2<sup>nd</sup> Workshop on Environmental Finance for the Common Good

# DIVERSITY CHALLENGES FOR A SUSTAINABLE FINTECH

### 13 April 2023

12.00 PM Registration and welcome coffee

1.00 PM FINAI Cost Activities: Core Group Meeting (Cost FINAI core group members only)

2.15 PM Plenary session, Chiesetta Data Protection and Artificial Intelligence: Never the Twain shall meet? Maria Moloney (University College Dublin)

3.00 PM Plenary session, Chiesetta The Digitalization of Credit: Intended and unIntended consequences

Round table introduced and moderated by Walter Gontarek (CEO and Chairman of Channel) With: Gabriella Kindert (Non Executive Board Member), Ronald

Kleverlaan (European Centre for Alternative Finance (ECAF) - Utrecht University School of Economics), Eugenia Macchiavello (University of Genua), Diederick van Thiel (CEO of AdviceRobo)

4.00 PM - 6.00 PM Conference programme

### 14 April 2023

9.00 AM Registration

10.00 AM Welcome remarks, Chiesetta

10.30 AM Keynote Speech, Chiesetta Trust versus Trustworthiness in Financial Services Aad van Moorsel (University of Birmingham)

11.30 AM Conference programme

12.30 PM Lunch break

1.30 PM - 6.00 PM Conference programme



Prin project FIN4Green funded by MIUR



Venue: University of Pavia Department of Economics and Management Via San Felice al Monastero 5 27100 PAVIA





Funded by the Horizon 2020 Framework Programme

2<sup>nd</sup> Workshop on Environmental Finance for the Common Good

# DIVERSITY CHALLENGES FOR A SUSTAINABLE FINTECH

# DAY 1 - 13 APRIL 2023

12.00 PM Registration and welcome coffee

### 1.00 PM FINAI Cost Activities: Core Group Meeting (reserved to Cost Core Group members), Sala consiglio

### 2.15 PM Plenary session, Chiesetta

Data Protection and Artificial Intelligence: Never the Twain shall meet? Maria Moloney (University College Dublin)

### 3.00 PM Plenary session, Chiesetta

### The Digitalization of Credit: Intended and unIntended consequences

Round table introduced and moderated by Walter Gontarek (CEO and Chairman of Channel) With: Gabriella Kindert (Non Executive Board Member) Ronald Kleverlaan (European Centre for Alternative Finance (ECAF) - Utrecht University School of Economics) Eugenia Macchiavello (Università di Genova) Diederick van Thiel (CEO of AdviceRobo)

4.00 PM – 4.30 PM coffee break

#### 4.30 PM - 6.00 PM Parallel sessions

Session 1A - Fintech, ESG and Corporate Finance, Chiesetta Chair: Catarina Silva

Does FinTech credit affect firms' cost of capital and capital structure? Evidence from OECD countries. Claudia Girardone, Laura Nieri, Stefano Piserà, <u>Rosalia Santulli</u> *Discussant: Nicholas Downing* 

What's the best size of an entrepreneurial team? Evidence from equity crowdfunding. <u>Valerio Lo Monaco</u>, Michele Meoli, Silvio Vismara *Discussant: Rosalia Santulli* 

The Importance of Board Diversity and Network Centrality in ESG Scores <u>Nicholas Downing</u>, Sandra Paterlini, Monica Paiella *Discussant: Stefano Filomeni* 

Environmental and Social Sustainability in Micro and Small Enterprises: Does Financial Literacy Matter? <u>Stefano Filomeni</u>, Laura Nieri, Stefano Piserà, Rosalia Santulli *Discussant: Valerio Lo Monaco* 

#### Session 1B - Fintech, ESG and Corporate Finance, Sala Consiglio

Chair: Claudia Tarantola

The effects of family ownership on gender equality upper echelons: evidence from a masculine society <u>Anna Doś</u>\*, Daniele Grechi, Daniela Montemerlo, Patrizia Gazzola, Fragkoulis Papagiannis *Discussant: Ioana – Florina Coita* 

Improvement of Financial Inclusion Index by Including Sustainable Development Indicators <u>Kristina Sutiene</u> *Discussant: Anna Do*ś

