



Call for Contributions:

# **Fintech and Sustainability: How Financial Technologies Can Help Address Today's Environmental and Societal Challenges**

An edited collection to be published by Palgrave-Macmillan

**Co-edited by:**

Thomas Walker, PhD

Harry Turtle, PhD

Maher Kooli, PhD

Elaheh Nikbakht, MSc

The Jacques Ménard - BMO Centre for Capital Markets at Concordia University, the Department of Finance of the School of Management (ESG) at Université du Québec à Montréal (UQAM), and the College of Business at Colorado State University kindly invite contributions to the edited book collection, entitled *Fintech and Sustainability: How Financial Technologies Can Help Address Today's Environmental and Societal Challenges*, to be published by **Palgrave-Macmillan**.

### **ABOUT THE BOOK:**

Financial institutions have, in recent years, increasingly begun to rely on the use of financial technologies (fintech) to provide more efficient and convenient services. Adapting to fintech innovations brings new challenges and opportunities to many financial institutions. Sustainable finance has become an area of increased interest for academics and practitioners alike. Fintech can, directly and indirectly, be used to improve sustainability and influence policies and regulations. Climate change, water pollution, and non-renewable resources management can all be addressed in a new way with fintech innovations. Despite the advantages offered by these technologies, there is a debate among environmentalists, with opponents warning that the negative consequences of using fintech innovations might surpass their benefits. Thus, fintech and its application in sustainability may be considered a double-edged sword that calls for careful attention and comprehensive investigations.

This topic is relatively new, and the literature surrounding it remains scarce. Prior publications in this area typically focus on a specific aspect of fintech and its effect on sustainability, or explore a certain policy in this area. Thus, the literature suffers from a lack of studies examining different aspects of the interplay of fintech and sustainability in detail. Our book aims to address this gap by providing a complete overview of various fintech applications and analyzing what they mean for the future of sustainable finance. It purposefully takes both a practitioner-oriented and academic approach to feature varied insights that is less seen in the literature. It will also highlight the potential disruptive power of fintech and the challenges or risks that practitioners and policymakers should be aware of. It will thus encourage readers to think about and explore how to find a balance between the beneficial aspects of fintech and the challenges it creates in terms of supervision, regulation, and risk management.

This book explores how financial technologies (fintech) can enhance the sustainability of investment and corporate decisions and thereby contribute to the fulfillment of the Sustainable Development Goals (SDGs). In particular, it examines (1) whether and how fintech can be used to improve sustainable practices, (2) the potential threats that fintech applications may pose and possible solutions to address them, and (3) policies and regulations designed to maximize the benefits of fintech in sustainability.

### **CALL FOR CONTRIBUTIONS:**

Per our intended global scope, the co-editors welcome contributions from the international community of scholars and administrators at the intersection of fintech, sustainability, finance, governance, policymaking, and research. The proposed contributions present, review, and critically analyze the impact of fintech developments on sustainability and environmental and societal challenges.

Given the interconnected and complex nature of the topic, the co-editors welcome contributions that are transdisciplinary in their approach. Moreover, they strongly encourage chapters that use case studies or comparative studies in this context.

**Submitted chapters must be original and exclusively prepared for the book, with no part of the article having been published elsewhere.** Finally, although the book can be used as a reference book in academic courses, it is not explicitly organized as a textbook.

## **POTENTIAL TOPICS FOR CHAPTERS:**

### **1. INTRODUCTION**

- Introduction to the book (background, objectives, and importance)
- Overview of the chapters

### **2. FINTECH AND ENVIRONMENTAL SUSTAINABILITY**

- Overview of fintech
- Fintech and climate change
  - Addressing climate change with blockchain technology
  - Green climate funds
  - Smart contracts and climate change
  - Application of artificial intelligence in climate risk insurance
- Fintech and global energy supplement
  - Secure energy trading with blockchains
  - Green energy digital assets
    - Green energy digital contracts
    - Energy cryptocurrencies
  - Efficient energy market and digitalization
- Fintech and air pollution
  - Green development, sustainable real estate, and artificial intelligence
  - Technological assessment of CO<sup>2</sup> footprints
  - Carbon market and digitalization
  - Distributed ledger technology
- Fintech and deforestation
- Fintech and water pollution
  - Agricultural water pollution and developments of fintech
  - Industrial wastewater management using blockchains
  - Blockchain rules in the water industry
    - Consumption tracking and record-keeping with AI
    - Modeling and reporting with machine learning techniques
- Fintech and the pandemic

