SOCIETY OF ACTUARIES

Article from:

Risks and Rewards Newsletter

February 2001 – Issue No. 36

Investment Actuary Symposium

The Investment Actuary in the United Kingdom

by Peter D. Jones

This article presents some thoughts on the role of the investment actuary in the United Kingdom. It is a topical subject and one that has involved a good deal of soul searching on the other side of the Atlantic Ocean, prompted by a feeling that the U.K. profession is not fulfilling its potential in this specialty.

The menu for this article has three main themes, but this is more in the way of a "ramble" than a journey through the investment countryside.

a) Some historical perspective.

b) What the professional actuary uniquely has to offer the investment marketplace.

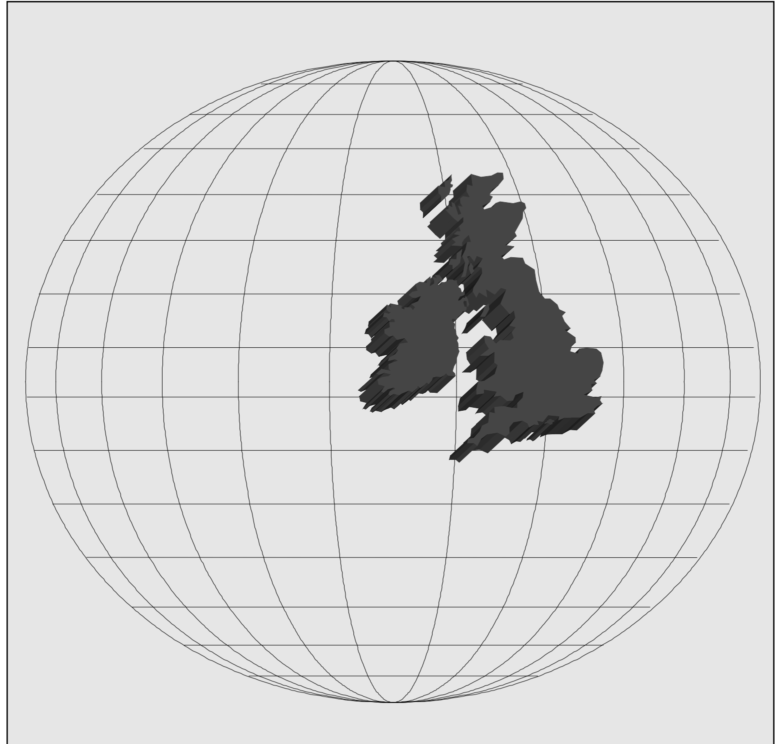
c) What the consulting actuaries in the U.K. currently offer their clients.

My own career may be instructive, because I started it in 1961 as an actuarial student. I began in the actuarial department, but the practice at the time was to rotate trainees through various departments. My next stop in 1962 was the investment department. In a sense, I never left that department. My entire career has been in investment. In what sense then, am I an actuary?

Well, I completed the examinations, and I have served the Institute in a wide range of posts — including 10 years as a member of the governing body. That though, does not make me an investment actuary.

Perceptions are of course all important in business. My ambitions always did lie in the investment field. But why did I choose to align my ambition with a course of examinations, which is far from easy? Two reasons come to mind.

Firstly, the actuarial profession in the U.K. was held in high esteem and had a reputation in the investment area. In the 1960s, the major pools of investment funds were life funds. Pension funds were growing quickly, but had not yet reached the pre-eminence that they have today. Investment departments of the life companies often had actuaries at their heads. Most life company chief executives were also actuaries, often having spent some part of their career in investment.



Secondly, the actuarial profession provided the only examination course in investment matters. The Institute had pioneered this in 1910.

A third factor would have influenced me, except I was too soon! Namely, the association of the Institute with the U.K. investment indices. The FT Actuaries Indices have been published daily since 1962 and have undoubtedly raised the profession's awareness with key opinion formers and the public at large. Indeed, the profession has been involved with investment indices since the 1930s when there was a fascinating paper in the *Journal of the Faculty of Actuaries*. And it was the president of the Institute (in 1923 I believe) who defined the standard for calculating gross redemption yields on British Government Stock.

And I, for some 30 years, have been heavily involved in design and management of the investment indices, the FT Actuaries Indices, a joint venture initially between the profession and the Financial Times newspaper, later joined by the London Stock Exchange.

The Institute of Actuaries dates back to 1848. The first Institute paper on an investment topic was in 1858. Over the next 40 years, there were at least half a dozen papers on investment topics. Some were of a technical nature, for example, one on "Debentures for life funds" and another providing a statistical summary of Investment of British and American Life Offices in the years 1880 to 1902.

But as early as 1862, before the names Gettysburg and Robert E. Lee took on the connotations that they have today, there was a paper by A.H. Bailey entitled "Principles on which the Funds of Life Assurance Societies should be invested."

(continued on page 22)

Investment Actuary Symposium: The Investment Actuary in the United Kingdom

continued from page 21

Bailey was a prolific contributor to the actuarial journals and became president of the Institute in 1880. All his other papers have a distinctly actuarial slant. He was the Actuary of London Life. His paper laid out five principles, interestingly enough with a preamble which emphasized the long-term nature of the liabilities against which the assets were to be invested.

