SUPTECH WORKSHOP II
AI, Market Risk and Robot Advisory

Fin – Tech HO2020 project

10, 11, 14, 15 December
Online event

10 December 2020 14.00 – 18.00

14.00 – 14.20	**Overview of the FIN-TECH Project** Paula Brito	
14.20 – 16.00	**Explainable Artificial Intelligence** Nuno Moniz	
16.00 – 16.30	**Coffee break and Discussion**	
16.30 – 18.00	**Case study : Explainability in Fintech Risk Management** Nuno Moniz	

11 December 2020 14.00 – 18.00

14.00 – 16.00   **Determinants of Sovereign Risk**
                       Cláudia Braz

16.00 – 16.30   **Coffee break and Discussion**

16.30 – 18.00   **Case study : Convergence and Divergence in European Bond Correlations**
                       Cláudia Braz & Paula Brito

14 December 2020 14.00 – 18.00

14.00 – 14.45   **Are Cryptocurrencies Connected to Forex? A Quantile Cross-Spectral Approach**
                       Paulo Teles

14.45 – 16.30   **Heteroscedastic ARCH and GARCH Models**
                       Paulo Teles

16.30 – 17.00   **Coffee break and Discussion**

17.00 – 18.00   **How do Bitcoin Returns Behave: Like a Currency or Like an Asset?**
                       Nuno Machado

15 December 2020 9.00 – 13.00

9.00 – 10.00   **Portfolio Construction**
                      Carlos Alves

10.00 – 11.00   **Network Models**
                      Paula Brito

11.00 – 11.30   **Coffee break and Discussion**

11.30 – 13.00   **Case-study: Network models to enhance automated cryptocurrency portfolio management**
                      Carlos Alves & Paula Brito

EU Fin-Tech Horizon2020

SUPTECH WORKSHOP II

AI, MARKET RISK AND ROBOT ADVISORY
ONLINE MEETING

December 10, 11, 14 and 15, 2020
Portugal

AI, MARKET RISK AND ROBOT ADVISORY

This SupTech workshop is part of the Project 'FIN-TECH Horizon 2020' funded by the EU. It covers aspects of Financial Modelling and Fintech Risk Management.

Different alternative approaches may be useful to quantify and/or prioritise compliance risks and market risks associated with the application of artificial intelligence methods in finance and can thus be employed to offer an "automated" risk management tool, for both RegTech and SupTech purposes.

During this SupTech workshop participants will learn how to apply data science in the development of predictive models for risk.

REGISTRATION

Register for free here

Download the agenda

Evaluation form

Visit us at
www.fintech-ho2020.eu

TARGET AUDIENCE BACKGROUND

- The Workshop is aimed at persons interested in financial modelling and technological innovations in Economy.
- Some background in statistics and quantitative modelling is recommended.
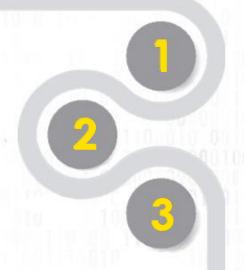
SUPTECH
WORKSHOPS
IN PORTUGAL

1

Big Data Analytics
CMVM, Lisbon
June, 6, 7, 18 and 19, 2019

AI, Market Risk and Robot Advisory
Online
December 10,11, 14 and 15, 2020

2

3

Blockchain
Spring 2021

Supervisory technology framework:
28 X 3 SupTech Workshops,
sharing use cases with national supervisors

Regulatory compliance framework:
6 RegTech Workshops,
sharing use cases with fintech hubs

All agendas of the past SupTech workshops here

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European Commission
FINTECH RISK MANAGEMENT
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INVITATION FOR
BANKS AND INSURERS

New financial technologies as Big Data Analytics, AI and Blockchain are used in innovation departments at banks/insurers and at Fintech startups.

YOU ARE INVITED TO BECOME AN EVALUATOR OF THE SERIES OF REG-TECH SESSIONS AND SHAPE THE LANDSCAPE OF RESEARCH SANDBOXING IN THE EU.
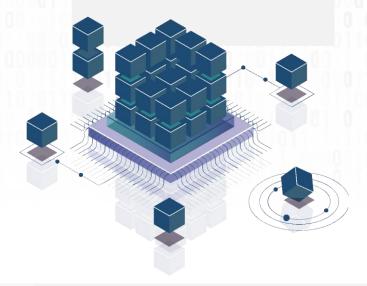
Within 2 years 6 RegTech sessions take place across Europe, covering topics such as:

- Artificial Intelligence

- Market risk management

- Credit risk management

- Operational risk management

- Creditworthiness

- Assessment

- Blockchain technologies

- Innovative payments

- Peer2Peer lending

- Robot-Advisory

- Big Data Analytics

Contact us if you are interested in becoming an evaluating bank that participates in the **RegTech** sessions and gives feedback about the workshops, models and use cases. Contact us at: info@fintech-ho2020.eu

Your benefit: get to know the latest trends / developments in RegTech and FinTech Risk Management and engage as a thought leader on EU level.