### **3. FINTECH, GREEN FINANCE, COMPANIES, AND INVESTMENT**

- Green finance and the sustainable financial system
  - The concept and standards of green finance
  - The effect of fintech in smart and green cities
    - Green digital infrastructures
    - Electronic governance provisions
    - Sustainable taxation framework with fintech
- Green fintech companies
  - Performance and sustainable business

- Sustainable supply chain and fintech innovation
  - Reporting and big data analysis with machine learning techniques
- Green assets and sustainable capital markets
  - Green bonds and asset-backed securities
  - AI and green investment
    - Online trading and transaction costs
    - Market efficiency, finance transparency, and information asymmetry
    - Pattern recognition, trading decisions, and robo-advisors
  - The sustainable development goals
  - Crowdfunding and crowdsourcing
- Institutional investors and sustainable investment
- Fintech and green banking
  - Online banking
  - Mortgage assessment and debt assessment
  - Digital/online payments

#### 4. FINTECH AND SUSTAINABILITY CHALLENGES AND REGULATIONS

- Negative effects of fintech on sustainability
  - Cryptocurrency mining and air pollution
  - The disruptive effect of excessive electric consumption
- Challenges
  - Maintaining green finance in the digital era
  - Barriers to the implementation of fintech innovations
  - Evaluation of sustainability
- Fintech and sustainability regulations
  - Macprudential policies to adapt green goals and fintech
  - Regulation strategies to avoid fintech key risks and client protection
  - Fintech and sustainability-related regulations in practice
- Opportunities
  - Computation advancements
  - Facilitating the green transformation
  - Financial inclusion

#### 5. CONCLUSIONS

- Conclusions and lessons learned
- An outlook for fintech in sustainability

#### IMPORTANT DATES:

- Abstract and CV submission deadline – **August 31, 2022**
- Selection of abstracts and notification to successful contributors – **September 30, 2022**
- After September 2022, the publisher's release forms will be forwarded to successful contributors
- Full chapter submission – **December 31, 2022**
- Revised chapter submission – **February 28, 2023**
- Manuscript delivery – **May 31, 2023**
- Publication (tentative date) – **Summer 2023** (tentative)

**GUIDELINES FOR CONTRIBUTORS:**

Submissions should be written in English using a non-technical writing style. The contributions may include diagrams/illustrations in order to present data, or photographs/figures (all in black & white) to better illustrate the topic of discussion. Submitted chapters should be original and exclusively prepared for the present book. No part of the article should be published elsewhere. Chapters must not exceed 7,000 words (including all references, appendices, biographies, etc.), must use 1.5-line spacing and 12 pt. Times New Roman font, and must use the APA 7th edition reference style.

Researchers and practitioners are invited to submit abstracts of no more than 500 words, a bibliography for their proposed chapter, and a CV. Abstract submissions are expected by **August 31, 2022**. Submissions should be sent via email to: [sustainable\\_fintech@concordia.ca](mailto:sustainable_fintech@concordia.ca).

Authors will be notified about the status of their proposals and will be sent complete chapter guidelines. Full chapters are expected to be submitted by **December 31, 2022**.

Please note that there are no submission or acceptance fees for the manuscripts.

