

EDITORIAL

It is now almost 2 years since I took over from David Wilkie as a co-editor of *ASTIN Bulletin*. It was indeed a great honour for me to have been appointed to the editorial committee and certainly it is my intention to work hard to maintain and enhance the excellent reputation that *ASTIN Bulletin* has.

As with my predecessor, my primary responsibility lies on the AFIR side of the journal. It is now, I think, almost 10 years since AFIR was formed. As a consequence the scope of *ASTIN Bulletin* was broadened to encompass not just non-life research but also actuarial problems dealing with financial risk. As most readers of *ASTIN Bulletin* will realise we still have a long way to go before we get a good balance in the journal between *ASTIN*-type and *AFIR*-type papers.

Perhaps this reflects how well the *AFIR* colloquia have been organised in the past and no doubt the future also. In particular, the success of the meeting depends upon the papers presented and, in consequence, the proceedings produced for the meeting. For many authors the publication of a paper in a colloquium proceedings is a satisfactory endpoint. I would argue that this is not good enough! For every one *AFIR* member who attends an *AFIR* colloquium there are ten who do not. It is important that we cater for these members by ensuring that the best of the colloquia papers get through to *ASTIN Bulletin*. What, then, do I regard as a paper in the core of *AFIR*? *AFIR* translates as Actuarial Approach to Financial Risks. Here there is something of a two way flow. On the one hand actuaries have the ability to apply well known actuarial methods to purely financial problems. On the other hand actuaries also need to import the best of financial economics into the traditional actuarial problems of risk management (for example, of an insurance company). I would say that this flow of ideas is essential for us to maintain our position as the leaders in this field. Thus actuaries already active in this field need to take on board, and adapt as appropriate, financial economic theory. Furthermore our systems of education will also need to adapt to equip the actuaries of tomorrow with the necessary tools to cope with tomorrow's problems. Those who insist that we already have the tools will be left behind.

There are a number of areas which I would like to see flourish within the pages of *ASTIN Bulletin*: asset-liability modelling; securitization of insurance risks; models for long-term financial risk analysis; value at risk; to name but a few. However, I would like to concentrate here on the need for papers which work towards a reunification of the financial economic and traditional actuarial theories. I use the word "reunification" here intentionally, since it is only in the last 20 to 30 years that financial economics (as it

might be applied to actuarial problems) has split off and become a major field of study in its own right. In the process actuaries were left behind, the majority preferring to stick with their tried-and-tested tools. Before that actuaries could be regarded as being as much at the forefront of financial economic thought as any other group. Indeed, recently I found in one of the earliest volumes of the *Journal of the Institute of Actuaries* (1855) a paper proving a now-well-known result in stochastic interest. If that doesn't prove that we were once at the forefront of financial economic thought I don't know what else could.

Over the last few years I have watched and become involved in some heated debates over which approach is the right one. In my view both approaches are correct and that they are compatible. Differences of opinion arise because of misconceptions about what the other approach is attempting to do. On the one hand we have problems which require a fair value or price to be put on a set of liabilities (for example, in setting a premium rate or in defining the liabilities which appear in company accounts). In my view the financial economic approach here is the right one. On the other hand we have, for example, problems of reserving. A reserve may be some sort of anticipated present value of future net cashflows often calculated along deterministic lines. However, reserves may be based on more sound stochastic principles. For example, reserves may be calculated according to the principles of value at risk. This means determining the level of reserve which will have a 95% probability, say, of being sufficient to take care of the future net cashflows as they arise when these are subject to uncertainty (such as stochastic liabilities and assets, parameter uncertainty and model risk). It is immediately possible to tie the two approaches together by describing a value-at-risk reserve as the fair or market value of the future net cashflows plus a contingency margin for future uncertainty.

Papers which do attempt to pull these approaches together are starting to appear and I very much hope that their authors will choose *ASTIN Bulletin* as the right home for their work.

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