

COMMENTS ON ASB DISCUSSION PAPER  
THE FINANCIAL REPORTING OF PENSIONS

Background

The writer is a Chartered Accountant with a Physics degree (Natural Sciences) background.

Physicists are taught how to measure physical behaviour of natural events to very high degrees of accuracy (sufficient for instance to land a spacecraft on Mars within metres of its intended touchdown point, launched and controlled throughout the flight and landing from up to 400,000,000 kilometres away).

Simple models can be constructed – like the pension model attached. The test of whether a model is effective lies in its ability to replicate real-life behaviour to equally high degrees of accuracy. Doing so, is conclusive proof of the model's effectiveness.

And conversely. If methods fail to replicate real-life behaviour with sufficient accuracy (or at all) they fail as measurement techniques. **To continue using them can sometimes do very considerable harm. Which may be happening to the pensions industry at the moment**, as will be explained.

Once a durable model is available (like the attached), a range of conditions (contribution percentages, pension percentages etc) are fed in, to see what outcome results (how long does the fund last before it becomes exhausted?).

This enables an optimum outcome to be chosen, in this case ensuring the fund lasts beyond say pensioner age 90 – something that can be made to happen. The conditions associated with that particular outcome are identified and put into practical everyday use as benchmarks to guide trustees, managers, regulators, indeed anyone who has a role in **making sure the chosen outcome happens - the key purpose of the exercise of course**.

The method enables **sensitivities** to be established. Does condition x have a large impact on the end result or a small? What condition has the largest impact? And what the smallest? Do some conditions have a big impact in one set of circumstances, and small in another? And so on.

If you experiment with the attached model you will see that:

- 1) Average Long Term Investment Return is the decisive factor in determining Pension Fund Success or Failure.
- 2) It needs to get into the 8% + range for Fund Viability.
- 3) Low returns during the formative years, eg typical of bonds or gilts, assure failure.
- 4) Average Long Term Investment Return is the decisive Benchmark for measuring progress. As already produced by most funds.

- 5) Also, for identifying key factors like Fund Solvency, Fund Adequacy, Fund Liquidity (illustrated in the underlying sheets of the model).
- 6) Contributions by and on behalf of members are only capable of contributing meaningfully to the ultimate fund for about the first 15 years, ie until around age 40.
- 7) Subsequent contributions, between ages 40 to 65, together with any additional capital contributions the Employer might make, have negligible impact.

Readers might like to familiarise themselves with the background – as for instance set out in the Business-Dynamics.co.uk website – before going further.

### The Discussion Paper

How much of real life pension fund behaviour is reflected in the Discussion Paper? Seemingly not as much as perhaps might be hoped. Is solvency for instance discussed? Seemingly not. The emphasis on Investment Gain? Seemingly not. The relative importance of Investment Gain v Contributions? Do the proposals provide pension trustees and others with concrete day-to-day guidance on how to run a successful pension fund? Seemingly not – at least not to the practical detail required. Is likely impact on the Employer considered and discussed? Seemingly not.

So great are the apparent differences, it is hard to know where to start. Perhaps the most convenient starting point is to consider whether, and if so to what extent, the techniques set out in the Paper are capable of reflecting real-life behaviour.

### 'Discounting'

**'Discounting' for instance is not a feature of real-life pension fund operation and produces serious distortions when applied.** IRR measurement is validly used for valuing private equity investments and for pricing annuities. In both cases attempting to answer sell? or hold? decisions. But the method forms no part of day-to-day operation of a fund.

'Discounting' of assets is valid in strictly limited circumstances (just illustrated), where the asset is already in possession, and choice presents itself of whether to continue to hold it or convert to another form.

No such aspect arises for liabilities. It is one thing knowing that a liability repaid early might be settled for a smaller amount. But if the financial means of doing so is not available, it is academic.

