ACCOUNTING STANDARDS & DISCOUNT RATES IN DB PENSION SCHEME EVALUATION: THE CONTRACTUAL ACCRUAL RATE

Dr Con Keating, Chairman, The Bond Commission of the European Federation of Financial Analysts Societies

Webinar

Wednesday, 03 October, 16:00 GMT

A Word From Today's Chairman

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Today’s Agenda

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- 16:00 – 16:05 Chairman’s Introduction
- 16:05 – 16:25 Keynote Presentation – Dr Con Keating
- 16:25 – 16:45 Question & Answer

Today’s Speaker

Dr Con Keating

Chairman

The Bond Commission of the European Federation of Financial Analysts Societies

A Briefing Note

Discount Rates, DB/CDC Pension Schemes, and their Sponsors

November 2021

Philip Bennett, Iain Clacher, Alan Duboisée de Ricquebourg,
Mark C. Freeman, Con Keating

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Problems – a simplified illustration

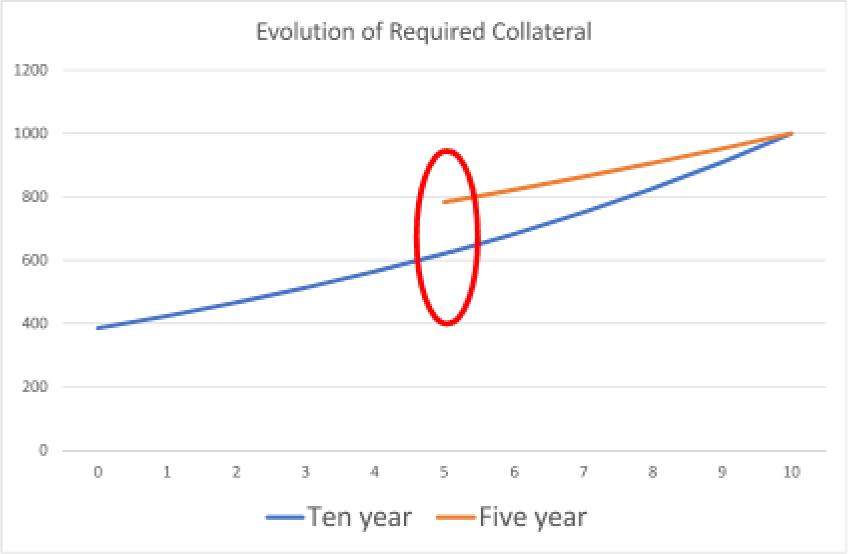
Consider two (untraded) secured zero-coupon bonds: one, a ten-year issued five years ago at a 10% yield; the second, a five-year zero coupon issued today at a 5% yield.

IAS 19 would have us value both using a 5% discount rate – they would have the same value.

But the required collateral levels differ – by 26%

The ten year would trade, reflecting the lower collateral, at around 5.50%.

Requiring the same level of collateral for the ten-year as for the five, would increase the cost of the ten-year bond to the issuer from 10% to 11.2%.



