

Supplementary submission to the Morris Review

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Following the Review's Interim Report, I would like to make a few additional points (to supplement my previous submission) where these seem to me to be relevant to a review of the actuarial profession. I hope these points are helpful.

1. Legislation and/or Inland Revenue practice asking actuaries to do the economically impossible

I feel that from time to time legislation and/or Inland Revenue practice have asked actuaries to do the economically impossible i.e. the financial economics implied by the legislation/IR practice has not been properly taken into account.

I give two examples.

Example 1

Guaranteed annuity rates (GARs) of the order of 11% p.a. (for a male aged 65) were introduced mainly in response to various Finance Acts (particularly the Finance Acts 1970 and 1978) and Inland Revenue practices. The 1970 Finance Act introduced the facility that a part of the pension could be commuted to provide a cash lump sum, the 1978 Finance Act introduced the facility of transferring the policy to another office under the so-called 'open market option'. Pension scheme rules had an Inland Revenue requirement to build in annuity rates, and 11.11% p.a. was the annuity rate automatically approved by the Inland Revenue under the New Code of Approval of Pension Schemes introduced by the Finance Act 1970. It was therefore not surprising that a typical annuity rate guarantee was also 11.11% p.a. The pension scale, in public service schemes, of three-eightieth cash lump sum and one-eightieth pension, is equivalent to one-sixtieth pension on the basis of an annuity rate of 11.11%.

This Inland Revenue requirement, namely to have benefits available in both cash and pension form and having to have a fixed, Inland Revenue approved, factor converting one into the other is asking the economically impossible because no-one was able in the 1970s or 1980s to simultaneously invest to produce the better of cash and pension when there is a fixed factor converting one into the other ('swaptions' only became available in the 1990s and life offices do not usually borrow significantly from banks or issue bonds i.e. go 'short').

Example 2

A second example is over defined benefit pension schemes the liabilities are based on proportion of final salary (with the final pension usually increasing each year in payment) while the assets are equities, bonds and property. The assets and liabilities of a final salary pension scheme are unavoidably mismatched with all the consequences that a fall in the stock-market and an increase in longevity bring. Actuaries have been criticised for not pointing out this degree of mis-match but the Government has not issued any stock where the coupon and redemption value are geared to national average earnings and the redemption date of the stock is geared to average longevity. This would be close to a matched investment for final salary schemes.

I feel the public interest is best served if the actuarial profession (independently from the life offices that employ actuaries) are encouraged to express more vigorously what they believe to be the scientific truth on financial matters (particularly in respect of proposed legislation or proposed Inland Revenue practices etc.).

2. Variation of financial conditions

The Review points out that the fall in interest rates and the fall in stock-market was not predictable by anyone. I agree with that, but I think it is relevant that, in certain circumstances, you can make,

using the motto of the Institute of Actuaries, *certis* out of *incertis*. For example, if you immunise it does not matter about the fall in interest rates as you have hedged out the interest risk.

I am reminded that the Nobel Prize for Economics was won because Black, Scholes and Merton showed, in 1973, that you could avoid equity risk on an option by dynamically adjusting a portfolio of bonds and equities i.e. you can hedge out the equity risk on an option. Again *certis* had been created out of *incertis*.

I feel that one of the main planks of actuarial science is to know which risks can be hedged out and which cannot. That is to know whether you can broadly hedge out a given risk or whether a given risk cannot be hedged out because financial markets do not supply the necessary assets or instruments and the risk can only be covered by having adequate financial resources.

I feel that actuaries best serve the public interest if it is one of their primary tasks to explain to the public where *certainty* can be created *out of uncertainty* and where it cannot. If the actuary cannot hedge out the risk because the financial market does not supply the assets necessary to do so, he should ensure that the life office (or pension fund) has enough money, or there is an adequate contribution rate, to cover the 'rainy day' if it arrives.

In statistical terms, the tail of the distribution can be realised by the future course of events (by future financial conditions) and the life office (or the pension fund) should have enough money (or an adequate contribution rate) to be able to cover an agreed percentage of the tail of the distribution not just the expected value. The actuary should be aware the size of the 'tail' and should advise his board or his trustees.

