INSTITUTE OF ACTUARIES

GENERAL INSURANCE STUDY GROUP

TORQUAY OCTOBER 29-30, 1987

REPORT OF SOLVENCY WORKING PARTY

Following the presentation to the Institute of Actuaries on 23 February 1987 of our paper "Assessing the Solvency and Financial Strength of a General Insurance Company", the Solvency Working Party has continued to meet regularly. Current activities fall into three categories:

- (a) development of the computer software used for our Institute paper to a point where it can be made available to other actuaries and interested persons for further research into the uses of simulation methods.
- (b) extension of the model to incorporate the presentation of balance sheet results at the end of each future year and to develop it as a practical tool for company actuaries to use in assessing solvency and financial strength and in providing management with information to aid decision-making.
- (c) preparation for the Second International Conference on Insurance Solvency, to be held in Brighton on May 25-27, 1988.

The first activity is being financed by the Memorial Education and Research Fund of the Institute. The work is being carried out by Brian Hey and Geoffrey Bernstein and is now well under way. It is hope to complete it within the next month or two.

The extension of the model has required us to grapple with some difficult conceptual and practical issues. It is hoped that further work along these lines will be ready for wider presentation in 1988.

The Solvency Conference in 1988 will bring together, as did the first such conference in Philadelphia in June 1986, actuaries, financial economists, academics and practitioners, who are researching into questions of solvency and financial strength. One of the most challenging aspects of the Philadelphia conference for the UK participants was trying to understand the entirely different approaches being adopted by American academics and others, from the standpoint of financial economics.

Whilst a first reaction might have been to reject much of it as high flown academic work out of touch with the reality of managing insurance companies, it is apparent that some of the research work is finding practical application in the US and it seems worthwhile and important that we should understand what these American researchers are saying.

The material which we are presenting to the Torquay Convention consists of two complementary papers, by Russell Devitt on "Financial Economics and the Theory of Solvency" and Geoffrey Bernstein on "Fundamental Principles of Modern Portfolio Theory and Option Pricing". It is hoped that these will give other members of the GISG a reasonably gentle introduction to these topics, about which we may hear a lot more in future.

C D DAYKIN Chairman, Solvency Working Party

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