Or if the whole intention is not to repay until the allotted time span has expired (as with mortgages), the deliberate intent being to retain the money meanwhile to put to good use elsewhere.

For pension funds, date of payment is known with certainty perhaps up to half a century or more into the future. 'Liabilities', ie pension payments, cannot be brought forward in time or altered in value. The amount owed – throughout a pensioner's lifetime – is the full obligation. It can't have any other value, particularly a discounted one (thankfully!)

**Where the principle of 'discounting' is used, assets and liabilities get understated. An illusory 'profit' or 'loss' needs to be created to deal with inevitable mismatches.** HSBC had \$3 billion of illusory profit in its 2007 accounts (which the chairman was good enough to exclude in his report when making comparison with previous years), reflecting \$3 billion understatement of liabilities.

Successful pension fund operation involves compound growth of assets. 'Discounting' of assets, or liabilities, does not feature. **The general assumption may be that one is merely the mirror image of the other and produces much the same result. Unfortunately no.**

You can test for yourself the degree of error inherent in the assumption by applying current pension valuation methods to years 10, 20, 30 and 40 in the 8% tab of the model.

The fund is solvent and capable of providing a fully resourced fund. 'Current' valuations tend to produce a rather different view, **too frequently producing illusory 'deficits'** (for reasons that won't be detailed here, but should be apparent from use of the model). Additional contributions are called for from the Employer (despite having minimal influence on ultimate fund size, certainly to the extent required). **The Employer's trading operation suffers needlessly.**

**The Pension Fund can also suffer.** External money injected into the fund may conceal, or cause to be overlooked, the fact that deeper reasons need to be identified and addressed; and on a far greater scale. Rates of internal investment growth may need to be accelerated. By focussing on issues other than real issues, wrong decisions get taken, often doing permanent – frequently unrecoverable – damage.

Advice to invest in gilts and bonds, rather than equities, during a Fund's formative years, may fall into this category.

#### Employer Company

The harm gets compounded if attempts are made to consolidate pension fund assets and liabilities (discounted or not) into Employer Accounts – **a main aspect of the Discussion Paper, which produces large, commercially damaging, distortions.** Assets wrongly appear that are not available to support the Employer's trading operation. And liabilities, wrongly, that do not burden the trading operation.

**A false picture of Balance Sheet strength / weakness results.** Which is particularly unfortunate in the case of banks, apparent asset, solvency and other ratios becoming misstated in the process, needlessly harming the bank's trading operation in the eyes of the outside world. (The June edition of Accountancy magazine sets out the consequences in more detail, pages 55,56.)

A pensioner enquired why his bank's pension fund had switched from equities into bonds and gilts, harming the fund's growth and ability to continue with, for instance inflation protected pensions. Only to be told equities damage the bank funding ratios

in a way unacceptable to the bank's wider trading operations and therefore could not be contemplated. Everybody ends up losing out.

Pension fund shortfalls only become relevant if insufficient resources are available at the time the pensions come to be paid, which may be half a century or more into the future, giving plenty of time to do something about it – always assuming valid, reliable, accurate measurement techniques are in place. Again emphasising the need for factual accuracy in the methods used.

If, despite all efforts, a pension shortfall genuinely becomes inevitable, provision for the *specific shortfall* should of course be made in the Employer's accounts. But only once it does become inevitable.

Given sound measurement techniques, capable of providing clear and adequate warning down the years, as much in advance as possible, much can be done to avoid such an outcome. As hopefully has been indicated.

**The Discussion Paper provides little encouragement that the methods described are capable of reflecting real life behaviour or of producing helpful, durable outcomes. Rather the reverse.** As long as this lasts, the pensions scene will be poorer and weaker for it, perhaps considerably. Along with Employers. Pensioners. And the UK Economy.

It need not happen. The attached model provides a good indication of what needs to be done. Which would resolve most of the issues set out in the Discussion Paper. And in perhaps neater, less disruptive, less harmful and more effective ways.



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