Why women are more uncertain than men? Could knowledge on the topic be a factor? <u>Ioana – Florina Coita</u>, Maria Iannario, Ștefana Belbe, Codruta Mare *Discussant: Stefano Piserà* 

Gendered language and bank board diversity <u>Stefano Piserà</u> *Discussant: Kristina Sutiene* 

#### Special Session PRIN Fin4Green – Climate econometrics, Aula E (Common Room) Chair: Paolo Giudici

Dynamic Calibration and Combination of Models Prediction with applications in Climate and Finance Roberto Casarin, <u>Dario Palumbo</u>\*, Francesco Ravazzolo

Circular economy, non-financial disclosure and credit risk in European companies Claudio Zara, <u>Luca Bellardini</u>\*

Greenium confusion in the stock market <u>Luca De Angelis</u>\*, Irene Monasterolo

Sustainable, Accurate, Fair and Explainable Artificial Intelligence in Finance Paolo Giudici, <u>Emanuela Raffinetti</u>

# DAY 2 - 14 APRIL 2023

9.00 AM Registration

#### 10.00 AM Welcome remarks, Chiesetta

Eduardo Rossi (Dean of the Department of Economics and Management, University of Pavia) Patrizio Tirelli (Director of CAMRisk, Department of Economics and Management, University of Pavia) Codruta Mare (Grant Awarding Manager, CA19130 FinAl & Babes-Bolyai University) Valerio Poti (Action Vice Chair, CA19130 FinAl & University College Dublin)

#### 10.30 AM Keynote Speech, Chiesetta

# Trust versus Trustworthiness in Financial Services

Aad van Moorsel (University of Birmingham)

We often find that there is a very poor correlation between the trust people place in technology and the actual trustworthiness of the technology. This also holds in the domain of financial services and becomes increasingly important the more complex the technology becomes, for instance when introducing AI. One of the consequences is that improving security, privacy and reliability does not directly result in more trusted and therefore more accepted services. This is problematic for many reasons and directs us to several important research questions that our multi-disciplinary community needs to address. In this keynote we discuss these research questions associated with the gap between trust and trustworthiness. We illustrate the issues and potential resolutions through recent interdisciplinary research insights in chatbots, machine learning platforms and identity systems for financial inclusion. We also discuss this considering UKFin, the recently announced UK academic/industry network funded by the UK government, which will support collaborative research, education and knowledge exchange activities in financial services.

#### 11.30 AM - 12.30 PM Parallel sessions

Session 2A - ESG in investments, Chiesetta

Chair: Dooruj Rambaccussing

Initial Coin Offerings and ESG - allies or enemies <u>Alessandro Bitetto</u>, Paola Cerchiello *Discussant: Barbara Będowska-Sójka* 

Do cryptocurrency investors care about the environment? Proof-of-work versus proof-of-stake coins as safe haven to green and dirty energy <u>Barbara Będowska-Sójka</u>, Agata Kliber *Discussant: Elda Xhumari* 

Credit scoring and risk management utilizing artificial intelligence <u>Elda Xhumari</u>, Suela Maxhelaku, Endrit Xhina *Discussant: Alessandro Bitetto* 

#### Session 2B - EME - inclusion, Sala Consiglio

Chair: Niklas Bussman

Comparative analysis of the law regulating artificial intelligence discrimination in finance in Europe, USA and Japan <u>Anastas Dzurovski</u>\* *Discussant: Yetsedaw Emagne* 

Financial Inclusion and Household Well-being: Evidence from Ethiopia <u>Yetsedaw Emagne\*</u> *Discussant: Isaac Kwesi Ofori*  Towards Sustainability: Foreign direct investment, economic freedom and inclusive green growth in sub-Saharan Africa <u>Isaac Kwesi Ofori</u> *Discussant: Anastas Dzurovski* 

12.30 PM – 1.30 PM Lunch break

#### 1.30 PM - 3.00 PM Parallel sessions

Session 3A - Fintech for the energy sector, Chiesetta Chair: Nikolaos Thomaidis

A multicriteria decision-support tool for optimal participation of RES aggregators in the wholesale electricity markets Alexios - Ioannis Moukas, Nikolaos S. Thomaidis

