

## Call for Contributions

# **Water Risk and Its Impact on the Financial Markets and Our Society: New Developments in Risk Assessment and Management**

An edited collection to be published by Palgrave Macmillan

Under consideration for the Palgrave Studies in Sustainable Business: In  
Association with Future Earth

**Co-edited by**

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Concordia University and Baden-Württemberg Cooperative State University kindly invite contributions to the forthcoming edited book, entitled “*Water Risk and Its Impact on the Financial Markets and Our Society: New Developments in Risk Assessment and Management*,” to be published by **Palgrave Macmillan** and being considered for the “Palgrave Studies in Sustainable Business: In Association with Future Earth” book series.

### **ABOUT THE BOOK**

Water risk, including the lack of access to fresh water for personal and industrial use, droughts, floods, and water contamination, is not a new problem, and is intensified in the face of climate change, population growth, and rapid economic development. Properly identifying, measuring, and managing water risk as well as taking advantage of related mitigation opportunities is essential for the future well-being of firms across various industries, investors, local and federal governments, and ultimately our society as a whole. Our financial system is changing as investors display an ever-larger appetite for sustainable investments and increasingly assimilate climate risks and sustainability considerations in their investment approaches. In light of these trends, it is imperative that financial investors, corporate managers, and policymakers understand the importance and potential impacts of water risk as well as the interconnectivity between water risk and financial and societal developments.

In its 2019 Global Risks Report, the World Economic Forum considers water risk as a “global risk” and “existential challenge” for society. However, the identification, measurement, and management of water risk among academics, practitioners, and regulators is still at a developmental stage. Our edited book will shed light on this topic by examining the unique measurement and modelling challenges associated with either the scarcity or overabundance of water (e.g., droughts and floods, but also the lack of access to clean water, water pollution, rising sea water levels, disputes of rights to water access, etc.) and their interaction with finance and society. Specifically, it will (1) identify and classify different types of water risk, (2) explore approaches to assess and operationalize water risk, and (3) show how it affects the financial and social system (thereby exploring the vulnerability of institutions and markets as well as strategies for risk mitigation).

A comprehensive analysis of water risk in finance should – as an extension – provide the basis for the development of appropriate risk management techniques. Approaches may include both actions to protect against the threats from water risk and measures to benefit from opportunities. We address this topic from the perspective of institutional investors who engage in the risk and return management of financial firms, corporate financial managers as well as from the perspective of financial supervisors, regulators, and central bankers. Water-related risks create unique challenges for individuals and institutions as well as for our entire society. Traditional risk management approaches are typically inadequate in addressing them.

Our book fills a gap in the literature by providing important new insights on water risk and related opportunities. It explores a wide range of topics in the field, providing a combined financial and societal as well as a local and global perspective. We will select chapter submissions from key players in the field.

### **CALL FOR CONTRIBUTIONS**

The editors are inviting contributions from the international community of **scholars** and **practitioners** at the interface of finance, economics, geology, philanthropy, and policy. The contributions will explore the potential repercussions of water risk for individual entities (citizens, firms, and investors), local and federal governments, as well as our economy and society. They will present, review, and critically analyze current assessment methods and management techniques for water risk and will discuss ongoing and

potential innovations in this field. The contributions will aim to highlight the current hurdles and challenges – technological, social, cultural, geographic and political – which are impeding the global transition from traditional short-term financial models towards effective long-term and combined financial-social solutions.

Considering the interconnected and complex nature of water-related risks, the co-editors are encouraging contributions that are transdisciplinary in their approaches. Moreover, because the main focus of the proposed edited collection is to examine a broad range of emerging innovations, the co-editors will also be accepting chapters that incorporate new concepts or tools beyond the academic fields of finance, economics, and social science. Contributions could come from the natural sciences, especially from geology and meteorology, as well as engineering solutions that seek to address technical and technological challenges in the conception, development, and management of water-related infrastructures. Moreover, the co-editors welcome contributions that present experimental approaches or concepts that have yet to be applied. Chapters that use case studies or comparative studies in this context are strongly encouraged. Finally, considering the global nature of climate change and its multi-scale consequences, the co-editors encourage authors to critically consider the scalar relevance – at the local, regional, national, and supranational levels – of their contributions.

