Dear Member

IACA Newsletter – July 2007

Welcome to the latest Newsletter from IACA.

News on IACA Meetings

IACA continues its efforts initiated under Chairman Waddingham to sponsor "mini" IACA programs or "tracks" in conjunction with the meetings of other actuarial organizations around the world.

We ran a very successful program in the U.K. on Thursday 8 February 2007 immediately prior to the Association of Consulting Actuaries' (ACA) annual conference with over 60 actuaries in attendance including a number who had travelled from afar. The meeting had been organized by the Conference of Consulting Actuaries at IACA's request. The program content which concentrated on recent developments in the US included the following presentations:

- US Pension Reform – The Pension Protection Act 2006 (separate presentations by Dave Gustafson from the PBGC and Ron Gebhardtsbauer from the American Academy of Actuaries)
- Retirement Share Plans (Don Fuerst from Mercer)
- Emerging Actuarial Practices in the US (Tom Terry and Stacy Powell from CCA Strategies).

Copies of the presentations can be downloaded from the IACA website by selecting "Meetings", then "ACA Members' Conference 2007".

Later in 2007, there is an IACA program at the East Asian Actuarial Conference in Tokyo, Japan (9-12 October 2007). For details of the conference program and registration details please click on the link above.

Following the IACA sponsored meeting in Gatwick, London in February, the ACA of the UK and the Conference of Consulting Actuaries of the US are getting together again at the Conference of Consulting of Actuaries Annual Meeting in San Antonio, Texas from 21 to 24 October 2007. Visiting consulting actuaries from the ACA will be giving presentations on topics of interest to IACA members. Details can be found on the CCA website by following the link above.

We would love to see you at either of these events.

As you know, the IACA Section holds biennial meetings with the next one scheduled to take place from 4-7 May, 2008 in Boston, USA at the Westin Copley Plaza in conjunction with the IAAHS and PBSS Sections. Please mark your calendar and pre-register to attend the meeting – I look forward to welcoming you to Boston next spring. The organising committee is now in full swing making plans for the conference – expect to see more on this later in the year.

Professionalism Articles/Other News Items

You will recall that in prior Newsletters we have provided links to articles/publications which should be of interest to consulting actuaries around the world. Continuing this theme, I have pleasure in attaching an article produced by Ken Buffin, who chairs IACA's Research Committee, on the content of a book entitled the "Pension Actuary's Guide to Financial Economics" published by the Society of Actuaries and the American Academy of Actuaries.

Ken has also flagged up the 2007 Actuarial Research Conference (ARC). The ARC provides an opportunity for academics and practitioners to meet and discuss current actuarial problems and their solutions. The 42nd ARC will be held at Robert Morris University in Moon Township, just outside Pittsburgh, Pennsylvania, USA, August 9-11, 2007.

Jay Jaffe, who chairs our Professionalism Committee, has also been actively on the look out for topical news items. He reports that earlier this year the Committee to Review the US Actuarial Profession (CRUSAP) of the American Academy of Actuaries published its report. The entire report can be found at www.crusap.net.

While many of the 19 recommendations are specific to the US, actuaries from other countries should not only find the report interesting to keep in touch with how the US actuarial profession looks at itself, but many of the recommendations deal directly with professionalism and there may be kernels that can be applied in each actuary's home country.

The report is lengthy so most actuaries are likely to read the recommendations and then turn to other sections as needed. It will be interesting to see how the CRUSAP report is dealt with by the US actuarial profession.

Jay has also highlighted a series of professionalism articles entitled "Up to Code" that have been appearing in Contingencies (this is a publication of the American Academy). These articles have been written by ABCD members and all address professionalism issues. The most recent article can be found at Up to Code.

Finally, Jay has highlighted a recent article in The Actuary Magazine (published by the Society of Actuaries) titled "Ethically Speaking" which again should be of general interest to consulting actuaries whichever country they are working in.

As ever, please do not hesitate to contact me if you have any suggestions in relation to IACA**.**

I hope that you all enjoy a relaxing summer.

