

Statistics & Risk Modeling

with Applications in Finance and Insurance

Editor

Georg Pflug, Department of Statistics and Decision Support Systems, University of Vienna, Universitätsstr. 5/9, 1010 Vienna, AUSTRIA, phone: +43 1 4277 38630, e-mail: georg.pflug@univie.ac.at

Co-Editors

Ludger Rüschendorf, Department of Mathematical Stochastics, University of Freiburg, Eckerstr. 1, 79104 Freiburg, GERMANY, e-mail: ruschen@stochastik.uni-freiburg.de

Rama Cont, Laboratoire de probabilités et modèles aléatoires (LPMA), Université Pierre et Marie Curie, Case 188, 4 place Jussieu, 75252 Paris cedex 05, FRANCE, e-mail: rama.cont@upmc.fr

Hansjörg Albrecher, Department of Actuarial Science, Faculty of Business and Economics and Swiss Finance Institute, University of Lausanne, 1015 Lausanne, SWITZERLAND, e-mail: hansjoerg.albrecher@unil.ch

Advisory Board

Paul Embrechts, SWITZERLAND, e-mail: embrecht@math.ethz.ch

Walter Schachermayer, AUSTRIA, e-mail: walter.schachermayer@univie.ac.at

Albert Shiryaev, RUSSIA, e-mail: albertsh@mi.ras.ru

Helmut Strasser, AUSTRIA, e-mail: helmut.strasser@wu.ac.at

Associate Editors

Nicole Bäuerle, GERMANY, e-mail: baeuerle@kit.edu

Holger Dette, GERMANY, e-mail: holger.dette@rub.de

Jürgen Franke, GERMANY, e-mail: franke@mathematik.uni-kl.de

Wolfgang Härdle, GERMANY, e-mail: stat@wiwi.hu-berlin.de

Arnold Janssen, GERMANY, e-mail: janssena@math.uni-duesseldorf.de

Axel Munk, GERMANY, e-mail: amunk1@gwdg.de

Michael Nussbaum, USA, e-mail: mn66@cornell.edu

Mark Podolskij, GERMANY, e-mail: mark.podolskij@uni-heidelberg.de

Zari Rachev, GERMANY, e-mail: rachev@kit.edu

Robert Stelzer, GERMANY, e-mail: rstelzer@ma.tum.de

Peter Tankov, FRANCE, e-mail: peter.tankov@polytechnique.org

Statistics & Risk Modeling

Volume 30 · Issue 4 · 2013

O. Okhrin
Editorial to the special issue on Copulae of Statistics & Risk Modeling 281

J.-F. Mai, M. Scherer
What makes dependence modeling challenging? Pitfalls and ways to circumvent them 287

E. C. Brechmann, C. Czado
Risk management with high-dimensional vine copulas: An analysis of the Euro Stoxx 50 . . . 307

T. Bouezmarni, A. El Ghouch, A. Taamouti
Bernstein estimator for unbounded copula densities 343

W. K. Härdle, O. Okhrin, Y. Okhrin
Dynamic structured copula models 361

Copyright: It is a general condition that submitted manuscripts have not been submitted or published and will not – without written consent by the publishers – be submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproduction, microform or any other reproductions of similar nature, and translations. Photographic reproduction, microform, or any other reproduction of text, figures, or tables from this journal are not allowed without permission obtained from the publisher.

The use of general descriptive names, trade marks etc. in this publication even if the former are not specifically identified, is not to be taken as a sign that such names are exempt from the relevant protective laws and regulations and may accordingly be used freely by anyone. Authors are requested to present copyright releases of published materials used in their contributions.

Re: Copyright in the USA: The appearance of the code at the top of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This authorization to photocopy items is granted for users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of \$ 3.00 per copy is paid directly to CCC, 27 Congress St., MA 01970. For those organizations that have been granted a photocopy license by CCC, a separate system of payment has been arranged. The fee code for users of the Transactional Reporting Service is: 0044-3336.

This consent is given for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale.

Subscription information: Volume 30, Issues 1–4 will appear in 2013. Annual subscription price ONLINE: € 308,-; annual subscription price PRINT or ONLINE+PRINT: € 418,- + postage Germany: € 9,-; postage elsewhere: € 15,-. Single issue: € 118,- + € 3,- postage elsewhere. For EU countries all prices are including 7% VAT, for all other countries they are gross prices. For cancellation of the subscription the publisher must be noticed not later than two months before the end of the calendar year. Orders can either be placed with your bookdealer or sent directly to:

Oldenbourg Wissenschaftsverlag, Postfach 80 13 60, 81613 München, Germany;

email to: vertrieb-zs@oldenbourg.de.

