



## Modern Numerical Techniques and Machine-Learning in Pricing and Risk Management

Guest Editors:

**Prof. Dr. Cornelis W. Oosterlee**

1. CWI—Centrum Wiskunde & Informatica, 1098 Amsterdam, The Netherlands  
2. DIAM, Delft University of Technology, 2628 Delft, The Netherlands

**Dr. Lech A. Grzelak**

Delft and Rabobank Group, Delft University of Technology, Utrecht, The Netherlands

Deadline for manuscript submissions:  
**closed (31 May 2019)**

### Message from the Guest Editors

In present day financial practice, we need to model and price the impact of a counterparty going bankrupt. In modern risk management, different valuation adjustments, commonly known as “xVA” (where “VA” stands for valuation adjustment and the “x” means “any letter”, where each letter stands for a different VA component), are added to the fair value of a financial derivative. Accurate pricing and hedging of these VAs is of a high importance and requires sophisticated models and numerical techniques.

At the same time, we observe a high interest in financial machine-learning, both at the level of pricing and price prediction, as on the level of risk management (“learning the client, learning the creditworthiness, etc.”).

We would like to connect both of these recent themes in this Special Issue, which will publish high-quality research papers on machine-learning in computational finance, and on advanced risk management. Combinations of these themes are especially interesting.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Steven Haberman

Faculty of Actuarial Science and  
Insurance, Bayes Business  
School, City University of London,  
106 Bunhill Row, London EC1Y  
8TZ, UK

## Message from the Editor-in-Chief

*Risks* is published in Open Access format – research articles, reviews and other content are released on the internet immediately after acceptance. Specifically, *Risks* welcomes contributions that

- contribute with insight, outlook, understanding and overview, no matter how simple they are;
- show creativity in pedagogical tricks and techniques;
- help the transfer of theoretical research to public and private application;
- show responsibility for societal impact.

The scientific community and the general public have unlimited free access to the content as soon as it is published.

## Author Benefits

**Open Access:** free for readers, with **article processing charges (APC)** paid by authors or their institutions.

**High visibility:** indexed within **Scopus, ESCI (Web of Science), EconLit, EconBiz, RePEc,** and **other databases.**

**Journal Rank:** CiteScore - Q1 (*Economics, Econometrics and Finance (miscellaneous)*)

## Contact Us

---

*Risks* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/risks](http://mdpi.com/journal/risks)  
[risks@mdpi.com](mailto:risks@mdpi.com)  
[X@Risks\\_MDPI](https://twitter.com/Risks_MDPI)