

Call for Chapters to the Edited Volume

Springer Scopus-indexed book series on Contributions to Finance & Accounting **Advances in Credit Risk Analytics – Methodologies and Applications for the Future of Credit Risk Management**

Credit plays a pivotal role in modern society by enabling individuals, businesses, and governments to access resources beyond their immediate means. It facilitates investment in education, housing, and business ventures, drives economic growth, and supports innovation. For consumers, credit allows to smooth consumption and manage financial shocks, while businesses rely on it for expansion, operations, and navigating uncertainties. At the macroeconomic level, credit underpins financial stability and resilience by enabling liquidity flow, which is critical for the functioning of markets and economies. Without well-functioning credit systems, economic opportunities would be constrained, and societal progress hindered.

The study of credit risk represents a long-standing multi-disciplinary strand of research, drawing on statistics, econometrics, computer science, financial analysis, optimisation, classification, simulation and stochastic modelling to support lending decisions and financial stability. Modelling credit risk, defined as the probability of borrowers failing to meet their obligations, has evolved from traditional scorecards to dynamic and complex approaches with survival analysis, machine learning and AI methodologies (Djeundje et al., 2025; Zandi et al., 2025). Survival analysis has enabled more accurate time-to-default modelling by incorporating macroeconomic variables and borrower dynamics (Baesens et al., 2005; Bellotti & Crook, 2009), while discrete hazard models have supported credit stress testing (Bellotti & Crook, 2014). Bayesian and semi-parametric approaches offer further refinement: e.g., Wang et al. (2024) introduce informative priors to improve model stability, and Loizidou et al. (2020) apply semi-Markov chains to related lifecycle modelling. These methods are complemented by cluster analysis to identify behavioural segments (Bakoben et al., 2019), adaptive collections using Bayesian dynamic programming (So et al., 2019), and deep-learning methodologies with Big and often unstructured data (Stevenson, 2021). Robustness and validation remain critical across all methodologies, with model risk management playing an increasingly important role (Jung et al., 2015; Breeden & Dobrin, 2022).

Regulatory compliance has driven the development of stress-testing frameworks (Bocchio et al., 2023), as well as increased attention to macro-financial interactions, particularly for capital adequacy (Djeundje & Crook, 2025) and model risk (Forrest, 2023). Yet emerging challenges, such as climate risk, fairness and inequality, geopolitical uncertainty, require new methodologies, strategies and applications.

Against this backdrop, **the 19th Credit Scoring and Credit Control conference (CS&CC XIX)**, the world's foremost forum on credit risk, took place in Edinburgh, UK, from 27 - 29 August 2025. The conference featured more than 100 papers across five parallel sessions, with an almost equal balance of contributions from academia and industry, making it a unique forum for exchange between universities and practitioners. It brought together more than 400 delegates from over 40 countries. This book, aligned with the CS&CC XIX conference, aims to present fresh perspectives on credit risk management, showcasing research findings that explore innovative information sources and methodologies for credit scoring. The book intends to provide a unique bridge between academia and practice, building on the successful cross-fertilisation between theory and applications, established via the conference.

Rationale and Scope

This Call for the edited collection of chapters seeks to explore cutting-edge solutions and theoretical advancements addressing the dynamic challenges facing credit risk analysts. Submissions are encouraged from both academics and practitioners and may focus on a range of topics, including but not limited to:

- Big and Alternative Data in Credit Risk
- Machine Learning and AI in Credit Scoring
- Explainable and Responsible AI
- Generative AI and Large Language Models in Credit
- Fairness in Credit Decision-Making
- Affordability, Financial Vulnerability and Inclusion
- Credit Bureaux, Information and Privacy
- Climate Risk
- ESG Aspects, Biodiversity and Sustainability
- Stress Testing
- Model Risk and Governance
- SMEs and Corporate Credit Risk
- Fraud Detection and Prevention
- Global Perspectives on Credit and Lending.

The Call continues a long and very well-established tradition of consolidating the best methodology and practice of credit risk modelling presented at the Credit Scoring & Credit Control conferences. The history includes the edited collection of chapters (Thomas et al., 2004) and Special Issues of reputed journals, such as *European Journal of Operational Research*, *Journal of Banking & Finance*, *Journal of the Royal Statistical Society (Series A)*, *International Journal of Forecasting*, *Journal of Operational Research Society*.

Submission information

We welcome submissions from both practitioners and academics on credit risk or related areas, including work that was not presented at the 19th Credit Scoring and Credit Control conference. If you were a presenter at the conference, we especially encourage you to develop your work into a chapter. This is a great opportunity to showcase your research to a global audience, increase the visibility and impact of your work, and contribute to shaping the future of credit risk practice and research. Please note that submissions outside the scope of the volume may be desk-rejected.