History Matters

and pensions accounting methods discard it

The Role and Function of a Discount Rate

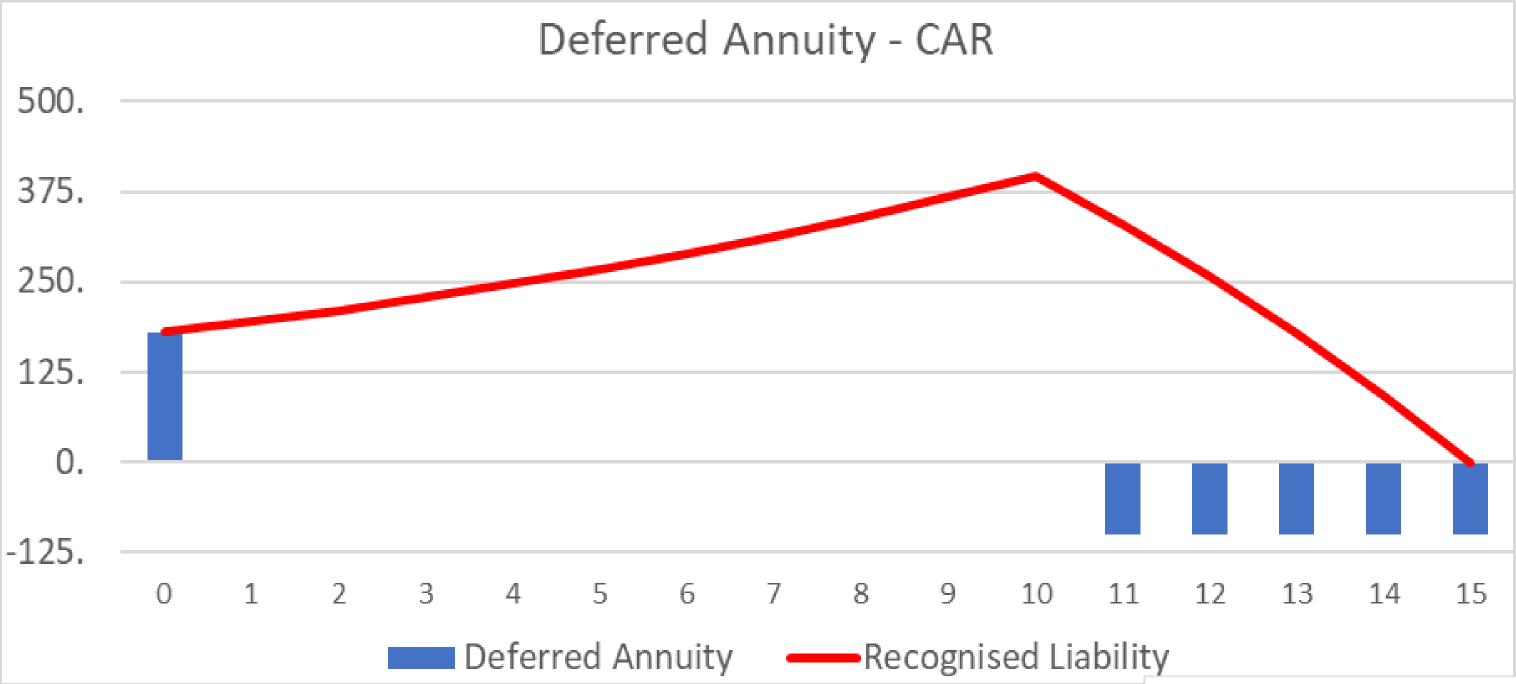
- Functionally a discount rate is a measure, albeit concerned with the time dimension. It reduces payments occurring at different future times to a common basis today.
- Invariance is a desirable characteristic of any measure - if we are to have comparable results. In the case of pension liabilities, the rate would ideally be invariant over time.

The choice of a discount rate is purpose specific

- The discount rate appropriate for valuing the accrued pension obligations of an employer differs from that appropriate for estimating the replacement cost of those liabilities in a market.
- There is a lack of intellectual consistency in the methods specified in different standards for discount rate selection. However, the purpose is the same, true and fair representation of the sponsor’s liabilities.
- IFRS 16 (Leases): an endogenous discount rate – specifies, for long-term leases that the lease payments shall be discounted using the interest rate implicit in the lease. It changes only if this is warranted by experience.

