
BBS FUNDING MODELLER

A NEW SOFTWARE TOOL TO HELP OUR CLIENTS

BBS have produced a new software tool to help clients through the difficult process of choosing assumptions for an actuarial valuation and ensuring that any investment strategy in place can be expected to deliver the long-term returns needed to match the valuation assumptions.

At present, it is often difficult for trustees and others to gauge the effects of differing assumptions without doing detailed calculations which can be very time-consuming. It can also be difficult to understand the relationship between the discount rates used to calculate a scheme's Technical Provisions and the underlying returns required on different asset classes if the valuation assumptions are to be met in practice.

The BBS Funding Modeller is designed to solve both of these problems. It does this by:

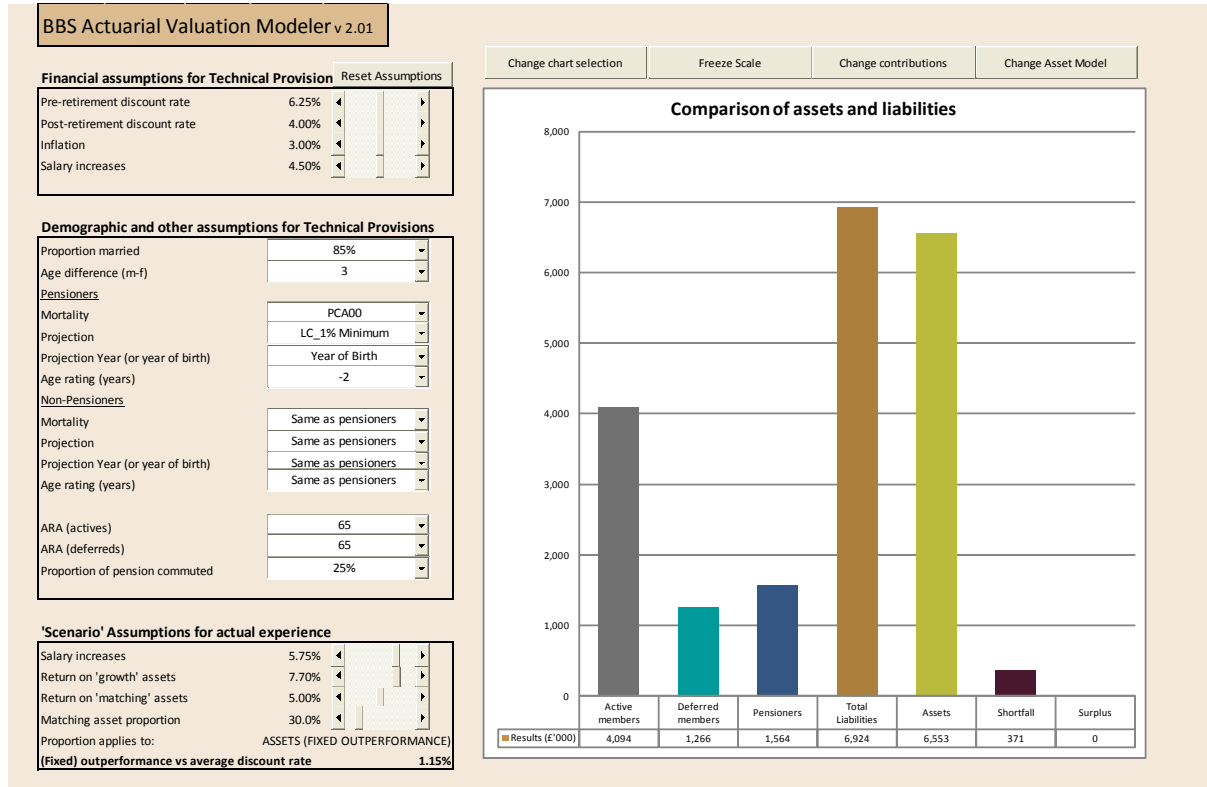
- Allowing the user easily to convert the results of a valuation from one actuarial basis to another. This can be done approximately if only limited data is on hand, or more accurately if a more detailed breakdown of the liabilities is available.
- Projecting the funding position forward based on assumptions set by the user and based on an assumed level of future contributions that can be input. The Modeller can also use these projections to work back to the contributions required to eliminate any deficit over a period specified.
- Incorporating a number of alternative asset models, including the ability to match assets against a specified proportion of either the overall liabilities or the pensioner liabilities, and deriving the asset allocation needed to deliver a specified level of outperformance relative to the average discount rate over time.
- Output is primarily in graphical form to make it easy to understand, although the underlying figures can also be easily accessed if required.