Risks you can hedge out include interest rate risk on conventional annuities. Risks you cannot currently hedge out include longevity risk, a pension equal to a proportion of final salary, an annuity rate guarantee on a unit-linked fund and an annuity rate guarantee on with-profits policies where the terminal bonus has to be the same as under a policy without a guaranteed annuity rate option (although 'swaptions' help).

3. Valuation of liabilities

The Review confirms the current rôle reserved for actuaries to value the liabilities of the life office or the pension scheme. This is to be welcomed. Valuing the liabilities is at the core of actuarial science. The Review acknowledges this in several places.

"The review acknowledges the critical role of actuaries' skills in assessing long-term liabilities" (para. 8) and "The review's view is that it is essential to overall financial stability that assessments of long-term liabilities of insurers or pension funds are done and done well" (para 29).

I endorse the view that actuaries should employ the latest techniques of actuarial science and of financial economics to value the liabilities. Perhaps no-one should be more knowledgeable than an actuary of the latest techniques used to value long-term liabilities. In my view, the mathematics employed in investment banks (financial economics) is not yet well enough known by the actuarial profession as a body. However, investment banks tend to look only a few years ahead and employ hedging (decide the equity/bond split – in the case of a call option that means going 'short' in bonds) at an 'individual' level. In contrast life offices look longer term, try to hedge at 'fund' level, calculate 'asset shares' at 'fund' level (not 'individual' level) and cannot easily go 'short' in bonds. Trying to hedge at 'fund' level (decide the equity/bond split at 'fund' level as opposed to 'individual' level), calculating 'asset shares' at 'fund' level, and not being able to go 'short', creates a different problem from investment banks (or the Black-Scholes-Merton theory and practice) where hedging (and effectively 'asset shares') is at 'individual' level.

I believe that in order to do his job properly, the actuary must know exactly what the liabilities are.

It seems very unsatisfactory that a situation was allowed to develop whereby certain life office liabilities leap overnight by as much as 40-50% as a result of an interpretation which was contrary to the views of the Treasury, the Regulator, life offices and the actuarial profession. It seems to me doubly unsatisfactory if the money to pay for these increased liabilities could only be met by taking from other 'innocent' policyholders (both happened, for example, in the Equitable Life case). I feel that it was accordingly no surprise that the former confidence of the investing public in the life industry and the actuarial profession was visibly shaken. I understand that it is now very difficult to recruit non-executive directors of life companies for this reason.

I would suggest that this issue goes beyond having an independent Actuarial Standards Board and independent regulation of the actuarial profession (although this may help) and involves a co-operative effort between the legal profession, the Regulator of the life industry, life offices and the actuarial profession. It seems to me that this is a matter that cannot be solved by the actuarial profession alone.

4. Protection of the public interest

To my mind with-profits business is not viable without an Estate (see earlier submission for definition of Estate) in the with-profits fund, as we have seen in the Equitable case (see Report on Equitable Life by Lord Penrose). In my view, the public have become concerned about mutual life offices, on a demutualisation, selling most of their Estates to the new shareholder. Policyholders find that a life office denuded of its Estate is no longer the same life office and policyholders' find that the terminal bonus is repeatedly cut as there is no longer any 'smoothing fund' to speak of, yet 'smoothing' is the hall-mark of with-profits.

Under corporate law the directors have a duty to the company as a going concern and a duty to protect the interests of future generations of policyholder.

I understand that it is felt that the recent Myners Report on corporate governance of mutual life companies has not dealt with this issue in a manner commensurate with widespread public interest in this matter.

I would suggest that this issue too goes beyond having an independent Actuarial Standards Board etc. and involves a co-operative effort between the legal profession, the Regulator of the life industry, life offices, the actuarial profession and the views of current and future generations of policyholder.

I would ask the Review if they agree with this point and, if so, to consider how the profession might play its part in addressing this issue in order that the actuarial profession is seen to play its part in adequately protecting the public interest (in this case, the interests of future generations of life office policyholders).

