

## THE 4th AFIR INTERNATIONAL COLLOQUIUM

Disney World Orlando, the venue for the 4th AFIR Colloquium could not be more different from its predecessor, Rome. The organisers again made an inspired choice; the Colloquium being moved from the seat of one of the greatest concentrations of sights of artistic, architectural and historical interest in the world to the seat of one of the greatest concentrations of entertainment oriented, technical innovations.

The entertainment laid on by the hosts reflected the venue. The social highlight undoubtedly was the final evening visit to MGM studios. Around one thousand of the world's actuaries defied their traditional "grey suited" reputation by walking through a full scale New York Street scene protected from the spectacular thunderstorm by bright yellow Mickey Mouse ponchos. Crowds of screaming girls with autograph books were hired to greet us at the entrance and boost our egos; a 3-D Muppets Show, a trip on a Star Wars simulator and a spectacular fireworks display provided the memorable entertainment.

The format of the meeting, entertainment apart, was somewhat different from its predecessor. The AFIR Colloquium was combined with the Casualty Actuarial Society Special Interest seminar and Society of Actuaries' Spring Meeting. The result of this was a total of 82 sessions a number of which ran in parallel.

The Colloquium began with the main invited speaker Professor Stephen Ross of Yale University. He was there to defend the efficient market hypothesis and answer questions such as: do markets follow random walks? Do they have inherent cycles? Can we gain from fundamental investment analysis? Can we predict the success of good fund managers by looking at past performance?

Stephen Ross explained how the apparent ability of fund managers to outperform consistently could be explained by "survivorship bias". A similar phenomenon explained why market prices appeared to form cycles. There is a tendency for market analysts to look at historical data for surviving stock markets. A stock market which has risen to enormous heights (due to hyper-inflation) or collapsed to nothing (due to economic collapse) will not be amongst those which survive to have their course analysed. In a similar way, river levels appear to be cyclical: in fact they are not; any river the level of which has moved out of the fixed bounds has either flooded or dried up. It is no longer a river. Analysts tend not to take a group of rivers and chart their courses forwards in history: they take a group of surviving rivers and look backwards. Inevitably, the surviving rivers will have levels which have moved in cycles.

Many contributors debated the use of different risk measures or applied different risk measures to actuarial investment problems. The proponents of different risk measures fell into four "camps". Those who used traditional mean/variance approach to trading off risk and return; those who preferred downside measures of risk; those who preferred "shortfall controls" (probability of underperforming a particular benchmark); and those who preferred the use of utility theory as a risk

management tool. The undercurrent of debate about risk measures went beyond the papers classified in that section. Some of the applied papers also contributed to the discussion on the measurement and control of investment risk.

There were various papers on stochastic investment modelling ranging from a simple ARCH approach to the use of transfer functions and time series models and one which involved elements of chaos theory. The application of stochastic investment models in simulation also featured prominently in the proceedings, especially in the areas of asset-liability management and measuring the risk of insurer insolvency.

A number of papers were submitted on the traditional stamping ground of immunization. One of the difficulties of immunization theory is the inability to deal with non-parallel yield curve movements. The problem was addressed in this section. Some demonstrated the wider fields potential of the profession by looking at credit risk, bank insolvency and money management.

The papers in the sections on Option Pricing Techniques and a number of papers in the sections on Financial Instruments and the Analysis of Products with Investment Guarantees were connected with option pricing. So many of the applications of option pricing are in the actuarial field; it is clearly an area in which actuarial professions throughout the world need to take greater interest in both the theoretical and practical implications.

Three reports were also presented from task forces and study groups. Society of Actuaries' Task Forces presented reports on the application of cash flow techniques to pension plans and on losses from credit risk events. The Finnish Insurance Modelling Group reported on the suitability of possible stochastic investment models in the light of data available from twelve countries.

Finally, it was gratifying to have two contributions from Eastern Europe. Both discussed the Polish investment markets, one making pertinent comparisons with the Hungarian stock market. We hope that the proximity of the next two AFIRs to Eastern Europe will lead to more contributions from that area in both the technical and empirical subjects.

Each AFIR Colloquium in recent years seems to have been held in a place with its own special history and attractions (albeit a short history in the case of Orlando). We look forward to the next AFIR Colloquium in Brussels, the home of the European Union, in 1995.

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