

Modelling member outcomes

**Proposed changes issued for consultation:
1/75ths accrual rate, £55,000 salary threshold, employee
contribution rate of 8%**

Scheme pension comparators

The following matrices and heat maps illustrate whether the proposed hybrid scheme would give a higher or lower benefit outcome than the reference scheme for future service. The results in the matrices show the proposed hybrid scheme outcome as being higher or lower by the percentage shown. The heat maps give an illustration of the effects on members.

DB section lump sums and defined contribution fund values are commuted to pension and the resulting figures are compared.

In order to make like for like comparisons, the DC fund is converted to pension using the joint life annuity until the pension figure is equal to the pension of the reference scheme. Any remaining funds are converted on a single life basis.

Assumptions which underpin the analysis

The assumptions made in the calculations for the modelling have been agreed by UUK and UCU, and are outlined below.

Assumptions	
Comparator scheme	Proposed hybrid arrangements issued for consultation
Reference schemes	USS CRB / USS final salary
Salary	Increased by RPI ¹
RPI	2.8%
CPI	2.0%
DC fund growth rates	4.5% / 5.5% / 6.5%
Joint life annuity rate (long term market conditions)	23.0 (CPI increases, 5 year guarantee)
Single life annuity rate (long term market conditions)	21.5 (CPI increases, 5 year guarantee)

¹ These assumptions make no allowance for additional promotional increases above RPI

Reference schemes

The information set out below details the main characteristics of the reference schemes.

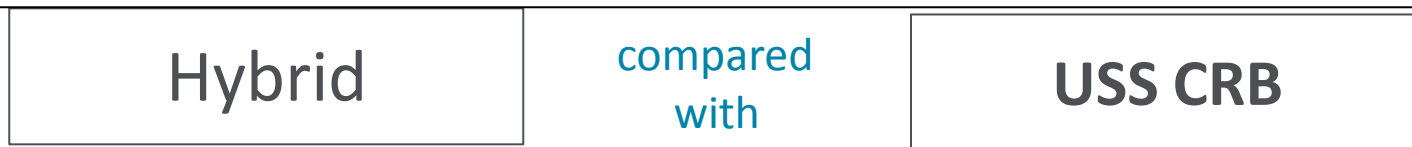
USS career revalued benefits (CRB) section

Pension accrual rate	1/80th
Lump sum accrual rate	3/80th
Revaluation of CRB benefits	CPI
Employee contribution rate	6.5%

USS final salary benefits section

Pension accrual rate	1/80th
Lump sum accrual rate	3/80th
Increases to salary	RPI
Employee contribution rate	7.5%

Proposed changes



In this matrix we compare the proposed future service hybrid benefits under the scheme structure issued for consultation with the benefits that would be payable from the USS CRB section. Positive results show that the hybrid scheme gives a higher benefit outcome; negative results (highlighted in red) show that it would give a lower outcome. Each cell gives a spread of results to illustrate the effect of the three different DC fund growth rates, as shown at the bottom of the slide.

Years to retirement	Salary at commencement														
	£30,000			£40,000			£50,000			£60,000			£100,000		
5 years		13.8%			13.8%			13.8%			9.7%			-5.1%	
	14.0%		13.7%	14.0%		13.7%	14.0%		13.7%	10.0%		9.3%	-4.1%		-6.0%
15 years		15.2%			15.2%			15.1%			11.2%			1.9%	
	15.9%		14.6%	15.9%		14.6%	15.8%		14.5%	12.8%		9.9%	5.8%		-1.7%
25 years		16.9%			16.9%			16.0%			14.2%			11.0%	
	18.3%		15.7%	18.3%		15.7%	17.6%		14.7%	17.7%		11.2%	19.5%		3.7%
35 years		18.9%			18.9%			17.7%			18.8%			22.8%	
	21.6%		16.9%	21.6%		16.9%	20.9%		15.2%	25.6%		13.3%	38.5%		10.4%

Key Assumptions:

DC fund growth rate	5.5%	
	6.5%	4.5%

Proposed changes

Hybrid

compared
with

USS CRB

In this matrix we compare the proposed future service hybrid benefits under the scheme structure issued for consultation with the benefits that would be payable from the USS CRB section. The results shown in red represent outcomes which would be more than 5% lower under the proposed hybrid arrangements, whilst green representing outcomes which would be more than 5% higher under the proposed hybrid arrangements (and shown in amber those results which fall in between).