**ABOUT THE EDITORS:****Thomas Walker<sup>1</sup>**

Thomas Walker holds a BSc in Management Information Systems from the Technical University of Darmstadt, Germany, and an MBA and PhD degree in Finance from Washington State University. Prior to his academic career, he worked for several years in the German consulting and industrial sector at such firms as Mercedes Benz, Utility Consultants International, Lahmeyer International, Telenet, and KPMG Peat Marwick. His research interests are in emerging risk management, corporate finance, venture capital, sustainability & climate change, Fintech, corporate governance, securities regulation and litigation, insider trading, and institutional ownership, and he has published over 70 articles, book chapters, and edited books in these areas. He is the lead editor of seven books on sustainable financial systems, sustainable real estate, sustainable aviation, environmental policy, emerging risk management, innovations in social finance, and water risk management. Dr. Walker currently serves as the principal investigator on research grants by the Social Sciences and Humanities Research Council (SSHRC), the Autorité des marchés financiers, and the Global Risk Institute. In 2018, he founded the Emerging Risks Information Center (ERIC, <https://emerging-risks.com>) which conducts targeted research on environmental, technological, and societal risks that affect our world today. In 2021, he became the inaugural director for the Jacques Menard/BMO Center for Capital Markets Research at Concordia University and the Concordia University Research Chair in Emerging Risk Management (Tier 1).

**Harry Turtle<sup>2</sup>**

Harry is a Professor of Finance at Colorado State University in the College of Business, Department of Finance & Real Estate. Previously, Harry held the positions of Chair, Department of Finance, Insurance, and Real Estate, Washington State University; Omer L. Carey Chair in Finance, Washington State University; Fred T. Tattersall Distinguished Chair of Finance at West Virginia University; and Chair, Department of Finance, and Real Estate, Colorado State University. Harry

---

<sup>1</sup> [thomas.walker@concordia.ca](mailto:thomas.walker@concordia.ca)

<sup>2</sup> [harry.turtle@colostate.edu](mailto:harry.turtle@colostate.edu)

enjoys teaching investment theory, portfolio management, international finance, and capital markets at the undergraduate and graduate levels. Harry's research is published or forthcoming in outlets including the Journal of Business and Economic Statistics, the Journal of Financial Economics, the Journal of Financial and Quantitative Analysis, and Management Science. He examines a variety of topics in the areas of household finance, investments, portfolio management, and international finance. Harry served as an Associate Editor for the Journal of Financial Research and for the Finance Division of the Canadian Journal of Administrative Sciences. He is a member of the Editorial Advisory Review Board for the American Journal of Business, the Topic Board for the Journal of Risk and Financial Management, and served as a founding member of the CSU OPEB Investment Committee.

### **Maher Kooli**<sup>3</sup>

Maher Kooli holds a BSc from HEC Carthage, an MBA from Ottawa University, and a PhD in Finance from Université Laval. He is a Full Professor of Finance at the Department of Finance of the School of Management (ESG), Université du Québec à Montréal (UQAM) and head of the Finance department. He is also Caisse de Depot et Placement de Québec (CDPQ) research chair-holder in portfolio management, founder of the Trading room at ESG UQAM, and Autorite des marchés financiers (AMF) and Finance Montreal research co-chair-holder in Fintech at ESG UQAM. Previously, professor Kooli worked as a senior research advisor for la Caisse de Depot et Placement de Québec. His research interests include initial public offerings, mergers and acquisition, venture capital, hedge funds, Fintech, portfolio management, and corporate finance. He has published in many prestigious academic journals and has several books on financial management, venture capital, and hedge funds. He is also a member of the Editorial Board of the Journal of Asset Management, the Journal of Wealth Management, and Risk Management.

### **Elaheh Nikbakht**<sup>4</sup>

Elaheh Nikbakht is an MSc candidate at the John Molson School of Business, Concordia University where she studies finance. She currently serves as a teaching assistant and research assistant in the Department of Finance at Concordia University. Elaheh completed her undergraduate degree and MBA at Shahid Chamran University of Ahvaz, Iran. She has been awarded several scholarships and awards for her remarkable academic performance, including the Arbour Foundation Scholarship and the Bourse D'études D'excellence du Centre Desjardins D'innovation en Financement D'entreprises. She has assisted in the organization and hosting of several conferences related to mathematics and statistics at Concordia University. Her research interests include capital markets, portfolio management, Fintech, and machine learning.

---

<sup>3</sup> kooli.maher@uqam.ca

<sup>4</sup> e.nikbakht70@gmail.com