His principles (this was 1862) were:

1. Security of capital is paramount.
2. Maximize income subject to the first principle.
3. Keep a small amount in cash to meet claims and contingencies.
4. The balance of the fund (the vast proportion of it) to be invested for the long term in securities not readily convertible (which in parlance I think means readily realizable)
5. Investments should "aid" the company's life business.

Apart from the fifth rather curious point, the first four are easily recognizable today. In those days, the funds were almost entirely invested in three types of securities:

- Government stock (25%)
- Mortgages and real estate (as much as 50%)
- Debentures, especially of Railways

In the text of his paper, Bailey says, "ordinary shares are not eligible as being too speculative."

I have focused on this paper of 1862 for a purpose. It contains the key element which differentiates the investment actuary from any other skilled investment professional: "That an understanding of the liabilities brings a greater awareness to the investment of the assets."

This was an essential element in the growing importance of actuaries on the U.K. investment scene. "With-profits" is a concept which does not really exist in the United States, but is common in Anglo-Saxon countries.

With-profits is an arrangement whereby actuarial surplus is determined periodically by the actuary and allocated as a reversionary bonus to ranking policyholders. The periods of review have become progressively shorter and are now invariably one year.

Once allotted, reversionary bonuses are contractual, but before allocation, they merely represent policyholders' "reasonable expectations" to use the term of phrase. No guarantees!

No modern insurance company would have designed this concept because of its lack of openness, its reliance on actuarial interpretation, and its weak contractual policy terms. So how did the concept come about?

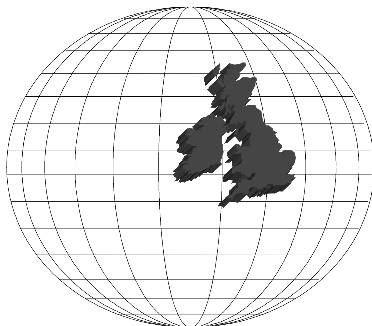
I suppose its origins lie in the views of the Actuary of the Equitable (the first mutual life office), William Morgan, in the 1760s. He set premiums on endowment policies at a high level to provide a cushion against adverse mortality and investment experience.

At each review, he reduced premiums. This soon became unwieldy and hence an alternative model was used, in effect to increase the sum assured.

The sum of the sum assured and reversionary bonus increased at each actuarial review and became the eventual maturity value.

This system worked well but required good judgements, especially as offices progressively invested in equities. As we have seen, they did not do this in the 19th century, but did increasingly, especially after the Second World War. The movement of actuaries into the investment field in significant numbers seems to have begun at this time, provoked by two things:

a) An awareness of how important investment returns were to policy holder value.



b) The need to understand the durability of equity stock market values in relation to the actuarial distribution of surplus.

And possibly by a third:

c) Inflation, which rose rapidly after the Korean War

It was not until 1959 that the income return on equities fell beneath the yield on British Government Securities, indicating wider acceptance of equities as an investment medium.

Today about 8% of U.K. Fellows are involved in the investment field in one way or another.

There are around 4,000 Fellows in the U.K. (Institute and Faculty).

45% in Consulting Practice

40% in Insurance Companies

15% elsewhere

About 300 state that their work is predominantly in finance and investment. While this number may be at an all time peak absolutely, I suspect it shows a decline:

a) Relatively

b) In stature and influence in the community

Now is perhaps not the time for a long discussion as to why. It has to do with the demise of with-profits (and its replacement by unitized products) and to the increasing numbers of well-educated entrants into the investment banks and asset management companies, i.e. the growth of Fidelity relative to Prudential (both the United Kingdom and the United States).

So what investment services should the actuarial profession be providing today? As I said earlier, a rethink is underway in the United Kingdom. In his address to the Faculty of Actuaries in October, David Kingston listed the following six topics:

a) Asset liability modeling

b) Risk management

c) Futures/derivatives

d) Managing investment managers

e) Product development

f) Investment strategy and communication

"I see less opportunity in areas like derivatives where I believe the investment banks will be able to recruit and remunerate the specialist talent that is needed..."

This, of course, is a list for the U.K. profession to address (for example, in terms of education). But in practice, it is one that the consulting firms will focus on most closely.

In preparing for this article, I consulted with a number of my contemporaries. They confirm that consultants in the U.K. did little or no investment work until the 1970s.

Performance measurement calculations began almost by accident. One very large pension fund in the late 1960s asked its pensions valuation actuary for help in measuring the performance of its investment managers on an objective basis, using the FT Actuaries All Share indices as a benchmark. About the same time a large stockbroking firm, Wood McKenzie, started doing similar calculations as a service to their clients. That business today trades under the name, the "WM Company." Immediately, we can see a topic where the actuarial profession cannot claim either a monopoly or indeed any special insights.

I am not proposing here to discuss these six items in detail. However, I hope the U.K. profession, and the consulting community in particular, will focus its attention in areas where:

1. It has a unique contribution to make (e.g. asset liability modeling).

2. It is close to the assets involved, e.g., pension assets and hence, pension fund manager selection and pension fund strategy

I see less opportunity in areas like derivatives where I believe the investment banks will be able to recruit and remunerate the specialist talent that is needed and may well be closer to the assets involved than the actuarial profession (unless, of course, they are life or pension assets).

That is my ramble through the U.K.'s investment countryside. I hope I have generated some interest.

Peter D. Jones, FIA, is an actuary in London, England and can be reached at (207) 834-4168.