

Global Challenges for the Actuarial Profession

Paul Thornton

Worshipful Company of Actuaries
Lecture at Southampton University

21 October 2009

Global Challenges for the Actuarial Profession

- Some key challenges and opportunities
- The Globalisation of the Actuarial Profession

Some key challenges and opportunities

- The Global Financial Crisis
- Solvency
- Financial Reporting
- Mortality and longevity

The Global Financial Crisis

- “Dealing with Predictable Irrationality – Actuarial Ideas to Strengthen Global Financial Risk Management” – IAA Jan 2009
- Targeted at the Financial Stability Forum, Governments, Regulators and major financial institutions
- Presented to the Joint Forum, of IAIS, BCBS, IOSCO
- “The Global Financial Crisis – What Next? – IAA July 2009, focused more on insurance and pensions

Some Insurance Industry Issues

- Very low market interest rates lead to higher liability values
- Combined with low asset values, this leads to significant pressure on emerging earnings, capital positions and solvency
- Life insurers with significant capital guarantees or minimum interest rate obligations under intense pressure if unhedged
- Embedded Values drop
- Reduced credit ratings lead to decreasing new business
- Potential liquidity demands increase surrenders

Insurance Challenges in the EU

- Solvency II development has improved capacity to cope
- But Solvency II based on one year VaR (99.5%) risk measure
- This relates capital required to (recent) historic volatility, introducing pro-cyclicality - Economic Capital outcomes inadequate when higher volatility emerges

Prevention of future financial crises

The G 20's
common
principles for
reform:

- Strengthen transparency and accountability
- Enhance sound regulation
- Promote integrity in financial markets
- Reinforce international co-operation
- Reform international financial institutions

Actuaries believe
additional
measures are
needed:

- Introduction of more counter-cyclical regulatory arrangements
- Creation of Country Chief Risk Supervisor role
- Wider use of comprehensive risk management concepts in banks and non-regulated sector
- Improved use of ERM & risk governance

Regulatory Reform

In the words of Lord Turner, Chairman of the UK Financial Services Authority:

- The financial crisis has challenged the intellectual assumptions on which previous regulatory approaches were largely built, and in particular the theory of rational and self-correcting markets. Much financial innovation has proved of little value, and market discipline of individual bank strategies has often proved ineffective ... major changes in regulation and in supervisory approach are required.

What Next?

- Can expect regulatory framework to be
 - reviewed
 - reformed
 - extended
- Can expect more discretion for regulators to vary stress tests and periods to restore capital requirements

Solvency issues for Insurance

- IAIS issuing Guidance on capital requirements, investments, Enterprise Risk Management, internal models
- “Measurement of liabilities for Insurance Contracts; Current Estimates and Risk Margins”
– IAA April 2009
- IAA Working Group on The Role of the Actuary

Pension Security

Three principal mechanisms:

- Funding
- Insurance (PPF, PBGC, PSV)
- Creditor ranking on employer insolvency

Consequences of increased security

- Cost and risk rises, leading to employers scaling back, closing schemes to new entrants, closing schemes to future accrual
- Replacement schemes typically DC with much lower contribution input
- Pension provision reduced, employees work longer, if able to

Solvency for Pensions

- Groupe Consultatif Draft Report – “a holistic view is required, recognising the trade-offs implicit in social and labour law between the quality and quantum of pension benefits and the security of pension delivery systems.”
- Solvency II - “The European Commission, supported by CEIOP should develop a proper system of solvency rules for pension provision, whilst fully reflecting the essential distinctiveness of insurance...”

International Financial Reporting for insurance

- Has been under debate for over 10 years
- Difficult to relate illiquid long-term liabilities to marked-to-market assets
- A particular issue has been “Own Credit Risk” – are the liabilities of weaker businesses smaller than for stronger, or is this nonsense?

Major IASB Measurement Projects in 2009

- Insurance Contracts
 - Phase II: Exposure Draft
- Financial Instruments
 - Comprehensive review: 3 stage project
- Revenue Recognition
 - Discussion Paper
- Fair Value Measurement
 - Exposure Draft
- Liabilities (IAS 37)
 - New IFRS late in the year

International Financial Reporting for pensions

- Current standards unsound
 - assets marked-to market but liabilities projected for future salaries
 - discounting at corporate bond yield but can it be right for default risk to be reflected?
 - a similar issue arises for early leaver transfer values
- Move to risk-free discounting of accrued liabilities?
- Current focus is on disclosure