5. Encouraging savings

The Review mentions that we have seen a very significant decline in final salary schemes but it acknowledged that it is in the national interest to encourage savings for pensions. It seems a pity that companies are closing their final salary schemes to new entrants and not moving to pensions based on *career average salary* which seems a 'half-way house'.

Defined contribution schemes or 'stakeholder' schemes do not seem to be popular with the public. Part of the reason may be that the public are aware that defined contribution schemes producing a cash sum at maturity have the profound drawback that the policyholder is a '*hostage to fortune*' as the market annuity rate when they retire. I feel a deferred pension contract with guaranteed bonuses being given on the pension would be a more suitable design. Actuaries and life offices can design and administer the risks in such a contract (provided there is some flexibility over the non-guaranteed terminal bonuses).

If the Review team have views on how the actuarial profession may be able to encourage the public to save substantially more for their retirement, this would be very useful.

6. Actuarial Function Holder

The Review reminds us that the Actuarial Function Holder has been given by the Financial Services Authority a 'whistle-blowing' role. One of the drawbacks of the Appointed Actuary system was the pressure that could be put on the Appointed Actuary in his capacity as employee of the company. In my view therefore the Actuarial Function Holder needs protection at the level of Option 3 (under 'Reporting and whistle-blowing' p189) for this 'whistle-blowing' role to 'work'.

7. Regulatory standards and accounting standards

The statutory valuation regulations and the accounting standards for with-profits business are acknowledged to have been out-of-date not least because they valued assets at *market value* but left *accrued terminal bonus* out of the liabilities.

I feel that out-of-date valuation methods and regulations and accounting standards have held the actuarial profession back. From end-2004 the FSA require a *realistic balance sheet* and the Accounting Standards Board have a new standard for with-profits business, *FRS 27*. The Regulator will require stochastic methods to be used in future to value the effect of guarantees, options and smoothing and any effect on maturity (or surrender) payments of the life office's Principles and Practices of Financial Management (PPFM). These changes are to be welcomed but they have been slow in coming.

It is probably true that the profession should have been more pro-active in seeking change but I feel the lesson to be learned may include the observation that the regulations and the accounting standards should be kept up-to-date. If these are '*behind the game*', I feel it may be all too easy for any profession to also fall behind.

Again, I would suggest that this issue goes beyond having an independent Actuarial Standards Board etc. and involves a co-operative effort to keep up-to-date between the accounting profession, the Regulator of the life industry and the actuarial profession.

8. Reviewing Actuary and Peer Review

There will, in future, have to be a realistic valuation given both to the Regulator and in the Accounts. This will require close contact between the Actuarial Function Holder, the Reviewing Actuary and the company's board particularly over a realistic valuation of liabilities. This is to be welcomed. But I suggest it may be 'over-kill' to have a Peer Reviewing Actuary as well. To my mind a Reviewing Actuary and a Peer Reviewing Actuary would be in danger of tripping over each other.

9. Longevity risk in final salary pension schemes

It is believed that within a short time this will be a major issue. For example, the value of the liabilities of certain final salary pension schemes far exceeds the market value of the sponsoring company (e.g. British Airways pension scheme where the ratio value of pension liabilities/stock-market value of the company, exceeds 10:1, for ICI the ratio is 3.5, for BAE Systems 2.4 etc.¹). In these situations, I think it is going to be increasingly difficult for the scheme actuary to play the part of 'honest broker' between the trustees on the one hand and the sponsoring company on the other. I am inclined to believe that where the contributions required for the pension scheme to remain solvent are significant in relation to the company's earnings, there may be an increasing need for one actuary to represent the trustees (to the pension scheme) and another actuary to represent the sponsoring company.

¹ see Richards S and Jones G (2004), *Financial Aspects of Longevity Risk*, paper presented to the Staple Inn Actuarial Society.

10. Cross-disciplinary contact

I welcome the encouragement of contact between other disciplines, whether financial economic, demographic, medical, legal etc. and the actuarial profession.

Conclusion

It seems to me that there are many important issues that cannot be solved by the actuarial profession alone and formal contact (independent of any insurance company) between the accounting profession, the FSA (as regulator of the insurance industry), legislators/Inland Revenue/Government, the legal profession etc. and the actuarial profession is therefore required and should be recommended.