Battery Energy Storage Systems operation in the Greek wholesale electricity market <u>Panagiota Kyrimlidou</u>\*, Pandelis Biskas

Can factor models enhance price monitoring? Evidence from the Spanish day-ahead electricity market <u>Eleftheria Paschalidou</u>, Nikolaos Thomaidis

Robust portfolio selection for wind energy investors Vlad Bolovaneanu, Alexios - Ioannis Moukas, <u>Daniel Traian Pele</u>, Alla Petukhina, <u>Nikolaos S. Thomaidis</u>

Procurement auctions for Renewables with defaults: effects of financial and physical pre-qualification requirements Silvester Van Koten\*, Bert Willems

#### Session 3B - ESG in businesses, Sala Consiglio

Chair: Barbara Będowska-Sójka

The ESGs in Finance and Accounting as perceived by Digital Natives - a comparative study <u>Rezarta Shkurti Perri</u>\*, Claudia Tarantola, Albulena Shala, Maria Iannario, Brunilda Duraj, Alessandra Tanda *Discussant: Karolina Bolesta* 

Improving the transparency of the financial markets - key action items Karolina Bolesta Discussant: Stavros Pantos

Supervisory approaches to AI regulation in insurance: the case of the UK prudential framework. <u>Stavros Pantos</u>\* *Discussant: Belma Ozturkkal* 

A Multi-Country Study: Company Tweets and Financial Performance <u>Belma Ozturkkal</u>, Alessandra Tanda *Discussant: Rezarta Shkurti Perri* 

3.00 PM – 3.30 PM Coffee break

#### 3.30 PM - 5.30 PM Parallel sessions

Session 4A - Fintech and AI applications, Chiesetta Chair: Ioana-Florina Coita

ETFs Information Extraction from KIIDs Bruno Ferreira, Hugo Gonçalo Oliveira, <u>Catarina Silva</u>, Alessandra Tanda *Discussant: Mostafa Goudarzi* 

Return predictability and the informational content in UK broadsheet newspapers: A computational linguistics approach <u>Dooruj Rambaccussing</u>, Sarunas Girdenas *Discussant: Hanna Kristin Skaftadottir* 

The ChatGPT Artificial Intelligence Chatbot: How Well Does It Answer Accounting Assessment Questions? David A. Wood [...], <u>Hanna Kristin Skaftadottir</u> et al. *Discussant: Catarina Silva* 

Identification of High Frequency Trading: A Machine Learning Approach <u>Mostafa Goudarzi</u>, Flavio Bazzana *Discussant: Dooruj Rambaccussing* 

# Session 4B - Fintech, AI and risks, Sala Consiglio

Chair: Kristina Sutiene

Financial Time Series Prediction using Deep Learning <u>Yosi Keller</u>, Ariel Navon *Discussant: Arianna Agosto* 

Statistical learning models to measure the impact of ESG factors on credit ratings <u>Arianna Agosto</u>, Paola Cerchiello, Paolo Giudici *Discussant: Bekir Cetintav* 

Modified SHAP method for better interpretation of bank customer segmentation and credit risk scoring <u>Bekir Cetintav</u>, Gizem Nur Dal *Discussant: Niklas Bussmann* 

Can ESG shape cost of capital? An empirical analysis through Machine Learning <u>Niklas Bussmann</u>, Alessandra Tanda, Ellen Pei-yi Yu *Discussant: Yosi Keller* 

#### 5.30 PM - 6.00 PM Concluding remarks and Cost FinAl award, Chiesetta

Award for the best paper on the sub-topic of the role of artificial intelligence in supporting environmental transition/finance by a young researcher

Presenters with an asterisk (\*) will present online.