Mortality and Longevity - implications

- Social Security – the cost of old age support
- Health care – cost of public/private provision
- Pension funds – funding of DB schemes; adequacy of DC schemes
- Life insurers – solvency and pricing
- Care services – implications
- Social Security and Health are more vulnerable to ageing

Mortality and Longevity

– IAA activity

- Collection of global mortality tables – central point of access
- Mortality trends -documentation
- Pandemics – possible impact
- Uncertainty – future medical advances
- Social and demographic stratification

Mortality and Longevity

– IAA activity

- Analysis by cause of death
- Graduation techniques
- Projection techniques – expectation, extrapolation, explanation
- Data paucity
- Financial products – reinsurance and hedging

The Globalisation of the Actuarial Profession

- Minimum education requirements
- Code of professional conduct
- Information sharing
- Research
- Contacts with Supranational bodies
- Developing countries
- Global educational qualifications/ examinations?
- Global actuarial standards?

The International Actuarial Association

- The “old” IAA was formed in 1895
- The “new” IAA was formed in 1998, with 40 Full Member Associations
- In 2009 the IAA has 62 Full Member Associations and 23 Associates, representing over 45,000 actuaries in over 100 countries
- Extending accessibility to high quality actuarial services worldwide

The Vision of the IAA

- “The actuarial profession is recognised worldwide as a major player in the decision-making process within the financial services industry, in the area of social protection and in the management of risk, contributing to the well-being of society as a whole.”

The Mission of the IAA

- “To represent the actuarial profession and promote its role, reputation and recognition in the international domain”
- “To promote professionalism, develop education standards and encourage research, with the active involvement of its Member Associations and Sections, in order to address changing needs”

IAA Sections

- ASTIN – Actuarial Studies in Non-life Insurance
- IACA – International Association of Consulting Actuaries
- AFIR – Actuarial Approach for Financial Risks
- IAAHS – IAA Health Section

IAA Sections

- PBSS – Pensions, Benefits and Social Security
- AWF – Actuaries Without Frontiers
- LIFE – Life Section

The opportunity for individual actuaries to get involved and broaden their horizons

Institutional Members

- International Association of Insurance Supervisors – IAIS
- International Social Security Association – ISSA
- International Accounting Standards Board – IASB
- International Organisation of Pension Supervisors – IOPS

Much involvement by the IAA in these bodies

Targeting supranational organisations

- Raise awareness of actuaries
- Contribute to their work, through representation at meetings and joint projects
- Involve them in IAA discussions

Supranational organisations

- High Priority: ADB, AfDB, GARP, IAIS, IASB, IOPS, OECD, PRMIA, WB
- Medium Priority: BCBS, CISS, EC, FSI, IAASB, IADB, ILO, IMF, IOSCO, ISSA, JF, WHO, WTO
- Low Priority: APEC, BIS, EBRD, EIB, FASB, FSF, ICC, IFC, IDB, UNCTAD, UNO, USAID, WEF

Developing Countries

- Considerable assistance from UK and US, and by the IAA Fund
- Much progress in Central and Eastern Europe and China - China Actuarial Association has been formed, will join IAA in future
- Slow progress in Africa and Latin America

IAA Fund Activities

- Leadership meetings
 - Kenya, Morocco, Nigeria, Ghana
 - Panama, Argentina
 - Russia, Poland, Croatia, Lithuania, Hungary, Latvia, Belarus, Czech Republic
 - Thailand, Indonesia, Philippines, Malaysia, Singapore
- Seminars and congresses
 - Ivory Coast, Moldova, Turkey, Lebanon, Jordan

Global Educational Qualifications

- Has been difficult to achieve consensus on a single global actuarial qualification
- Several Member Associations are joining forces to create a global qualification in Enterprise Risk Management

Actuarial Standards

- 11 International Actuarial Standards relating to the application of Financial Reporting Standards (IFRS) of the IASB
- 1 International Actuarial Standard relating to social security calculations
- Classified as educational Practice Guidelines

Should they be moved up to Model Practice Standards?

International Actuarial Standards

- International Roundtable on Actuarial Standards, including the IAA, UK, US, Canadian and Australian standard setters
- Possible goals are to achieve convergence (in the short-term); to reach a single global standard for IFRS for insurance contracts (in the long term)

Summing up

- There are major global issues to which actuaries can and should contribute
- These go well beyond traditional areas of “life and pensions”
- The International Actuarial Association provides a vital vehicle for coordinating worldwide engagement

Long Live Actuaries!

- Your questions please