



The Actuarial Profession
making financial sense of the future

CAS Research Report
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Overview of Presentation

- Present a brief summary of the CAS's research efforts
- Also brief mention of CAS's collaborations with other actuarial organizations
- Will highlight some resources that are available from the CAS's web site
 - www.casact.org
 - <http://www.casact.org/research/> for research

CAS Committees and Working Parties

Dynamic Risk Modeling
Health Care Issues
Management Data & Information
Ratemaking Research
Reinsurance Research
Reserves Research
Theory of Risk
Valuation, Finance and Investments
Research Initiatives Coordinator, AERF Grants TF
Halmstad Prize Committee
Foundational Statements Task Force
Climate Change Committee
Research Grants TF (used to be AERF Grants TF)
Loss Simulation Model Working Party
Research Working Party on Public-Access DFA Model
Tail Factors Working Party
Ratemaking Survey Working Party
Hachmeister Prize Committee
Accounting Changes Task Force
DRM Handbook Working Party
Economic Capital Working Party
R Working Party
Health Economics Working Party

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What Do the Committees Do?



The image shows a screenshot of the CAS (Casualty Actuarial Society) website. On the left is the CAS logo with the text 'CASUALTY ACTUARIAL SOCIETY' and '1914'. To the right is a photo of a man in a suit sitting at a desk. Below the logo is a navigation menu with links: 'My CAS', 'My Information', 'My Transactions', 'My Committees', and 'Member Directory'. To the right of the menu is a section titled 'COMMITTEE DIRECTORY' with a list of committees: 'AAA Joint Task Force on Discipline', 'Accounting Changes Task Force', and 'Actuarial Climate Volatility Index Subcommittee'.

[Climate Change Committee](#)

[Committee on Dynamic Risk Modeling](#)

[Committee on Health Care Issues](#)

[Committee on Management Data & Information](#)

[Committee on Online Services](#)

[Committee on Professionalism Education](#)

[Committee on Ratemaking](#)

[Committee on Reinsurance Research](#)

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Click on Committee Link to Learn More

COMMITTEE ON THEORY OF RISK

The [Committee on the Theory of Risk](#) (COTOR) is charged: To propose, encourage, and monitor research and other projects concerning the actuarial and financial evaluation of risk in insurance contracts and operations in support of the CAS Centennial goals.

Members

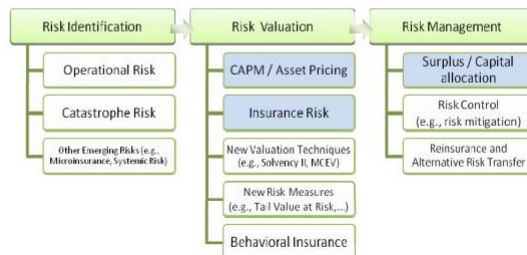
name	position
Richard A. Derrig	Chairperson
David Appel	Member
Todd R. Bault	Member
Anthony O'Boyle Beirne	Member

RPP 2 Literature Search

Page 8 Martin Eling and Hato Schmieser | RPP II | Copyright: Casualty Actuarial Society


2. Search and Evaluation Strategy

- Definition of the search strategy - Thematic Categories:



3. Results: Aim 1 – Update of the bibliography


[University News](#) | [University](#) | [Faculties](#) | [Research](#) | [Study](#) | [International](#) | [Continuing Education](#) | [Campus](#)



[Risk Premium Project II](#) > [RPP II Results](#) > [Management Summary](#)

Risk Premium Project II

- 1 About RPP II
- 2 Questionnaire
- 3 RPP II Results
 - Management Summary
 - Thematic Categories
 - Detailed RPP II Report
- 4 RPP II Database

 Search provided by tiz

Management Summary

Our literature review covers 961 references. The opinion of 51 colleagues from academia and practice was incorporated in the review document. As a main result we find that actuarial and financial views of how to price risk are still converging, but additional factors have been added to the discussion such as new risk measures, new valuation techniques, behavioral aspects, or emerging risks. In the aftermath of the financial crisis systemic risk, liquidity risks, and implications from the crisis are discussed. Throughout this report the five conclusions from RPP I are revised and five new conclusions are added to the discussion. Furthermore, five areas for future research are identified.