The contractual accrual rate (CAR) - an endogenous discount rate

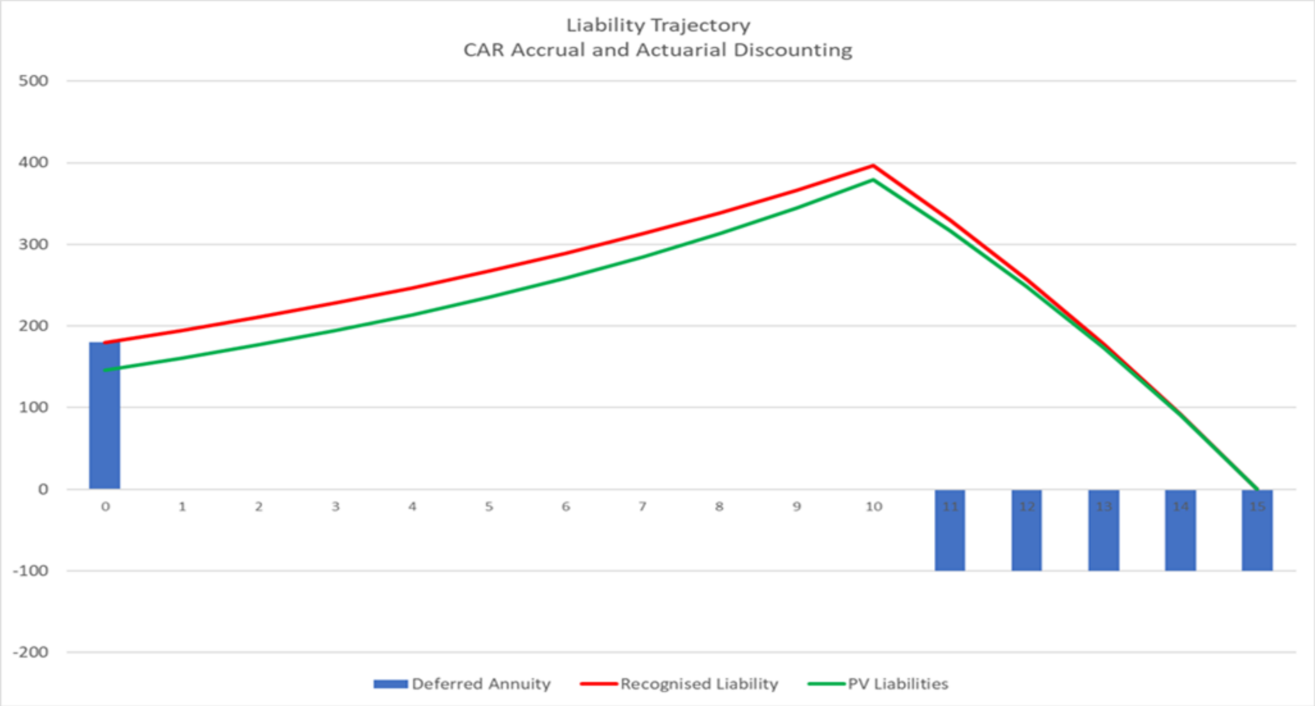
- For a DB pension, this is the rate of return that the company has implicitly promised to pay on the contributions in order to discharge the liabilities on time and in full. In other words, it is the rate at which contributions and assets should accrue over time.
- The rate is intrinsically unique, invariant and time consistent.
- Changes to the rate arise because of explicit differences in the true benefits ultimately payable.
- For a scheme overall, the contractual accrual rate is the weighted average of its awards made over time and across members.
- The CAR is independent of the way in which the liability is financed. In fact, this is a desirable property in the valuation of the obligations of a sponsor company.