## **POTENTIAL TOPICS FOR CHAPTERS**

### **1. Dimensions of water risk**

- a. Types of water risk
- b. Disclosure standards
- c. Overview of regulations
- d. Consequences of water risk
- e. Opportunities from water risk

### **2. Water risk assessment**

- a. Existing tools
- b. New tools
- c. Water risk stress testing

### **3. Water risk management**

- a. Water risk derivatives
- b. Water risk insurance
- c. Social governance

### **4. Data science and its use in water risk management**

- a. Advances in high-resolution geo-mapping
- b. Modelling approaches using neural networks, artificial intelligence, and other advanced methods

**IMPORTANT DATES**

- Abstract and CV submission deadline – **March 31<sup>st</sup>, 2020**
- Selection of abstracts and notification to successful contributors – **April 30<sup>th</sup>, 2020**
- Full chapter submission – **August 31<sup>st</sup>, 2020**
- Comments/feedback provided to authors – **September 30<sup>th</sup>, 2020**
- Revised chapter submission – **November 30<sup>th</sup>, 2020**

**GUIDELINES FOR CONTRIBUTORS**

Submissions should be written in a non-technical writing style. The contributions may include original diagrams/illustrations in order to present data, or photographs/figures to better illustrate the topic discussed. 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 6th edition reference style.

**Researchers and practitioners are invited to submit an abstract of 750 words maximum, a bibliography for their proposed chapter, and a CV.**

**Abstract submissions are expected by March 31<sup>st</sup>, 2020.**

**Submissions should be sent via email to [emerging.risks@concordia.ca](mailto:emerging.risks@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 **August 31<sup>st</sup>, 2020.**

**It goes without saying** that there are no submission or acceptance fees for submitted manuscripts.

**ABOUT THE EDITORS**

**Thomas Walker** holds an MBA and Ph.D. 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 firms such as Mercedes Benz, Utility Consultants International, Lahmeyer International, Telenet, and KPMG Peat Marwick. He has taught as a visiting professor at the University of Mannheim, the University of Bamberg, the European Business School, and the WHU – Otto Beisheim School of Management. His research interests are in sustainability & climate change, corporate governance, securities regulation and litigation, and insider trading, and he has published over sixty articles and book chapters in these areas. He is the co-editor of five books on sustainable financial systems, sustainable real estate, sustainable aviation, emerging risks, and environmental policy. Dr. Walker has held numerous administrative and research positions during his career. For instance, he served as the Laurentian Bank Professor in Integrated Risk Management (2010-2015), Chair of the Finance Department (2011-2014), Director/Co-director of the David O'Brien Centre for Sustainable Enterprise (2015-2017), and as Associate Dean, Research and Research Programs (2016-2017) at Concordia University. In addition, he has been an active member of various advisory boards and steering committees including, among others, the human resources group of Finance Montréal, the steering committee of the Montreal chapter of the Professional Risk Managers' International Association (PRMIA), the academic advisory board of the MMI/Morningstar Sustainable Investing Initiative, and the advisory board for Palgrave Macmillan's Future Earth book series on sustainability.

**Dieter Gramlich** is a Professor of Banking & Finance at DHBW – Baden-Württemberg Cooperative State University, Heidenheim, where he serves as head of the banking department. He has received his Ph.D. from the University of Mannheim and his Habilitation degree from the University of Halle. His main research focuses on financial risk and return management, systemic financial stability, and sustainable finance. He has published widely in these areas and has a forthcoming book with Palgrave Macmillan on the topic of emerging risk management. He was a visiting professor at Cleveland State University and the Cleveland Federal Reserve Bank and is a recurring visiting scholar at Concordia University, Montreal.

**Kalima Vico** is a research associate at the John Molson School of Business at Concordia University, Montreal. She has previously served with Concordia's David O'Brien Centre for Sustainable Enterprise. She holds a Bachelor of Commerce in finance with a concentration in economics from Concordia University. She has participated in and worked on well over 30 research papers and helped launch three books within the Finance Department. She currently works with Amtrust Financial in the Unique Risk Department in New York City. Her research interests include diverse topics in economics, risk management, corporate governance, financial systems, organizational behaviour and sustainability.

**Adèle Dumont Bergeron** is an MA student in English Literature and Creative Writing at Concordia University, Montreal. She currently serves as a research assistant for Concordia's Finance Department. She recently completed a research project about plastic taxes and has co-authored an article, soon to be published, on the topic. Adèle has copyedited over a hundred chapters and articles by professionals in finance for publication. In her department, Adèle has won the Compton-Lamb Memorial Scholarship and has been awarded a fellowship to pursue her work in literature. She has presented and published her work at several literary conferences. Her interests include sustainability, feminism, and modernity.