Zoom Link for the two days conference programme -

https://us02web.zoom.us/j/88162537535?pwd=VDZzdGc0L1ZHRnN3Uzl4Sm9WYXVYZz09

## **Speakers:**

# Keynote speaker: Aad van Moorsel (University of Birmingham)

Aad van Moorsel is Professor and Head of the School of Computer Science at University of Birmingham. He is the Principal Investigator of UKFin, the UKRI EPSRC Network in Financial Services, which kicks off September 2022 to provide an interface between academia and industry. In his current research he is spearheading efforts in financial inclusion in collaboration with Atom Bank and the Bill & Melinda Gates Foundation. He is a Fellow of the Turing Institute and has led large interdisciplinary research projects for a total of over £20m throughout his career. Prior to joining Birmingham he established Newcastle University's NCSC/EPSRC Academic Centre of Excellence in Cyber Security Research and pioneered degree apprenticeships as Director of the Institute of Coding at Newcastle. During his time at Lucent Technologies/Bell Labs Research and HP Labs he gained ample experience of industry-style research and research management, and he co-founded the startup CloudIdentity Ltd in human-centric identity management, which since has been successfully sold. He is the author of over 200 peer-reviewed research and of 4 US patents.



### Policy meeting: Maria Moloney (University College Dublin)

Maria straddles work in academia and industry. She led the GDPR committee for transitioning University College Dublin (UCD) to full legal and technical compliance in 2018. She is a Fulbright scholar and studied with Professor David Maimon at Georgia State University in Atlanta, Georgia. She continues to be a partnered faculty member in the Evidence-Based Cybersecurity Research Group at the Andrew Young School of Policy Studies there. She is also an adjunct research fellow in the Performance Engineering Lab (PEL) in the School of Computer Science in UCD.

In her previous roles, she worked as a Research Centre Strategy Manager for the School of Computer Science in UCD, which involved developing strong research links to the Centre for Cyber Security and Cyber Crime Investigations (CCI). She was Head of Research at Escher Group Holdings Plc., the leading software provider to postal operators worldwide. She advised the Chief Executive Officer, Liam Church, and oversaw the coordination of the company's research efforts (mainly in informational privacy and security) across all international offices. She presented the company's research to the Office of the Inspector General for the US Postal Service in Washington DC and collaborated with the Massachusetts Institute of Technology (MIT).

She was instrumental in forming the Irish consortium for the European Large-Scale Project (LSP) entitled the Electronic Simple European Networked Services (eSENS), under the leadership of the Irish Department of Public Expenditure and Reform (DPER). She oversaw the coordination efforts for the Irish consortium, which formed part of the larger European consortium, consisting of multiple government bodies, along with several European Universities across 21 European countries

## Round Table

#### Walter Gontarek

Walter Gontarek is CEO\Chairman of Channel Capital. He previously served as Managing Director/Global Head of Credit Products at the Royal Bank of Canada and held senior executive roles in capital markets and consumer/SME banking in the US, Canada and Europe. Walt holds non-executive board roles at the UK regulated arms of Catalina Re-insurance and chairs the board at Wiserfunding Ltd, backed by Dr Ed Altman, Dr Gabriele Sabato and British Growth Fund.

He holds an MBA from NYU Stern School of Business and a Doctorate (Finance) from Cranfield University. He also holds certificates from Carnegie Mellon University (Cyber Risk Board Oversight) and Stanford University (Board Directors College). Walt is a Visiting Fellow/Lecturer for Sustainable Finance/Financial Markets at Cranfield University, a lecturer at SciencePo Paris, and a Professor (Honorary) for fintech at the University of Aberdeen, Scotland.

#### Gabriella Kindert

Gabriella Kindert is a senior banking and investment professional specialising in Alternative Credit and Private markets. She gained over 20 years of international experience in managing alternative fixed income investment portfolios over the cycle for leading institutional investors. She created and successfully launched several new, innovative private market investment strategies, to which she attracted institutional investor support. She started her career in banking in 1998 in MeesPierson Corporate and Investment Banking, where she gained insight into various asset classes - asset-based finance, project finance, and leveraged finance in different geographies. She held various managerial positions at Fortis Investments Structured Credit, BNP Paribas Asset Management as Global Head of Loans and at NN IP as Head of Alternative Credit. Since 2019, she is focusing on Non-Executive Board and advisory positions focused on Private market investment strategy. She holds an M.A. in History (KLTE Hungary), Economics (Economic University, Hungary), MBA in Accounting and Finance (MSM, The Netherlands) and a Ph.D. in Finance (ISM, France). Her research focuses on alternative lending platforms and private market trends.