For further information refer to statistics-international.de

Information: Oldenbourg Wissenschaftsverlag, Postfach 80 13 60, 81613 München, Germany, phone: +49 (0)89 4 50 51-2 99; fax: +49 (0)89 4 50 51-2 92; internet: oldenbourg.de

Printing: grafik + druck GmbH, München

Index of Volume 30 (2013)

Number 1

<i>P. V. Gapeev, N. Rodosthenous</i> Perpetual American options in a diffusion model with piecewise-linear coefficients	1
<i>O. Okhrin, Y. Okhrin, W. Schmid</i> Properties of hierarchical Archimedean copulas	21
<i>L. Györfi, H. Walk</i> Rate of convergence of the density estimation of regression residual	55
<i>N. Laïb, M. Lemdani, E. O. Ould Saïd</i> A functional conditional symmetry test for a GARCH-SM model: Power asymptotic properties	75

Number 2

<i>A. Gelman, Ch. P. Robert, J. Rousseau</i> Inherent difficulties of non-Bayesian likelihood-based inference, as revealed by an examination of a recent book by Aitkin	105
<i>M. Aitkin</i> Comments on the review of <i>Statistical Inference</i>	121
<i>R. Cont, R. Deguest, X.D. He</i> Loss-based risk measures	133
<i>H.R. Lerche, D. Stich</i> A harmonic function approach to Nash-equilibria of Kifer-type stopping games	169
<i>P. Babeliny</i> A note on the biasedness and unbiasedness of two-sample Kolmogorov–Smirnov test	181

Number 3

<i>K. Shimizu</i> The bootstrap does not always work for heteroscedastic models	189
<i>M. Burkschat, U. Kamps, M. Kateri</i> Estimating scale parameters under an order statistics prior	205

<i>X. Chen, L. Wang</i>	
Conditional L_1 estimation for random coefficient integer-valued autoregressive processes . . .	221
<i>S. Christensen, A. Irle</i>	
American Options with guarantee – A class of two-sided stopping problems	237
<i>B. Roorda, J.M. Schumacher</i>	
Membership conditions for consistent families of monetary valuations	255

Number 4

<i>O. Okhrin</i>	
Editorial to the special issue on Copulae of Statistics & Risk Modeling	281
<i>J.-F. Mai, M. Scherer</i>	
What makes dependence modeling challenging? Pitfalls and ways to circumvent them	287
<i>E.C. Brechmann, C. Czado</i>	
Risk management with high-dimensional vine copulas: An analysis of the Euro Stoxx 50 . .	307
<i>T. Bouezmarni, A. El Ghouch, A. Taamouti</i>	
Bernstein estimator for unbounded copula densities	343
<i>W.K. Härdle, O. Okhrin, Y. Okhrin</i>	
Dynamic structured copula models	361

Statistics & Risk Modeling – Instructions for authors

Journal home page: statistics-international.de

Submission of papers. Papers submitted for publication must be written in English and should be prepared with $\text{T}_\text{E}\text{X}$ or $\text{L}^{\text{A}}\text{T}_\text{E}\text{X}$. For all submission authors should use the online tracking system Editorial Manager (www.editorialmanager.com/statdec).

Review process. Manuscripts are accepted for review with the understanding that the same work has not been published or submitted for publication elsewhere. The Editor, Co-Editors and Associate Editors reserve the right to return manuscripts at any time without stating the reasons for doing so. The identity of the reviewers will not be disclosed to the authors or to any other part of the review process. The Editorial Board attempts to reach final decisions on papers submitted within six months. To facilitate a timely review, authors are encouraged to take extreme care in the preparation of the manuscripts that they submit.

Accepted papers. If and when an article is accepted for publication, the author(s) agree(s) to grant Oldenbourg Verlag an exclusive and unlimited right to reproduce and distribute the article in any form anywhere in the world.

Electronic Format. Authors are asked to prepare their manuscripts using the [Statistics & Risk Modeling templates](#). The templates support the program $\text{L}^{\text{A}}\text{T}_\text{E}\text{X}$. Templates and instructions can be called from the Welcome Page of www.editorialmanager.com/statdec.

Preparation of manuscripts. Papers published in Statistics and Risk Modeling should normally not exceed 25 pages after typesetting. Longer papers require a special decision of the editorial board in order to be published.

The cover page of each paper should contain the title of the paper, the names of the authors and a short summary not exceeding 200 words. In addition, authors should include a footnote on the cover page of the paper containing key words and phrases as well as the statement of the AMS 2000 Mathematics Subject Classification (MSC) numbers.

No further footnotes should appear in the paper.

Each paper must begin with an informative introduction to the problem that is the subject of the paper and a survey of previous work done by other authors.

Authors should follow the style guidelines (font-sizes, text height and text width, etc.) defined in the publisher's $\text{L}^{\text{A}}\text{T}_\text{E}\text{X}$ template. Usual mathematical environments (definitions, theorems, etc.) should be typed using the standard $\text{L}^{\text{A}}\text{T}_\text{E}\text{X}$ macros.

Pages of manuscripts should be numbered consecutively. Final page numbers will be provided by the Editor. The title pages will be assigned an odd page number. Each subsequent odd numbered page should contain a header stating the title of the paper in abbreviated form (less than 35 characters). Even numbered pages should contain a header stating the names of the authors.

All references are to be listed by the author in a bibliography at the end of the paper, containing complete information according to usual scientific standards. Book titles and journal titles should be typed in italic style. References in the text have to be indicated by figures (numbers or character strings) in square brackets referring to the appropriate section of the bibliography.

Authors must provide their addresses (both postal and electronic) and their institutional affiliations at the end of the paper (following the bibliography). The date of submission and the date of acceptance will be inserted by the Editor at the very end of the paper. Acknowledgements, if any, should be inserted after the text of the paper, but in front of the bibliography.

Open access. Authors of accepted and peer-reviewed contributions can choose to make their published articles free accessible. The article will be listed under "Open Access Articles" at the webpage. During a trial period the Open Access fee is fixed at € 1500. Open Access can be ordered with the return of the Copyright Agreement and will be realized after the issued invoice has been paid.