# FIRST ACTUARIAL CONVENTION, BIRMINGHAM, 12–13 SEPTEMBER 1985

THE first United Kingdom actuarial convention was held at the Albany Hotel, Birmingham, having been organized by the Institute of Actuaries with two objectives:

to bring actuaries together from throughout the U.K., thus filling a need that had arisen with the move of many offices away from London, and

to provide a substantive forum for broad and informal discussion within the profession.

340 actuaries, members of the Institute and Faculty, attended. Five of the speakers were not members of the profession. The convention was centred on the theme of life assurance.

In opening the convention, the President of the Institute, Professor P. G. Moore, referred to a number of matters currently of concern to the profession:

the change in the life assurance market following the withdrawal of LAPR; changes in the investment market;

the green paper on the reform of Social Security;

the terms of benefit projections; and

the public image of the profession

The ensuing sessions touched on all of these subjects.

Only one further session was attended by all participants. F. R. Wales and C. S. S. Lyon talked on the subject of "Reasonable Expectations—Bonus and Growth Illustrations", highlighting the commercial and professional issues. There were difficulties in comparing projections of unit linked and with profit business. Some alternative investment media did not make long term projections and some went to great lengths to ensure that misunderstandings were eliminated. Three alternative projection methods for with profit business were discussed. There was general agreement that there are problems with benefit projections and that these would increase if the savings market becomes freer and wider. While this was seen as essentially a problem for the industry, the actuarial profession's standing is inextricably linked to it. Various views were expressed which suggested general support for the concept that the Appointed Actuary should have to comment, in a published report, on the sustainability of current bonus distributions.

## MARKETING

Three workshops were held on marketing topics—the role of the intermediary, direct sales and mass marketing.

B. Crittenden, a guest, led the workshop on the intermediary. Much of his presentation concentrated on the current problems in the relationship between life offices and independent intermediaries, highlighting changes taking place through commissions and licensing. It emerged that independent intermediaries are concerned at the restrictions falling on them as compared with (in their view) the lighter restrictions which will fall on tied agents. The market was changing as a result of the loss of LAPR and the resultant unbundling of contracts was exposing life assurance to competition from unit trusts with lower remuneration to the intermediary. Concern was expressed that, while commission changes would alleviate the problem of selecting the office for high commission, they would do little to minimize the risk of selling the contract from an office's portfolio that offered the highest commission from that office.

The mass marketing workshop took the form of a discussion between the Marketing Manager (A. J. Cade, a guest) and the Actuary (S. Shah) of a hypothetical office. The case study highlighted many of the problems encountered by an office seeking to mass market for the first time. It was suggested that offices trying to enter this field should do so by a test market to their own clientele. It emerged that actuaries tend to consider that their contract is aimed at the customer whilst the marketing team tends to think that contracts are designed to aid office administration.

The workshop on direct sales was led by G. Westall and considered the objectives and standards appropriate to a direct life assurance sales force. The creation of such a sales force is not easy and there are dangers that considerable amounts of money could be wasted in endeavouring to create one. There will be a high turnover of staff both at the sales and managerial levels; the salesman usually being managed by a successful salesman who may or may not make a good manager. The sales team is subject to a conflict in that they are asked to sell ethically and professionally but yet pressured to produce high volumes of sales. The result of the conflict can easily be a bad reputation for the office if the ethical argument is not given due weight. The problems of retaining unsuccessful branches were also discussed.

## EXPENSES AND BUDGETS

M. MacFarlane, F.C.A. and A. Turner, A.C.M.A., guest speakers, gave a presentation on Priority Base Budgeting, a technique developed in other industries but which could usefully be applied to life offices. The method brings together the activities of corporate planning and budgeting, including the planning of financial and other limited resources. The structure ensures that senior management can see the effects of their strategic plans clearly, and thus are able to make informed decisions about the direction in which their company is to move. The method fits well with actuarial methods for the costing of new products, ensuring that due weight is given to the overhead costs of running a life office. A problem commonly facing offices is to find the best way of utilizing

manpower, time and computer resources, whilst implementing a number of sizeable projects concurrently. P.B.B. appears to be a formalization of a system capable of tackling such problems.