All manuscripts considered for inclusion in the edited volume will be subject to a double-blind review process and must be submitted via Oxford Abstracts by **31 May 2026** using this link: <https://app.oxfordabstracts.com/stages/79933/submitter>

All submissions should have an original contribution and meet Springer's high publishing quality standards, please, refer to the Code of Conduct for Authors: <https://www.springernature.com/gp/authors/book-authors-code-of-conduct>.

Formatting guidelines and templates are available here:

<https://www.springernature.com/gp/authors/publish-a-book/manuscript-guidelines>

Additionally, please find a link below where you can download essential style guidelines for formatting chapter elements such as numbering, citations, and references:

<https://media.springernature.com/full/springer-cms/rest/v1/content/27838696/data/v1>

Guest Editors

Galina Andreeva, Professor of Societal Aspects of Credit, Director of Credit Research Centre, The University of Edinburgh

Anthony Bellotti, Professor of Computer Science at the University of Nottingham Ningbo China.

Jonathan Crook, Professor Emeritus, former Director of Credit Research Centre, The University of Edinburgh

Alan Forrest, Business Associate at the University of Edinburgh Business School's Credit Research Centre, former Model Risk Oversight Manager at Virgin Money.

Christophe Mues, Professor of Data Science and Information Systems at the University of Southampton.

References

Baesens, Van Gestel, Stepanova, Van den Poel & Vanthienen (2005). Neural network survival analysis for personal loan data. *Journal of the Operational Research Society*, 56(9), 1089–1098. <https://doi.org/10.1057/palgrave.jors.2601990>

Bakoben, Bellotti & Adams (2019). Identification of credit risk based on cluster analysis of account behaviours. *Journal of the Operational Research Society*, 71(5), 775–783. <https://doi.org/10.1080/01605682.2019.1582586>

- Bellotti & Crook (2009). Credit scoring with macroeconomic variables using survival analysis. *Journal of the Operational Research Society*, 60(12), 1699–1707. <https://doi.org/10.1057/jors.2008.130>
- Bellotti & Crook (2014). Retail credit stress testing using a discrete hazard model with macroeconomic factors. *Journal of the Operational Research Society*, 65(3), 340–350. <https://doi.org/10.1057/jors.2013.91>
- Bocchio, Crook & Andreeva (2023). The impact of macroeconomic scenarios on recurrent delinquency: A stress testing framework of multi-state models for mortgages. *International Journal of Forecasting*, 39(4), 1655–1677. <https://doi.org/10.1016/j.ijforecast.2022.08.005>
- Breeden & Dobrinov (2022). Quantifying model selection risk in macroeconomic sensitivity models. *Journal of Risk Model Validation*, 16(3).
- Djeundje & Crook (2025). Incorporating behavioural and macroeconomic correlations for the prediction of bank capital for credit risk. *Journal of the Operational Research Society*, 1–15. <https://doi.org/10.1080/01605682.2025.2467774>
- Djeundje, Crook & Andreeva (2025). The devil in the details: Dynamic prediction of loan portfolio profitability with macroeconomic drivers through multi-state modelling. *European Journal of Operational Research*, 327(2), 703–715. <https://doi.org/10.1016/j.ejor.2025.07.008>
- Forrest (2023). Best Practice in Model Risk Quantification. *Credit Scoring & Credit Control XVIII* conference, Edinburgh, UK. <https://www.crc.business-school.ed.ac.uk/sites/crc/files/2024-01/Best-Practice-in-Model-Risk-Quantification-slides.pdf>
- Jung, Thomas & So (2015). When to rebuild or when to adjust scorecards. *Journal of the Operational Research Society*, 66(10), 1656–1668. <https://doi.org/10.1057/jors.2015.43>
- Loizidou, Jones, Grey & So (2020). Modelling the lifetime of banknotes with a semi-Markov chain model. *Journal of the Operational Research Society*, 73(3), 497–508. <https://doi.org/10.1080/01605682.2020.1843979>
- So, Mues, de Almeida Filho & Thomas, L. C. (2019). Debtor level collection operations using Bayesian dynamic programming. *Journal of the Operational Research Society*, 70(8), 1332–1348. <https://doi.org/10.1080/01605682.2018.1506557>
- Stevenson, Mues & Bravo (2021). The value of text for small business default prediction: A deep learning approach. *European Journal of Operational Research*, 295(2), 758–771. <https://doi.org/10.1016/j.ejor.2021.03.008>
- Thomas, Edelman & Crook (2004). *Readings in credit scoring: Foundations, developments, and aims*. Oxford University Press.
- Wang, Crook & Andreeva (2024). Improving the accuracy of credit scoring models using an innovative Bayesian informative prior specification method. *Journal of the Operational Research Society*, 76(2), 229–253. <https://doi.org/10.1080/01605682.2024.2339510>
- Zandi, Korangi, Óskarsdóttir, Mues & Bravo (2025). Attention-based dynamic multilayer graph neural networks for loan default prediction. *European Journal of Operational Research*, 321(2), 586–599. <https://doi.org/10.1016/j.ejor.2024.09.025>