Association of Colleges

FRS102 as at 31 July 2019

Advice on assumptions & calculation spreadsheet

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12 August 2019

Introduction

Background and Scope

We have been instructed by the Association of Colleges (the "Company") to provide a spreadsheet and report to enable the Colleges within the Association of Colleges to value their enhanced (unfunded) pensions for inclusion in their financial statements. This report is addressed to the Association, but should be made available to all Colleges intending to use the spreadsheet.

This report, and the accompanying spreadsheet, will permit the Colleges to make such provision, based on the yields, other financial assumptions and most recent mortality tables as at 31 July 2019.

It is noted that the report and spreadsheet were last produced in 2016. It is our recommendation that this report should be reviewed annually, and Colleges relying on a report from a previous period should do so with the understanding that they will need to determine an appropriate yield and will need to use this yield in the spreadsheet, and that the most up-to-date mortality experience will not have been included.

This report sets out our advice on the proposed actuarial method and approach to deriving the actuarial assumptions for pension accounting purposes for the period.

It is the responsibility of the Directors of each College to set the actuarial assumptions to be used for pension accounting purposes. The proposed assumptions represent one possible set of assumptions that could be used for pension accounting purposes, but other assumptions may also be valid.

The advice in this report sets out the methodology we have used to derive the assumptions as at 31 July 2019.

The importance of the assumptions adopted will depend on the materiality of the pension disclosures in the context of the financial statements as a whole.

This report, and the accompanying spreadsheet, is for use solely in connection with the preparation of the Colleges' financial statements for the period, and should not be used for any other purpose.

This report may not be disclosed to any third parties (with the exception of the Colleges' auditors), except as required by law, without our express prior written consent.

Please note that to the fullest extent permitted by law, Broadstone does not accept or assume responsibility to anyone other than the Association of Colleges and their members for their use of this report.

This report complies with the Financial Reporting Council's Technical Actuarial Standards where material to do so and in a manner proportionate to the decisions being taken by its users.

FRS102 requires that the actuarial assumptions adopted should be unbiased (neither imprudent nor excessively conservative), mutually compatible, and selected to lead to the best estimate of the future cashflows that will arise under the plan.

The present value of the liabilities, the profit and loss charge and the other pension disclosure items are sensitive to certain key assumptions. We will provide sensitivity information to the key assumptions when sending our report on the pension accounting figures.

We set out below details of the principles that were used to derive each of the key assumptions for pension accounting purposes as at the last time this exercise was undertaken (31 July 2016) along with our proposals for the current year-end. The proposed approach to deriving the key assumptions is consistent with that adopted at 31 July 2016.

Please note that whilst the assumptions described in this report are, in our opinion, appropriate for valuing the liabilities for pension accounting purposes, they may not necessarily be appropriate for valuing liabilities for scheme funding purposes.

Appendix A sets out a summary of the assumptions based on the proposed methodology and on market conditions at 31 July 2019.

Actuarial Assumptions

Discount Rate & Inflation Rate

The discount rate assumption for pension accounting purposes must be determined “by reference to market yields at the reporting date on high quality corporate bonds”. In this context, high quality is usually deemed to be AA-rated. The currency and term of the corporate bonds should be consistent with that of the pension scheme’s future cashflows.

We have set the discount rate with reference to the yield on the iBoxx over 10 year corporate bond index. This approach is consistent with that adopted in 2016. The rate is 2.0%, down from 2.3% in 2016. All other things being equal, this will result in a slight increase in the liability.

As the benefits provided are inflation-linked, the inflation assumption is also calculated and the resulting net discount rate is used in the spreadsheet. In setting the Retail Prices Index (RPI) assumption, we have used data direct from the Bank of England’s website. RPI inflation was 3.4% p.a. There is currently no developed market for Consumer Prices Index (CPI) linked financial instruments, and as such there is no reliable method to calculate expected future CPI increases directly. The difference between RPI and CPI arises mainly from different compositions in the two measures and from differing formulae used to produce these figures. Historically, CPI inflation has been around 0.7% p.a. – 1.0% p.a. lower than RPI inflation. Therefore, we propose to base the CPI price inflation assumption on expected future increases in RPI, less 1%. The resulting inflation rate will be reduced further by a reduction of 0.2%, to allow for distortions in the inflation rates due to high demand for index-linked gilts as well as an implicit “inflation risk premium” in the fixed rate interest yield. This approach is consistent with that adopted in 2016.

The proposed RPI assumption is 0.9% p.a. higher than in 2016, which is due to an increase in inflation expectations over the period. This increase in assumed inflation will lead to an increase in the liabilities, all other things being equal.

	METHODOLOGY	2016 ASSUMPTION	2019 ASSUMPTION
INTEREST RATE (A)	over 10 year iBoxx corporate bond yield (rounded to 0.1%)	2.3%	**2.0%**
INFLATION (B)	Bank of England spot inflation 10 year term (3.43%) less 1% difference between RPI and CPI inflation less 0.2% inflation risk premium (rounded to 0.1%)	1.3%	**2.2%**
NET INTEREST RATE (C=A-B)	Interest Rate less Inflation Assumption (rounded to 0.1%)	1.0%	**-0.2%**

Actuarial Assumptions

Mortality

Post-retirement mortality assumptions

These are the most important demographic assumptions as they determine for how long pensions will be paid in retirement. To derive the mortality assumptions we need to make assumptions regarding base tables, which reflect current life expectancies, and future projection tables, which reflect how we expect life expectancies to improve over time.

For the disclosures at 31 July 2016, the assumptions used were 95% S2NA Year of Birth tables with CMI 2015 projections & 1.25% long term rate. As at 31 July 2019, the most up to date version of this assumption is now 95% S3NA Year of Birth tables with CMI 2018 projections & 1.25% long term rate. We propose to retain this updated assumption for the disclosures at the current period-end.

The table below sets out the implied life expectancies for a 65 and 85 year-old male and female based on the proposed assumptions.

	Base table	Improvements	Life expectancy (years)
Male currently aged 65	95% S3MNA	CMI 2018 with a 1.25% trend	22.5 years
Male currently aged 85			6.9 years
Female currently aged 65	95% S3FNA		24.8 years
Female currently aged 85			7.8 years

Actuarial Assumptions

Other Demographic Assumptions

The proportion of members who leave a qualifying dependant is estimated from national statistics. Census data, however, only reflects the proportion of people married at any given age, so the proportions used will be as in the table below.

The age difference between a member and their surviving qualifying dependant is taken to be 3 years (males 3 years older than females).

These are the same assumptions as in 2016.

Current Age	Proportion of males leaving a qualifying dependant	Proportion of females leaving a qualifying dependant
Younger than 80	80%	65%
80-84	70%	40%
85-89	60%	30%
90-94	50%	10%
95 or older	40%	10%

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