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AGENDA part I
AI, MARKET RISK AND ROBOT ADVISORY

December 10, 2020 | 14.00 – 18.00

14.00 – 14.20	**Overview of the FIN-TECH Project**
	Paula Brito
14.20 – 16.00	**Explainable Artificial Intelligence**
	Nuno Moniz
16.00 – 16.30	**Coffee break and Discussion**
16.30 – 18.00	**Case study: Explainability in Fintech Risk Management**
	Nuno Moniz

December 11, 2020 | 14.00 – 18.00

14.00 – 16.00	**Determinants of Sovereign Risk**
	Cláudia Braz
16.00 – 16.30	**Coffee break and Discussion**
16.30 – 18.00	**Case study: Convergence and Divergence in European Bond Correlations**
	Cláudia Braz & Paula Brito

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AGENDA part II

AI, MARKET RISK AND ROBOT ADVISORY

December 14, 2020 | 14.00 – 18.00

14.00 – 14.45	**Are Cryptocurrencies Connected to Forex? A Quantile Cross-Spectral Approach** Paulo Teles
14.45 – 16.30	**Heteroscedastic ARCH and GARCH Models** Paulo Teles
16.30 – 17.00	**Coffee break and Discussion**
17.00 – 18.00	**How do Bitcoin Returns Behave: Like a Currency or Like an Asset?** Nuno Machado

December 15, 2020 | 09.00 – 13.00

09.00 – 10.00	**Portfolio Construction** Carlos Alves
10.00 – 11.00	**Network Models** Paula Brito
11.00 – 11.30	**Coffee break and Discussion**
11.30 – 13.00	**Case-study: Network models to enhance automated cryptocurrency portfolio management** Carlos Alves & Paula Brito

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SPEAKERS

PAULA BRITO is Associate Professor in Statistics and Data Analysis at the Faculty of Economics (FEP) of the University of Porto and member of the Laboratory in Artificial Intelligence and Decision Support (LIAAD) of INESC TEC. She holds a Ph.D. in Mathematics (1991) from the University of Paris-IX Dauphine, France. Her research interests comprehend multivariate data analysis, in particular cluster analysis and symbolic data analysis, applied statistics and data analysis in the social sciences.

NUNO MONIZ is Researcher at the Laboratory of Artificial Intelligence and Decision Support (LIAAD) of INESC TEC, and an Invited Professor at the Sciences College of the University of Porto (FCUP). He successfully defended his Ph.D. at FCUP in 2017 and completed his M.Sc. in Architectures, Systems and Networks at the Polytechnic Institute of Oporto (ISEP) in 2012 and was awarded a merit diploma for outstanding academic performance.

CLÁUDIA BRAZ is an Economist, working at the Economics and Research Department at Banco de Portugal, since 1999. She is also Chairperson of the Working Group on Public Finances of the European System of Central Banks, since 2015, and was recently appointed Head of the Public Finances and Structural Studies Division, Economics and Research Department, Banco de Portugal. She concluded the academic part of her Ph.D. and holds a MA in Economics, both in Universidade Nova de Lisboa, where she has been Teaching Assistant (1996-2002) and Adjunct Professor (2003-2007).

SPEAKERS

PAULO TELES has a Ph.D. in Statistics at Temple University, Philadelphia, USA. He is currently an Assistant Professor in the School of Economics of the University of Porto and a member of the Laboratory in Artificial Intelligence and Decision Support (LIAAD) of INESC TEC and was Director of the Northern Regional Office of the National Statistical Institute (2001-2004). His research interest includes time series analysis, forecasting methods, financial time series and application of statistics to economics, business and the health sciences.

NUNO MACHADO currently works as an M&A Associate in the Investment Banking division of the Millennium BCP Group. His academic background includes a B.Sc in Economics and a M.Sc in Finance from the School of Economics and Management of the University of Porto (FEP).

CARLOS ALVES is an associate professor of finance at University of Porto (Faculty of Economics and Porto Business School), were he has chaired various subjects of finance, corporate governance and economics of organizations, in graduate, master and doctoral programs, MBAs and executive programs. He is also a researcher member of CEF.UP (the Research Center in Economics and Finance of University of Porto). He is Graduate, Master and Doctor (Ph.D.) in Economics by the University of Porto.

EVENT ORGANIZER

The FIN-TECH consortium consists of 24 research partners who develop risk management models. The FIN-TECH consortium collaborates with international regulators, European supervisors and European Fintech hubs.

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EVENT SUPPORTERS

INESC TEC is a private, non-profit public utility institution, and an Associate Laboratory. The Institute dedicates to scientific research and technological development, technology transfer, advanced consulting and training, and pre-incubation of new tech-based companies.

www.inesctec.pt

CMVM - Comissão do Mercado de Valores Mobiliários (Portuguese Securities Market Commission) was established in May 1991 and is tasked with supervising and regulating the financial instruments markets as well as the agents operating within those markets and promoting investor protection.

www.cmvm.pt

ABOUT THE EU GRANT

FinTech (Financial Technology) means "technology-enabled financial innovation." There is a strong need to improve the competitiveness of European FinTech, creating a common regulatory approach across all countries. This can help encourage innovations in banks and in B2B FinTech companies, in the application of big data, artificial intelligence and blockchain technologies, while authorities and researchers assess their risks .

Europe has a broad mosaic of regulatory landscapes and technological innovations in finance. Regulators must move quickly and make important decisions about emerging scientific and business opportunities, without stifling their economic potential.

The Fin-Tech project, under the EU's Horizon2020 funding scheme, aims to create a European FinTech risk management hub. To this end, it will develop ready-to-use FinTech risk management models which will be dynamically updated and aligned with best research and practice.

The project includes training to national regulators (suptech) and to European fintech hubs (regtech) by a group of independent experts that have leading research expertise in the measurement of the risks that arise from the application of big data, artificial intelligence and blockchain technologies and, specifically, of those arising from innovative payments, peer to peer lending and financial robot-advisory.

The project has started on January 1st, 2019 and will last until June 2021. The activities of the project include 6 research workshops with international regulators, 48 hours of suptech workshops for each national supervisor and 6 regtech workshops for Fintechs and innovative banks.

Financial institutions will be the ultimate validator of the proposed FinTech risk management solutions, as the project will involve the risk management functions of a selected group of banks in writing a final assessment of the project's output (FinTech risk management models).

The Pavia University team (above); the project partners (below)

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or contact as at
info@fintech-ho2020.eu