Revision of key conclusions from RPP I

(1) Financial vs. actuarial approaches: There is an ongoing consolidation between financial and actuarial literature with regard to pricing of insurance contracts. Both fields acknowledge the role of systematic and non-systematic risk in the pricing of insurance contracts.

(2) Fair value of the insurance premium: Theoretical models as well as empirical tests have confirmed that given the real-world market imperfections, the price of insurance should be a function of the (1) expected cash flow with adjustments for systematic risk, (2) production costs (i.e. expenses), (3) default risk, and (4) frictional capital costs. By-line adjustments should be integrated depending on the cash flow pattern of the liabilities.

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Search on a particular topic

RISK PREMIUM PROJECT (RPP) II

[Home](#) | [About RPP II](#) | [Questionnaire](#) | [RPP II Results](#) | [RPP II Database](#)

RPP2 DATABASE

RPP II LITERATURE

BASIC SEARCH

AUTHOR LAST NAME BEGINS WITH:

[A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#) | [P](#) | [Q](#) | [R](#) | [S](#) |

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Committee on Reserves

- Annual call paper program
- Created working parties
 - Annual call paper program
 - Loss Simulation Working Party (Joint WP)
 - Issues Call for paper involving using model or making change to it in 2010
 - Tail Factor Working Party
 - BF Initial LR Working Party

Climate Change Committee

- Membership is very diverse including international members and non-actuaries with special expertise
- Subcommittee working on Climate Change Index
- Prepare educational materials for members

Ratemaking Committee

- Sponsors biannual call paper program
- Joined with GIRO on international Ratemaking survey
 - Companion to 2008 CAS Reserving Survey
 - Ratemaking Survey initially proposed in GRIP paper
 - Report back to the professions (GIRO, CAS Annual, RPM)
 - Important part of the CAS Research Centennial Goals
 - Desire to coordinate U.S. with UK, Australia efforts

R Working Party

- Goal and develop tools that prepare actuaries to implement advanced methods in R
- Sponsoring a limited attendance seminar in the fall

Loss Simulation Model Working Party

- Sponsored by DRMC in 2005, the LSMWP began work in 2006.
- Purpose: creation of a simulation model that will generate claims that can be summarized into loss development triangles and complete rectangles.
- Deliverables: Open source program available to CAS members, seminars, and a CAS Working Party paper documenting work.
- Time Frame: Complete testing and refinement of APL prototype in 2008. Develop alternate Visual Basic version in 2008, test and document in 2009.
- The Group A report "Literature and Test Criteria Subcommittee Report" is available on the CAS web site at www.casact.org/research/lsmwp.
- Will be giving workshop on LSMWP model

National Association of Insurance Commissioners Dataset

LOSS RESERVING DATA PULLED FROM NAIC SCHEDULE P

Glenn G. Meyers, PhD, FCAS
Peng Shi, PhD, ASA

SITE SEARCH
Google™ Custom Search

Please direct all comments to Glenn Meyers at gmeyers@iso.com

1. Purpose

Our goal is to prepare a clean and nice data set of loss triangles that could be used for claims reserving studies. The data includes major personal and commercial lines of business from U.S. property casualty insurers. The claims data comes from Schedule P – Analysis of Losses and Loss Expenses in the National Association of Insurance Commissioners (NAIC) database.

We have obtained permission from the NAIC to make this data available to all interested researchers on the CAS website.

Joint Risk Management Section

- CAS, CIA and SOA jointly fund projects through the JRMS
- Some projects include
 - Annual survey of actuaries on emerging issues
 - Two essay calls on the Financial Crisis
 - A funded project on the cause of the financial crisis
 - Contributed funding to two COTOR projects

NAAC (North American Actuarial Council)

- All North American Actuarial Association
- Several years ago began to collaborate on research projects
- Funded Climate Index project
- Funded severe inflation/deflation project
 - Developed stochastic model used in analysis that will be publically available
 - Analyzing impact on insurance industry in North America

Questions?