## PROFIT TESTING

R. P. Burrows and J. Goford gave a presentation on profit-testing, a practice which has now extended well beyond its initial applications on pricing into other areas such as office projections, appraisal values and bonus distribution policy. The cult of profit testing has moved quickly and its jargon can be confusing at times—especially to the uninitiated. Nevertheless, the meeting clearly accepted that this has become an important element of life office work which was not practicable prior to the widespread availability of computer calculating power. The concept is a return to the first principles, underlying a wide variety of actuarial calculations, using computers to refine and improve on the nineteenth century techniques of commutation columns. The results are, however, only as good as the assumptions and remaining approximations. The merits of various programming languages were also discussed in relation to the technique.

## INVESTMENT PERFORMANCE MEASUREMENT

This workshop, led by A. J. Frost, considered whether short term performance measurement inhibited long term performance. The difference between asset exchange and capital formation was stressed. Some capital formation projects have long development periods before financial returns can be achieved and hence short term performance can be held back. Whilst some speakers tended to the view that the long term was merely a succession of short terms, it became evident in discussion that the difficulty of timing made it impracticable to consistently select the long term venture immediately before its accelerated growth. One speaker suggested that measurement performance statistics should be accompanied by a measurement of the volatility of the portfolio.

# SEGMENTATION OF THE LIFE FUND

This workshop, led by G. D. Clay and D. W. Hanson, considered the problems caused by the pooling of assets into one life fund which represents several fundamentally different product lines. Their techniques involved the hypothecating of assets to the various product lines. The results were useful in investment management and tax planning. The implications for bonus distribution were also considered. A lively discussion followed.

## VALUATION AND SOLVENCY MARGINS

C. J. Brocksom, C. L. Cannon and R. J. Squires spoke on the Bases and Methods of Valuation, particularly with regard to the liability valuation

regulations. Much of the discussion centred on mismatching reserves. Speakers from the Government Actuary's Department (G.A.D.) indicated how they were interpreting some regulations and, in particular, indicated that they would assess matching in relation to the effect of a 3% change in long term interest rates and a 25% change in equity values when associated with the corresponding change permitted in the valuation basis.

The workshop on Solvency Margins, led by M. B. Brown and P. H. Hinton was less contentious: comments on G.A.D. working standards were again welcome—in particular explanations that 4% reserves were required in full on reserves incorporating guarantees or carrying insurance risks. The rate of margin on sterling reserves held under unit linked contracts will, however, be calculated at the same rate as applies to the unit reserve. In discussion, it became clear that some companies were clearly considering the financing of solvency margins in setting prices, but that there had been little market movement in rates as a result. The difficulties of reassurers and the assistance they could give to direct offices were also discussed.

M. A. Pickford and S. Thompson led a workshop on the completion of returns under the Insurance Companies Acts. A speaker from G.A.D. indicated that some companies had experienced difficulties in completing forms under the latest regulations, particularly drawing attention to the footnote to Form 14 which applied to the calculations of the Solvency Margin of a company, even if it had adopted book value accounting. Further reserves for mismatching and for tax on unrealized capital gains may also be required where assets are taken broadly at market values. The speakers were agreed that actuaries should give more information in their returns particularly in relation to significant options and guarantees to allow the supervising authority to make a proper assessment.

# MORTALITY

P. J. L. O'Keeffe gave an entertaining introduction to his paper discussing principally the development of non-smoker life assurances. Non-smoker discounts started in the United States of America and are justified by statistics. They have been popular in North America and have been adopted to a lesser extent in the U.K. The paper also discusses certain other factors including alcohol and the imposition of unisex rates by legislation. A lively discussion ensued, highlighting some of the interesting options that can be exercised against the office in a regime of unisex annuities. The discussion drew to a close with the worrying observation that mortality from AIDS is having a significant impact on mortality in the 25–40 age group in the U.S.A. and there are fears that this may spread to the U.K.

