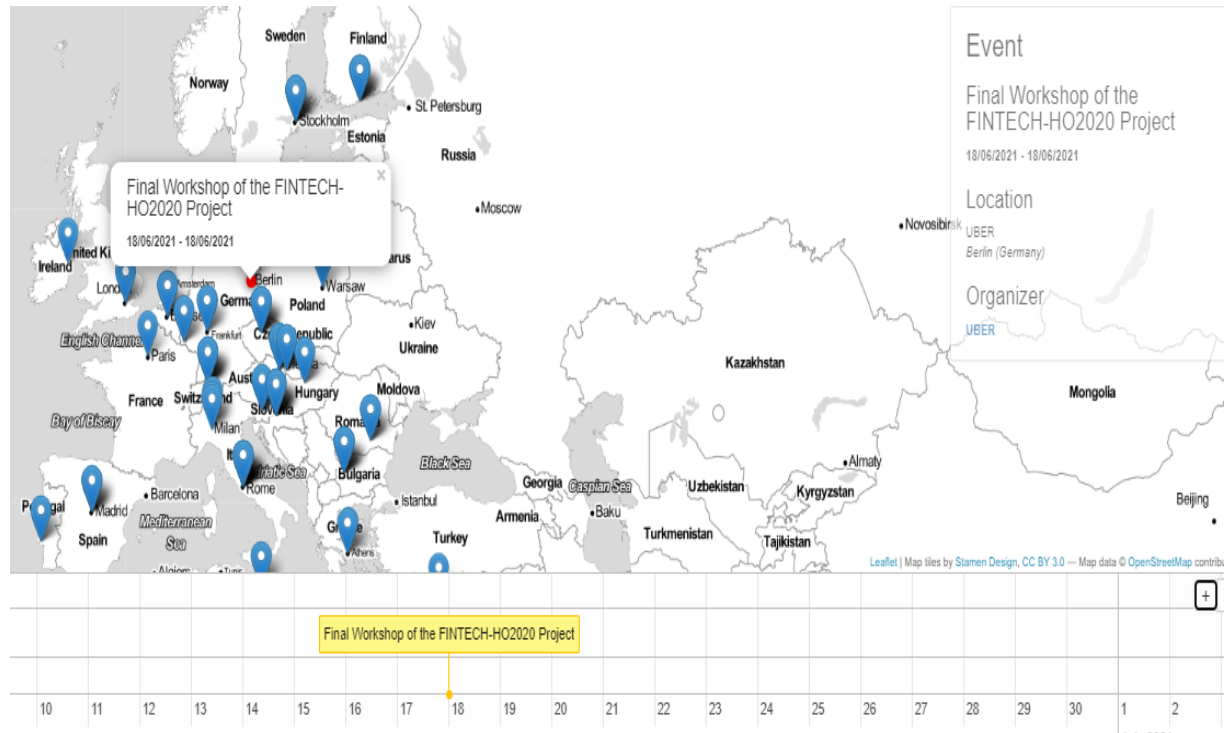

Use Cases Collection

1) A Decentralised Digital Identity Architecture (Goodell and Aste, 2019)

2) A Probative Value for Authentication Use Case Blockchain (Guegan, 2019)

3) Fostering consumer bargaining and e-procurement through a decentralized marketplace on the blockchain (Amorim et al. 2019)

4) **Initial Coin Offerings: risk or opportunity? (Toma and Cerchiello, 2019)**

5) Metcalfe's law and log-period power laws in the cryptocurrencies market (Pele and Pele, 2019)

6) Momentum and contrarian effects on the cryptocurrency market (Kosc et al. 2019)

7) Phenotypic convergence of cryptocurrencies (Pele et al. 2019)

8) The other side of the Coin: Risks of the Libra Blockchain (Abraham and Guegan, 2019)

9) Using High-Frequency Entropy to Forecast Bitcoin's Daily Value at Risk (Pele and Pele, 2019)

10) Benefits of sectoral cryptocurrency portfolio optimization (Culjak et al. 2020)

11) **A Statistical Classification of Cryptocurrencies (Pele et al. 2020)**

12) **Libra or Librae? Basket based stablecoins to mitigate foreign exchange volatility spillovers (Giudici et al. 2020)**

13) **FRM Financial Risk Meter (Mihoci et al. 2019)**

FINTECH-HO2020 events

- **3rd validation and research workshop** on Blockchain and Risk Management **in Winterthur on 25th of March 2021**

- **Final workshop   in Berlin the 18/06/2021**

Event

Final Workshop of the
FINTECH-HO2020 Project

18/06/2021 - 18/06/2021

Location

UBER
Berlin (Germany)

Organizer

UBER

Blockchain and Risk Management Conference

Horizon2020 Project: FINTECH-HO2020
A Financial supervision and Technology
compliance training programme

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FINTECH RISK MANAGEMENT

1st European Workshop on Blockchain and Risk Management 2021

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Contact us

info@fintech-ho2020.eu
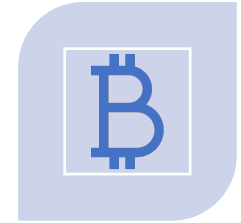
Cross HO2020 projects COLLABORATION

FINSEC
SOTER
INFINITECH
Critical Chains

JOINT EXPLOITATION AND DISSEMINATION WORK ON:

AI RISK MANAGEMENT MODELS AND EXPLAINABILITY

CYBER SECURITY/RISKS FOR FINANCE

SUSTAINABILITY OF FINTECH RISK MODELS

CROSS PROJECTS TRAINING ACTIVITIES AND WORKSHOPS

NEXT EVENTS : 12TH DECEMBER / 14TH JANUARY

Work in progress collaborations: Concordia – BDVA – SPARTA – Cybersecurity for Europe

FINTECH RISK MANAGEMENT

Aim. Propose **F**inancial Technologies (peer to peer lending, robo advice in asset management, blockchain payments) through risk management standards to sustain digital assets and green investments.

Methods. Propose new use cases for fintech risk management of digital assets (particularly for green investments), measuring risks to make innovations sustainable

Work plan. Collaboration with other project can be achieved by: i) developing "benchmark" use cases in digital assets risk management, including ESG principles; ii) disseminating the use cases with researchers, regulators, supervisors, fintechs and

Bridging-up: proposal