Years to retirement	Salary at commencement														
	£30,000			£40,000			£50,000			£60,000			£100,000		
5 years	Green												Amber	Red	Red
	Green												Amber	Red	Red
15 years	Green												Amber		Amber
	Green												Amber		Amber
25 years	Green												Amber		Amber
	Green												Amber		Amber
35 years	Green												Amber		Amber
	Green												Amber		Amber

	Hybrid outcome is 5% (or more) higher
	Hybrid outcome is between 5% higher and 5% lower
	Hybrid outcome is 5% (or more) lower

Proposed Changes

Hybrid

compared
with

USS final salary

In this matrix we compare the proposed future service hybrid benefits under the scheme structure issued for consultation with the benefits that would be payable from the USS final salary section. Positive results show that the hybrid scheme gives a higher benefit outcome; negative results (highlighted in red) show that it would give a lower outcome. Each cell gives a spread of results to illustrate the effect of the three different DC fund growth rates, as shown at the bottom of the slide.

Years to retirement	Salary at commencement														
	£30,000			£40,000			£50,000			£60,000			£100,000		
5 years		12.1%			12.1%			12.1%			7.9%			-6.5%	
	12.3%		11.9%	12.3%		11.9%	12.3%		11.9%	8.2%		7.5%	-5.6%		-7.4%
15 years		9.1%			9.1%			9.0%			5.1%			-3.8%	
	9.8%		8.6%	9.8%		8.6%	9.7%		8.4%	6.5%		3.7%	-0.1%		-7.1%
25 years		6.4%			6.4%			5.4%			3.6%			0.7%	
	7.7%		5.3%	7.7%		5.3%	6.9%		4.2%	6.8%		0.8%	8.4%		-5.9%
35 years		4.1%			4.1%			2.7%			3.6%			7.2%	
	6.4%		2.3%	6.4%		2.3%	5.5%		0.4%	9.5%		-1.2%	20.9%		-3.8%

Key Assumptions:

DC fund growth rate	5.5%	
	6.5%	4.5%

Alternative proposal




Hybrid

compared
with

USS final salary

In this matrix we compare the proposed future service hybrid benefits under the scheme structure issued for consultation with the benefits that would be payable from the USS final salary section. The results shown in red represent outcomes which would be more than 5% lower under the proposed hybrid arrangements, whilst green representing outcomes which would be more than 5% higher under the proposed hybrid arrangements (and shown in amber those results which fall in between).

Years to retirement	Salary at commencement														
	£30,000			£40,000			£50,000			£60,000			£100,000		
5 years	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red
	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red
15 years	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Amber	Amber	Amber
	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Amber	Amber	Red
25 years	Green	Green	Green	Green	Green	Green	Green	Green	Amber	Green	Amber	Amber	Green	Amber	Red
	Green	Green	Green	Green	Green	Green	Green	Green	Amber	Green	Amber	Amber	Green	Amber	Red
35 years	Green	Amber	Amber	Green	Amber	Amber	Green	Amber	Amber	Green	Amber	Amber	Green	Green	Amber
	Green	Amber	Amber	Green	Amber	Amber	Green	Amber	Amber	Green	Amber	Amber	Green	Green	Amber

	Hybrid outcome is 5% (or more) higher
	Hybrid outcome is between 5% higher and 5% lower
	Hybrid outcome is 5% (or more) lower