

CAMBRIDGE

JOURNALS

# Journal of Pension Economics & Finance

## Editors

Steven Haberman, *Cass Business School, UK*

Moshe Milevsky, *York University, Canada*

J. Michael Orszag, *Watson Wyatt, UK*

The *Journal of Pension Economics & Finance (JPEF)* is the only academic journal focusing on the economics and finance of pensions and retirement income. The ageing population, together with the shrinking workforce, heralds a growing pensions crisis, which has become a key public policy issue in developed countries and elsewhere. *JPEF* provides a valuable and influential forum for international debate in this area.

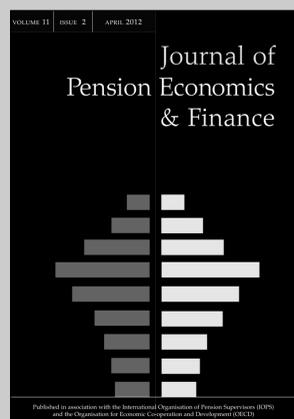
The journal publishes original research papers, covering a variety of topics, including pension fund management, the regulation of pensions, and pensions and labour markets.

## Price information

is available at: <http://journals.cambridge.org/pef>

## Free email alerts

Keep up-to-date with new material – sign up at  
<http://journals.cambridge.org/alerts>



## Journal of Pension Economics & Finance

is available online at:  
<http://journals.cambridge.org/pef>

## To subscribe contact Customer Services

### in Cambridge:

Phone +44 (0)1223 326070  
Fax +44 (0)1223 325150  
Email [journals@cambridge.org](mailto:journals@cambridge.org)

### in New York:

Phone +1 (845) 353 7500  
Fax +1 (845) 353 4141  
Email  
[subscriptions\\_newyork@cambridge.org](mailto:subscriptions_newyork@cambridge.org)

For free online content visit:  
<http://journals.cambridge.org/pef>



CAMBRIDGE  
UNIVERSITY PRESS

# Go Mobile

CJO Mobile (CJOm) is a streamlined  
Cambridge Journals Online (CJO)  
for smartphones and other  
small mobile devices



- Use CJOm to access all journal content including *FirstView* articles which are published online ahead of print
- Access quickly and easily thanks to simplified design and low resolution images
- Register for content alerts or save searches and articles – they will be available on both CJO and CJOm
- Your device will be detected and automatically directed to CJOm via: [journals.cambridge.org](http://journals.cambridge.org)



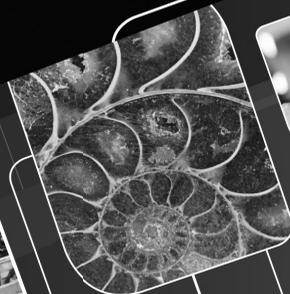
**CAMBRIDGE**  
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

# Cambridge Journals Digital Archive

- ▶ 1770 – 2011
- ▶ Over 220 titles
- ▶ From Volume 1



[journals.cambridge.org/archives](http://journals.cambridge.org/archives)



CAMBRIDGE  
UNIVERSITY PRESS

# Guidelines for Contributors

## British Actuarial Journal

*British Actuarial Journal (BAJ)* contains the papers presented to the sessional research programme of the Institute and Faculty of Actuaries along with transcripts of the discussions and debates. It also contains Presidential addresses; memoirs and papers of interest to practitioners. It is anticipated that three parts of *BAJ* will be published annually. For information on presenting a paper, contact Maria Lyons, e-mail: maria.lyons@actuaries.org.uk

## Annals of Actuarial Science

*Annals of Actuarial Science (AAS)* contains research papers in any area of actuarial science – life insurance, non-life insurance, pensions, health insurance, finance and investment, econometrics, insurance economics and financial risk management – in the form of original research, review papers and case studies.

AAS comprises 2 parts per Volume, issued in spring and autumn and all papers are subject to a rigorous process of peer-review. Papers should be submitted direct to the Editor, Professor Angus Macdonald (Heriot-Watt University, Edinburgh), e-mail: a.s.macdonald@hw.ac.uk

For more information on contributing see <http://journals.cambridge.org/aas>

## Disclaimer

The views expressed in this publication are those of the authors. The Institute and Faculty of Actuaries does not endorse any of the views stated, nor any claims or representations made in this publication and accepts no responsibility or liability to any person for loss or damage suffered as a consequence of their placing reliance upon any view, claim or representation made in this publication. The information and expressions of opinion contained in this publication are without guarantees, conditions or warranties as to their accuracy and are not intended to be a comprehensive study, nor to provide actuarial advice or advice of any nature and should not be treated as a substitute for specific advice concerning individual situations.

*Printed by Bell and Bain Limited, Glasgow*

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see [www.fsc.org](http://www.fsc.org) for further information.

## VOLUME 18 – PART 1

This part contains sessional research meeting papers and discussions covering the period September 2011 – November 2011

<b>Contents</b>	<b>Page</b>
Presentation of a Finlaison medal to Professor Angus Macdonald	1
Address <i>D. Martin</i>	3
Calculating and communicating tail association and the risk of extreme loss <i>P. Sweeting and F. Fotiou</i>	13
Abstract of the London Discussion	73
Summary of Sir Harry Burns' (Chief Medical Officer for Scotland) lecture 'Health & well-being in Scotland: Time for a rethink?'	84
A common risk classification system for the Actuarial Profession <i>P. O. J. Kelliher, D. Wilmot, J. Vij and P. J. M. Klumpes</i>	91
Abstract of the London discussion	122
Abstract of the Edinburgh discussion	145
A review of the use of complex systems applied to risk appetite and emerging risks in ERM practice <i>N. Allan, N. Cantle, Professor P. Godfrey and Dr Y. Yin</i>	163
Abstract of the London discussion	235
Abstract of the Edinburgh Discussion	257

### Cambridge Journals Online

For further information about this journal please go to the journal website at:  
[journals.cambridge.org/baj](http://journals.cambridge.org/baj)



**MIX**  
Paper from  
responsible sources  
**FSC® C007785**

**CAMBRIDGE**  
UNIVERSITY PRESS