Yours sincerely

Michael Toothman
Chairman

July 2007

Pension Actuary's Guide to Financial Economics
A commentary by Ken Buffin – Buffin Partners Inc

In 1998 The Actuarial Foundation published a 669-page textbook, *Financial Economics with Applications to Investments, Insurance and Pensions* that its editor described as suitable for a two-semester course at the early graduate school level. The title page with the imprimatur of The Actuarial Foundation included the words *Preparing for tomorrow's possibilities.* That tomorrow may perhaps now have arrived, some nine years later, with the publication of *Pension Actuary's Guide to Financial Economics* prepared by the Joint American Academy of Actuaries and Society of Actuaries Task Force on Financial Economics and the Actuarial Model.

The 1998 text was motivated by the explosive growth of financial economics over the preceding half-century. Its foreword stated: "It is clear that actuaries need to enhance their education about these new ideas if the profession is to keep its eminent position in planning and managing financial security systems." The hope was expressed that the book would enable actuaries to "send a powerful communication that they have the intellectual tools to solve modern financial security problems." The book comprised eleven chapters written by a ten-member team of distinguished academic authors from three continents, four nations, and eight universities. The authors succeeded in presenting the principal ideas underlying financial economics, including: financial markets; derivative securities; interest rate risk and immunization; equilibrium pricing; no-arbitrage pricing theory; options and derivatives; term structure models; portfolio selection; investment return models; and option pricing in continuous time. The book was immediately recognized as a significant contribution to the actuarial literature by a small number of actuaries, mainly in the academic community, and those PhD actuaries engaged in pension, insurance and social security work, but was not widely acknowledged, fully-appreciated, or perhaps, understood, by many practitioners who did not immediately recognize the significance of financial economics or what its implications would be for traditional actuarial models and practices. The intervening years since 1998 have seen a gradual acceptance and appreciation of financial economics by an increasing number of actuaries as its new concepts and terminology have become more widely incorporated into the actuarial practitioner's toolkit and vocabulary. The terminology of option pricing, the Black-Scholes model, interest rate swaps, securitization, equilibrium pricing, no-arbitrage pricing, derivative valuation, lattice models, dynamic hedging, yield curves, capital-asset pricing model, autocorrelation, Brownian motion, martingales, etcetera are all now relatively commonplace for today's well-informed practicing actuary, whereas a decade ago these terms were generally regarded as mysterious, and even with suspicion or as irrelevant to actuarial practice.

What was missing until now is a simple-to-understand introduction to financial economics for the non-PhD actuary. This need has been admirably met with the publication of *Pension Actuary's Guide to Financial Economics.* It also serves as a wake-up call for those members of the actuarial profession who have chosen to ignore, or who are in denial of, the significance of financial economics. An important message to the reader appears in the Introduction: "The task force believes it is important for actuaries to consider what financial economics teaches so that (they) can better evaluate (their) practice and role as actuaries. It is not important that every actuary agree with what financial economics says about pension plan management. But in light of the importance attached to financial economics by financial professionals, actuaries should not ignore financial economic theory."

The Pension Actuary's guide introduces readers to some basic concepts in modern corporate finance including agency theory and the capital indifference model. It continues with an explanation of pension finance and makes good use of an augmented balance sheet to illustrate the effect of pension plan assets and liabilities, with appropriate tax adjustments, which leads to a focus on the efficacy of equity investment from the perspective of corporate shareholders. This section of the guide offers a quick formula for the analysis of the implied arbitrage to show that it is unaffected by the equity return and how it is proportional to the bond rate, the tax spread and the complement of the corporate tax rate.

The guide gives good definitions of pension liabilities, distinguishing clearly between solvency liability, market liability, and budget liability, and presents a visual aid that shows the effect of default risk and discount rates, accompanied by a statement that the challenge for today's pension actuary is to educate plan sponsors on how to interpret different types of pension liability. The guide devotes separate sections to discussions of pension accounting, pension funding and pension investment, and does an excellent job of making the point that these are three separate aspects of pension management that need to be considered in their appropriate contexts. Perhaps these explanations will help actuaries to see pension fund investment strategy from a financial economics perspective and to fully comprehend the significance of default risk and non-economic discount rates that incorporate an equity risk premium element.