# SURRENDERS ALTERATIONS AND LAPSES

This workshop, presented by A. M. Burnett-Brown, S. Haberman and N. H. Taylor, considered the statistical experience of 7 Scottish offices (reported in

T.F.A.), together with other more general aspects of the topic. The opposing elements of consumerism and front end loadings were discussed with reference to the expected future trend to more open competition between savings media.

#### PRODUCT DEVELOPMENT

Several workshops considered this theme, concentrating on:

Group pensions—P. R. Hogley; Life assurance—P. W. Wright; Permanent health insurance—E. A. Hertzman and R. J. Sansom; Individual pensions—O. Thoresen F.F.A.; and A trans-atlantic view—P. S. Carroll.

The group pensions workshop concentrated on the need for an insurance contract, and on the structure of deposit administration contracts including their costing and bonus aspects. Discussion highlighted the need for a single contract that could consistently grow with a successful small business and which would avoid any discontinuities. Concern was expressed at the cross subsidies some actuaries considered were given between contracts, whilst others stressed that the cost effectiveness of a scheme came more from its simplicity than from its size. The impact of the Green Paper on Social Security was discussed at length with particular reference to the impact of competition on cross subsidies and discontinuance terms. One speaker stressed that time was short if the industry was to respond as successfully to the proposals in the Green Paper.

The life workshop concentrated on the changes that had occurred in the market following the withdrawal of LAPR and queried the continuing need for life assurance contracts as savings vehicles. It was generally agreed that there would be a need to minimize front end loadings, commission in particular being spread over the term of the policy. There was some discussion on the principles underlying surrender values in the light of front end loadings and some criticism of the unit linked practice of taking profit early in the life of a contract.

Recent developments in individual, group and unit-linked PHI were considered in a further workshop. There is clear evidence of under-insurance in this market but expense loadings are too low to allow heavy marketing to increase penetration. The lack of a modern table for morbidity gave some professional problems but these were being addressed by the C.M.I. committee on PHI. The effect of changes in the economic cycle on morbidity experience were also discussed.

The individual pension workshop concentrated on the wider issues, in the light of the Green Paper, in relation to portability, competition, taxation, marketing methods and targets, investments and administration. The proposed market was vast and variable. Many speakers considered that there would be difficulties in reshaping insurance products and systems to cope with the variety, while others suggested that the more volatile contributors might best be left to other

institutions. Concern was expressed at the size of the expense margins that might be necessary—in relation to the compulsory nature of the business and the competition from other institutions. The discussion, as a whole, revealed little consensus as to how the industry would react to the challenge posed by the Green Paper, should its proposals become law.

Term assurance pricing was generally agreed to be too low with few offices now able to consider term rates as profitable. The paper presented differentiated between stand alone pricing and marginal pricing and included profit tests, showing that any office operating on a stand alone basis would be selling such business on a loss leader basis. The paper thoroughly discussed the ethical problems to be considered by the Actuary in reaching a compromise basis between the two extremes. The inadequacy of rates is exacerbated by the need to maintain and finance solvency margins. As with PHI, the market is much underinsured, but cost margins do not allow extensive marketing of the product.

The trans-atlantic view assessed the impact of 'universal whole life contracts' which offered variable premiums, benefits and mix of cover to savings. These had become popular in the U.S.A. and could spread to the U.K. They were similar in some respect to recent developments in the U.K. unit-linked field, but had some similarities to deposit administration contracts. There was further discussion on the system of premium collection by payroll deduction which had developed faster in the U.S.A. due to the poorer banking system and the absence of direct debits. The method is lightly used in the U.K.