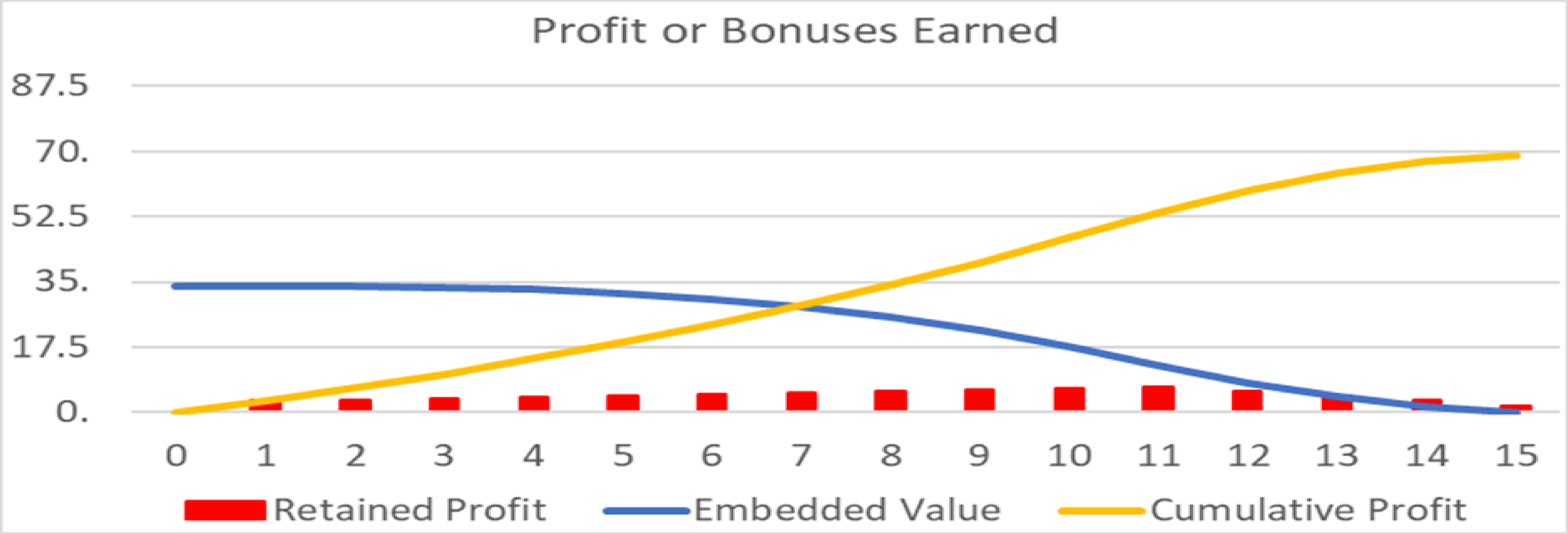
CAR – Contractual Accrual Rate

- A ten-year deferred five-year fixed annuity of £100 pa - Premium £180
- CAR is 8.23% pa
- Results in the liability trajectory shown

- Introduce an asset offering 10% pa
- Discounting at this rate – pv £146
- But profit not earned
- This is an embedded value



- Diagram shows evolution of embedded value
- Realised profit
- And cumulative profit



Regulatory Standard

- The Occupational Pension Schemes (Scheme Funding) Regulations 2005 specifies:
- *"The rates of interest used to discount future payments of benefits must be chosen* ***prudently****, taking into account either or both*
- ***the yield on assets held by the scheme to fund future benefits and the anticipated future investment returns, and***
- *the market redemption yields on government or other high-quality bonds"*
- The problem with adding 'prudence' to a discount rate is that it does nothing for the uncertainty of the ultimate benefits, but it raises costs materially in the interim in a manner which simply cannot be rationalised. It introduces potential problems of intergenerational unfairness.
- **But the value of a liability is independent of its financing**

The changed role of the DB pension fund:

- The role of the fund has changed from its historic role as the sole source of finance to pay pensions to the dual of reducing employer costs and serving as collateral security.
- When the pension fund serves as collateral security for the accrued liabilities of the sponsor employer, valuation of the assets of the fund at market prices is appropriate. This is an instantaneous snapshot of the status of the scheme. Full funding of the scheme would consist of the assets equalling the accrued liabilities.
- This may or may not be sufficient to buy out those liabilities in the marketplace.

CDC Viability Valuations

- For CDC schemes an annual viability statement must be prepared.
- This uses central estimates of all parameters (no prudence)
- It also should use the expected return on assets as its discount rate
- Purpose
- But is it fit for scheme management purpose?

Does it matter?

- In the past 20 years, employers have paid over £200 billion in DB deficit repair contributions - a tax revenue loss of over £40 billion. Ordinary contributions have increased fivefold.
- Companies report lower capital, wage, job and skills investment in consequence.
- Scheme closure has been rampant – just 11% of private sector DB schemes are open to new members.
- Pension fund asset allocation has moved from 73% equity to 12%. – of that less than 20% is in the UK. That is a £1 trillion shift.
- The LSE capitalisation has declined from 8% of the world total to under 3%. The number of listed companies declined from over 7,500 to under 2,000. Pension Funds own less than 3%
- Private equity is rampant.
- Long term (20-year) realised real equity returns have fallen from over 6% to around 2%.
- The case for revision of accounting standards and regulations is overwhelming.

Reports

- Discount Rates, Defined Benefit Pension Schemes, And Their Sponsors www.zyen.com/publications/public-reports/discount-rates-defined-benefit-pension-schemes-and-their-sponsors/

- Does IAS 19 (Accounting for pension costs) meet the criteria for its adoption and retention including the legal requirement of being conducive to the public good? fsclub.zyen.com/media/documents/Public_good_FINAL_Con_Keating.pdf

Comments, Questions & Answers

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Thank You For Listening

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- Tue, 09 Nov (15:00-15:45) Where have All The £300k+ Jobs Gone? Challenging Presumptions Existing Within The Executive Job Search Arena
- Wed, 10 Nov (10:00-10:45) Why British Tech Investors Fail And Americans Succeed: Time To Reinvent Futurology?
- Thu, 11 Nov (16:00-16:45) Early Research: The Global Leading Indicator
- Tue, 16 Nov (15:00-15:45) Financial Centres Of The World 2021: Focus On Turks & Caicos

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