#### **Ronald Kleverlaan**

Ronald Kleverlaan is very active in the field of crowdfunding. He is director of the European Centre of Alternative Finance at the Utrecht University and advisor of the European Commission. Additionally, he is partner at the CrowdfundingHub, a specialized consultancy firm for international and national governments. Lastly, he is chairman of the foundation 'MKB Financiering' – a independent organization founded to professionalize the alternative financing sector. MKB Financiering also increases access to customer focused and suitable financing for entrepreneurs.

#### Eugenia Macchiavello

Eugenia Macchiavello (Ph.D. '11; LL.M. '10 NYU) is Assistant Professor (license as Associate Professor '18) in Economic Law at the University of Genoa, Academic Fellow of the Jean Monnet Centre of Excellence in Sustainable Finance (EuSFIL) and certified attorney-at-law in Italy. Eugenia is also an Academic Board member and supervisor of Ph.D. candidates in the area of sustainable finance regulation within the transdisciplinary Ph.D. in Sustainable development and Climate Change (IUSS Pavia and other universities, Italy). She is a member of the Italian Association of Professors in Economic Law (ADDE) and of the Associated Researchers Group (ARG) of the European Banking Institute (EBI) as well as former participant to the Italian Financial Markets Authority (Consob) Expert Working Group on FinTech and former visiting Fellow at the NYU Center of Financial Institution. She is an internationally renowned expert in alternative finance and fintech, editor of the recent international Commentary published by Edward Elgar Regulation on European Crowdfunding Service Providers for Business: A Commentary.

#### **Diederick van Thiel**

Diederick van Thiel, CEO AdviceRobo, Non-executive Director Channel Capital Advisors & Ikano Bank, datatech investor and writer is one of Europe's Fintech pioneers. His fintech companies were all listed in the European Fintech 50 and he is awarded London Fintech CEO of the year 2018. Diederick's work is driven by purpose. Purpose of supporting financial inclusion with AdviceRobo's alternative credit decisioning platform. Purpose of ESG as Chairman of the sustainability committee at Ikano Bank and purpose of leveraging data technologies for improving the net zero performances with smart buildings. Diederick holds a PhD at the Tilburg School of Social and Behavioral Sciences. His academical work focuses on understanding the impact of human-centred artificial intelligence in banking. His broader research interests lie at the intersection of behavioral science, neuroscience, and digital sciences. He has an MSc degree in Business Administration from Erasmus University Rotterdam. Diederick used to be on the boards of ING and KPN Mobile.







#### Scientific Committee

Niklas Bussman, Università degli Studi di Pavia, Italy Dominic H. Chai, Centre for Business Research, University of Cambridge, UK Alberto Citterio, Università degli Studi dell'Insubria, Italy Maria Elena De Giuli, Università degli Studi di Pavia, Italy Timothy King, University of Vaasa, Finland Ana Ivanisevic Hernaus, University of Zagreb, Croatia Rossella Locatelli, Università degli Studi dell'Insubria, Italy Bernardo P. Marques, Catolica Porto Business School, Portugal Thomaidis Nikolaos, Aristotle University of Thessaloniki, Greece Alessia Paccagnini, University College Dublin, Ireland Cristiana Schena, Università degli Studi dell'Insubria, Italy Dooruj Rambaccussing, University of Dundee, UK Alessandra Tanda, Università degli Studi di Pavia, Italy Claudia Tarantola, Università degli Studi di Pavia, Italy Ellen Pei-Yi Yu, Birbeck College, University of London, UK

#### **Organising Committee**

Coord: Alessandra Tanda, Università degli Studi di Pavia, Italy Alberto Citterio, Università degli Studi dell'Insubria, Italy Maria Elena De Giuli, Università degli Studi di Pavia, Italy Timothy King, University of Vaasa, Finland Bernardo P. Marques, Catolica Porto Business School, Portugal Claudia Tarantola, Università degli Studi di Pavia, Italy Ellen Pei-Yi Yu, Birbeck College, University of London, UK





Venue: University of Pavia Department of Economics and Management Via San Felice al Monastero 5 27100 Pavia



Funded by the Horizon 2020 Framework Programm