## TAXATION

J. R. Coomber and C. B. Russell F.F.A., examined the taxation of a life office from a theoretical point of view. The question of optimizing the tax position for a life office was posed. Its answer affects investment policy and sales strategy/product mix. Discussion progressed to the appropriate use of tax in product pricing, including both life and pensions products. Few firm solutions were agreed. One speaker observed that the finer points of planning the future tax position of an office were of limited value to offices which do not yet know where they stand now; it is not untypical for several recent years tax claims to be the subject of negotiation or dispute with the Inland Revenue. It was suggested that the way to proceed in product pricing was to use a reasonable average rate of tax, whilst keeping a weather eye on current tax changes.

# TRAINING OF ACTUARIAL STAFF

S. Haberman, S. P. L. Kennedy and W. W. Truckle led this workshop, explaining the practical effects stemming from the Kennedy Committee to review training, the co-ordination of graduate courses and changes in the Education Service. Pass rates had fallen significantly following the 1978 review of the syllabus; the proportion of those starting the examinations who would eventually

be expected to qualify had fallen from around 40% to around 30%. The revised role of the Education Service, with its new full-time tutors, was outlined. Although one speaker criticized the cost of training, it was considered that the anticipated greater efficiency in tutoring should give rise to higher pass rates and thus the aggregate cost should not reflect the individual increases. The cost of training an actuary was held to be below the cost of training an accountant. Whilst the university courses were aimed at the A subject syllabi, the methods of teaching should help prepare students for the different examination style of the B subjects.

## PERSONAL COMPUTING

N. F. C. de Rivaz opened the workshop, giving rise to a lively discussion on the respective merits of micro-computers and main-frames. The independence of the micro with its limited capacity was contrasted with the almost unlimited capacity of the main-frame which would, however, be subject to interference from other users. The programming language APL was either loved or hated. There was some discussion on the merits of actuaries doing their own programming; some held that this was an improper use of professional time, whilst others felt that the time taken to specify requirements to programmers was even less efficient. There was a consensus that some packages, especially spreadsheets, were satisfactory for many experimental jobs, but for some tasks a micro was not powerful enough, would not have the capacity or was too slow.

## CORPORATE PLANNING

The workshop, led by A. R. Bland, K. H. McBrien and J. R. Riley, was a non-technical explanation of corporate planning. Its main purpose could be lightly interpreted as a means of avoiding surprises. Its role was to assist the head planner, the chief executive. The technique is not merely one of planning; there is an iterative cycle of setting aims, determining how to achieve those aims, designing a control system, implementing them, assessing the effect and reconsidering the aims etc. The planner's role is seen as a catalyst. In discussion there was much interest in the inter-relationships between the planners and management and with the marketing team. There was further comment on the need to involve each level of management in the system.

## ACCOUNTS AND ACCOUNTANTS

J. D. F. Dickson F.C.A., a guest, and M. J. Burns talked on the interrelationships between Actuaries and Auditors with regard to an insurance company operating under the Companies and Insurance Companies Acts. The Companies Act returns are subject to a true and fair view which over-rides the exemptions in the legislation. The auditor must therefore satisfy himself in this

respect. The effect of accountancy professional guidance was explained including recent changes which would strengthen the auditor's role. While most of the changes were jointly agreed, some had been of wide application and had not been specifically agreed with the Institute of Actuaries in advance. The audit objectives and methods were considered and it was explained that there might be a need to check the actuarial arithmetic—a practice that some of the subsequent speakers considered unnecessary. The possibility that the auditor might require a second actuarial opinion was considered, together with the ensuing possibility that the auditor might then seek to interfere with the responsibilities placed on the Appointed Actuary by statute. One speaker referred to the employment of actuaries by auditors as was now happening in some of the larger practices. Mr. Dickson agreed that such a situation would impose a greater liability on the auditor since he would not always be able to act only as an intelligent layman. It was suggested that the Institute of Actuaries should consider the ethical problems involved. Mr. Dickson also outlined the implications of a draft Standard of Recommended Practice on insurance currently working its way through the accountancy bodies and the E.E.C. 4th directive.

D. G. MORGAN