Towards a New Global Education System

ACTUARIAL EDUCATION IN ITALY

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Outline

- Introduction
- University education
- Qualification
- CPD
- Actuarial education outside the actuarial profession
- Conclusions
Introduction

• Increasing extent of opportunities for actuaries
  – inside the insurance industry
    • assessment of modern reinsurance arrangements and ART
    • financial management of the company
    • implementation of new accounting standards
    • ..... 
  – outside the insurance industry
    • financial analyses
    • risk evaluations
    • financial risk management
    • .....
• Enlarging range of opportunities ⇒ important challenge for all institutions involved in actuarial education and actuarial training

• Actuarial education and training involve
  – technical issues, complementing the basics of actuarial science (probability, statistics, actuarial mats, ...) and strictly related with the actuarial work in
    • life insurance
    • non-life insurance
    • pensions
    • finance
    • risk management
    • .....
– non-technical issues, i.e. skills not unique to the actuary
  • communication and reporting skills
  • influencing skills
  • general management skills
  • .....  
– professional issues, i.e. standards expected by public, employers and clients of the profession
• Actuarial education in Italy
  – mainly university-based
  – the profession intervenes after qualification
  – sharing of educational tasks
    • universities:
      – basic actuarial knowledge
      – most important technical issues
      – some non-technical issues
    • professional body:
      – continuing education and professional development
University education

• The old system
  – based on one degree level (+ PhD courses)
  – a four-year degree course in Statistics and Actuarial Science
    • the only one allowing graduates to enter the actuarial profession
    • provided by the following universities: Rome “La Sapienza” (1927), Trieste (1978), Florence, Benevento, Calabria, Milan “Università Cattolica”
• The new system
  – based on two degree levels (+ Master courses + PhD courses)
  – first level degree: 3 years (“degree”)
  – second level degree: 2 years (“specialization degree”) and final thesis
  – degree structure based on a credit system
  – from 2001 applications accepted only for the new system
  – greater freedom in the design of educational products
  – courses in actuarial sciences may substantially differ
Qualification system

• Professional qualification
  – based on examinations
  – regulated by the State

• The old qualification system
  – strictness of the organization of degree courses in Statistics and Actuarial Science ⇒ simple structure
  – based on three exams (two written and one oral)
• The new qualification system (from 2002)
  – two professional levels and two qualification levels
  – professional level A ("actuary")
    • (first + ) second level degree in Statistics, Actuarial Sciences or Finance
    • level A examinations
  – professional level B ("junior actuary")
    • first level degree in Statistics or Actuarial Sciences
    • level B examinations
  – at both levels: two written exams, a practical exam, an oral exam
– Qualification subjects (according to specific syllabuses)

• level A examinations
  Probability, Statistics, Financial maths, Actuarial maths,
  Actuarial technique of life insurance, Actuarial technique of
  general insurance, Actuarial technique of pension
  schemes, Actuarial statistics, Mathematical Finance,
  Insurance company reporting, Portfolio evaluations,
  Insurance and finance legislation, Professional legislation

• level B examinations
  Probability, Statistics, Financial maths, Actuarial maths,
  Insurance products, Financial products, Pension schemes,
  Data bases and computing, Legislation

• exemptions for people qualified at level B to enter
  level A
CPD

- CPD short courses (1 - 3 days) provided by SIFA
  - previously, courses provided by Istituto Italiano degli Attuari
  - SIFA set up in 1999 jointly by Istituto Italiano degli Attuari and Ordine Nazionale degli Attuari (the professional body)
– Several actuarial topics covered so far
  Valuations in life insurance, Pension funds according to recent legislation, Projected mortality tables, Unit-linked and index-linked products, Risks and solvency in life insurance, Actuarial work in general insurance, Reinsurance techniques, Mathematical finance issues, ...

• New task for SIFA
  provide specific courses for people applying for qualification, according to new qualification rules
Actuarial education outside the actuarial profession

• Extended range of tasks for the actuary
  – cooperation between actuaries and other professionals
    • improved communication skills
    • mutual knowledge of some basic technical issues
  – basic actuarial topics should enter knowledge of non actuaries
• A challenge for actuarial education outside the actuarial profession
• Present situation in Italy
  – basics of actuarial maths taught in some degree courses in Economics and Management (usually eligible exams)
  – some degree courses in Mathematics include actuarial mathematics or risk theory
  – at post-graduate level (inside or outside the university system)
    • Masters in insurance, finance and risk management
    • Executive courses provided by Business Schools
Conclusions

• Continuous evolution of the actuarial role ⇒ continuous evolution of actuarial education and skills
• A challenge for technical education complementing university actuarial teaching
• Guidelines for technical education and qualification standards provided at an international level
  – International Actuarial Association ⇒ a worldwide standard to be implemented by 2005
  – Groupe Consultatif Actuariel Europeen: Core Syllabus
Main changes in the examination syllabus in Italy planned for 2005
  – move towards a common international syllabus
  – reflect modern actuarial, financial and business practice
  – attract select candidates to the actuarial profession
Many thanks for your kind attention