

CAS Actuaries Working Overseas

CAS Spring Meeting
May 16, 2011

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Agenda

- Germany & United Kingdom
 - Business Environment
 - Regulatory Environment
 - Actuarial Environment
 - Work Environment



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Business Environment - Germany

- German P&C market statistics
 - Largest European P&C market
 - 250 P&C insurance companies
 - €55 billion in net written premiums
- Insurers can be organized as:
 - Stock corporations
 - Mutual insurance associations
 - Insurance companies under public law
- Leading German P&C insurers
 - Allianz
 - HDI-Gerling
 - Ergo
- Several large reinsurers are based in Germany



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Sources: German Insurance Association and University of Frankfurt

Regulatory Environment - Germany

- Federal regulation, within the constraints of European law
 - Federal Financial Supervisory Authority
 - Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)
 - No direct price regulation for any line in the German insurance market
 - Primarily regulates solvency and statutory reporting requirements
- Regional insurers operating in only one state (Bundesland) are subject to regulation by that state only

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Source: BaFin

Actuarial Environment - Germany

- Focus on technical skills
 - All actuaries have Masters' degrees, many have PhDs
 - Doing research and completing a thesis are a typical part of undergraduate studies

- April 2011 DAV Meeting
 - P&C Afternoon organized through ASTIN (Actuarial Studies in Non-Life Insurance):
 - Supply/Demand-Oriented Premium Strategies
 - Risk Transfer Accounting for Reinsurance Contracts
 - First Experiences with QIS 5
 - IFRS 4, Phase 2: Current Situation and Outlook
 - Scientific Day (held in English) – selected sessions:
 - When diversification fails: modeling endogenous risk
 - Contingent Capital and Contingent Convertibles
 - Local volatility pricing models for long-dated derivatives in finance and insurance

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Source: DAV

Actuarial Society - Germany

- German Actuarial Society
 - Deutsche Aktuarvereinigung (DAV)
 - Membership requirements
 - Basic education requirements
 - A university degree in Math or similar analytical subject
 - 3-5 years of relevant actuarial experience
 - Actuarial standards to ensure consistency and professionalism
 - Code of conduct
 - Disciplinary procedures
 - Continuing education

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Source: DAV

Actuarial Exams - Germany



- Basic education requirements
 - 1 Introductory Exam: Mathematics, 90 min (can also be fulfilled through a university degree)
 - 2 Introductory Exam: Statistics, 90 min (can also be fulfilled through a university degree)
 - 3 Insurance Economics, 90 min
 - 4 Basic Principles of Insurance Math and Financial Math, 90 min
 - 5 Financial Mathematics and Investment Management, 90 min
 - 6 Stochastic Risk Modeling and Statistical Methods, 120 min
 - 7 Insurance Mathematics, 120 min
 - 8 Personal Insurance Mathematics (Life, Health, Pension), 3 x 60 min
 - 9 Accounting, 90 min
 - 10 Modeling, 60 min
 - 11 Value and Risk-Based Management, 90 min
 - 12 One specialized exam from the following:
 - Life Insurance
 - Casualty Insurance
 - Pension
 - Health Insurance
 - Building Society Mathematics
 - Financial Mathematics



Source: DAV

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Business Environment - UK



- UK P&C market statistics
 - Second-largest European P&C market
 - 740 P&C companies
 - £30 billion in net written premiums
- Leading UK P&C insurers
 - RBS (Direct Line, Churchill, NIG)
 - Aviva
 - AXA
 - Royal and Sun Alliance
- Leading specialist insurer
 - Lloyd's



Source: Association of British Insurers

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Regulatory Environment - UK




- Federal regulation, within the constraints of European law
 - Financial Services Authority
 - Focuses on solvency, contract language
 - Claims handling practices
 - Absence of rate regulation
 - "Approved persons"




Source: FSA

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Actuarial Environment - UK




- Focus on technical skills
- Actuaries are relied upon for modeling, statistics, and financial math expertise
- GLMs have been common practice in ratemaking for 15+ years




The Actuarial Profession
making financial sense of the future


Source: FIA 10

Actuarial Society - UK





Coat of Arms of the Institute of Actuaries




Coat of Arms of The Faculty of Actuaries in Scotland

- Institute and Faculty of Actuaries
 - Membership requirements
 - Basic education requirements
 - A university degree in Math or similar analytical subject
 - 1-3 years of relevant actuarial experience, with work based skills log
 - Actuarial standards to ensure consistency and professionalism
 - Code of conduct
 - Disciplinary procedures
 - Continuing education
- Mutual recognition agreement with the CAS

Source: FIA 11

Actuarial Exams - UK



- UK P&C Insurance sample exam questions:

1. A small well-capitalised London-market insurance company underwrites a variety of direct commercial and industrial property and liability insurance. Outline, with reasons, the types of reinsurance it is likely to buy. [8 points]
2.
 - (i) State what is meant by a soft insurance market. [1 point]
 - (ii) Discuss the reasons why general insurance companies may wish to continue writing business during a soft market. [4 point]
 - (iii) Describe and evaluate strategies that a London-market insurance company might adopt during a soft market. [7 point]

[Total 12 points]

- Typical 3-hour exams have 100 points and 10 questions.

Source: FIA 12
