# ASTIN Bulletin

The Journal of the International Actuarial Association

# **Editor In Chief**

Mario Wüthrich

# Editors

Benjamin Avanzi An Chen Łukasz Delong Catherine Donnelly Michael Merz Annamaria Olivieri Steven Vanduffel Ruodu Wang

# **Editorial Board**

Jennifer Alonso Garcia Yair Babad Tim Boonen Arthur Charpentier Marcus Christiansen Griselda Deelstra Jan Dhaene Mary Hardy Jean Lemaire Gary Parker Liang Peng Robert Reitano Peng Shi Julien Trufin Andreas Tsanakas Jae Kyung Woo

Vol. 53 No. 2

05 / 2023





https://doi.org/10.1017/asb.2023.19 Published online by Cambridge University Press

# ASTIN Bulletin: The Journal of the International Actuarial Association

### **EDITORIAL OFFICE**

For further information about *ASTIN Bulletin* or to make inquiries concerning submitting manuscripts for possible publication, please contact Christian Levac at Christian.levac@actuaries.org.

### SUBSCRIPTIONS

*ASTIN Bulletin* (ISSN 0515-0361) is published three times a year (January, May, and September) by Cambridge University Press (One Liberty Plaza, 20th Floor, New York, NY 10006) for ASTIN Bulletin.

Annual institutional print and electronic subscription rates: US \$398.00 in the USA, Canada, and Mexico; UK £252.00 + VAT elsewhere. Institutional electronic only rates: US \$240.00 in the USA, Canada, and Mexico; UK £186.00 + VAT elsewhere. Institutional print only rates: US \$380.00 in the USA, Canada, and Mexico; UK £192.00 + VAT elsewhere. Single part rates: US \$146.00 in the USA, Canada, and Mexico; UK £74.00 + VAT elsewhere. Prices include surface postage and insurance.

### DISCLAIMER

None of the International Actuarial Association (IAA), the Sections of the IAA or The Publisher (Cambridge University Press) is responsible for statements made or opinions expressed in the articles, criticisms and discussions published in *ASTIN Bulletin*. Further, any supplementary materials such as data and/or code that have been made available by the authors remain their sole property. Any data and/or code used to replicate the results during the review process were not validated. These materials are provided "as is" without any warranties of any kind including but not limited to warranties of merchantability, fitness for a particular purpose, or non-infringement of intellectual property. The IAA and CUP does not warrant the accuracy or completeness of the information.

## **COPYRIGHT AND PERMISSIONS**

Copyright © The International Actuarial Association 2023. All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from Cambridge University Press. Policies, request forms and contacts are available at: cambridge.org/asb

Permission to copy (for users in the U.S.A.) is available from Copyright Clearance Center http://www.copyright.com, email: info@copyright.com.

**Postmaster:** Send address changes to *ASTIN Bulletin*, Cambridge University Press, One Liberty Plaza 20th Floor New York, NY 10006, USA

### ABSTRACTING AND INDEXING

*ASTIN Bulletin* is abstracted and indexed in the Social Sciences Citation Index, the Science Citation Index Expanded, the CompuMath Citation Index, and Current Contents/Social & Behavioural Sciences; MathSciNet; Zentralblatt MATH; Scopus; CrossRef; ISI Links.

### **INTERNET ACCESS**

*ASTIN Bulletin* is included in the Cambridge Core service, which can be accessed at cambridge. org/asb. For information on other Cambridge titles, visit cambridge.org.

**ISSN:** 0515-0361 **EISSN:** 1783-1350