As well as helping trustees through the valuation process and in setting their investment strategy, we would expect the Modeller to be of interest to employers and others wishing to gain an understanding of the impact of the key assumptions on the valuation results.

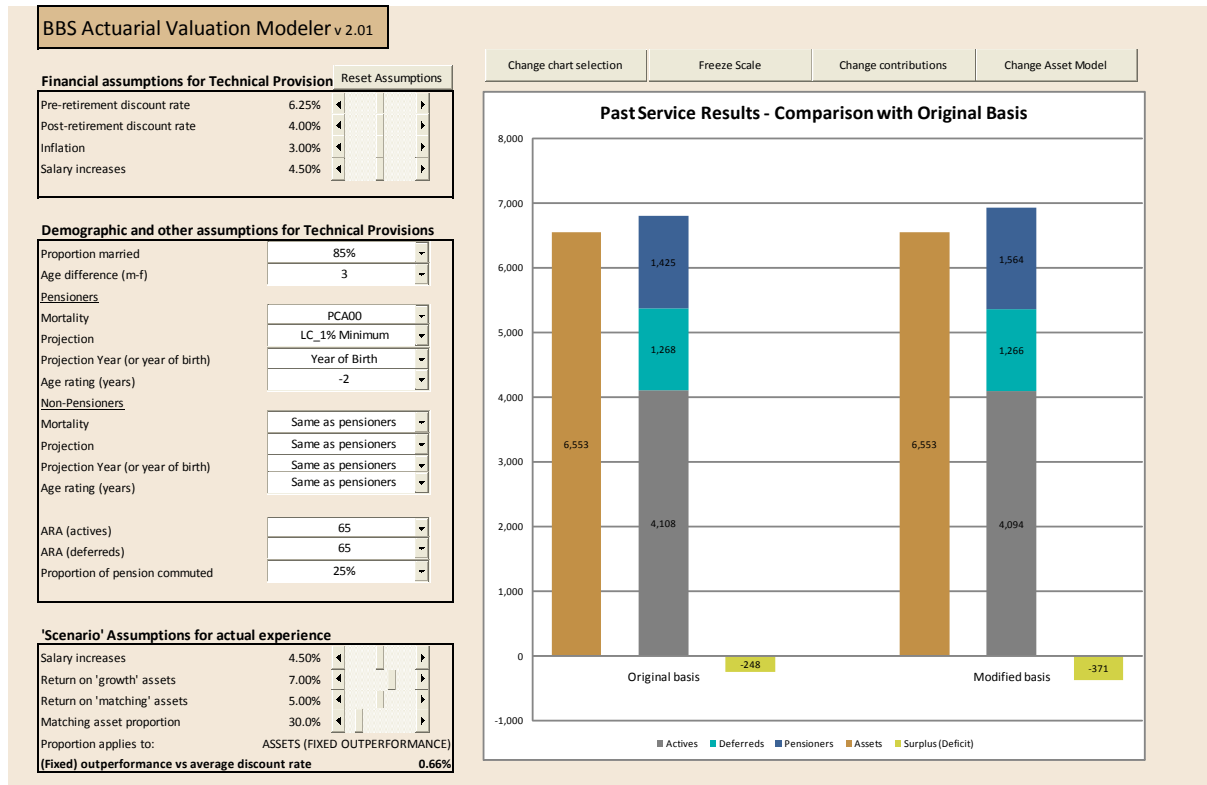
SAMPLE OUTPUT

The following is just a selection of 'screen shots' from the modeller.

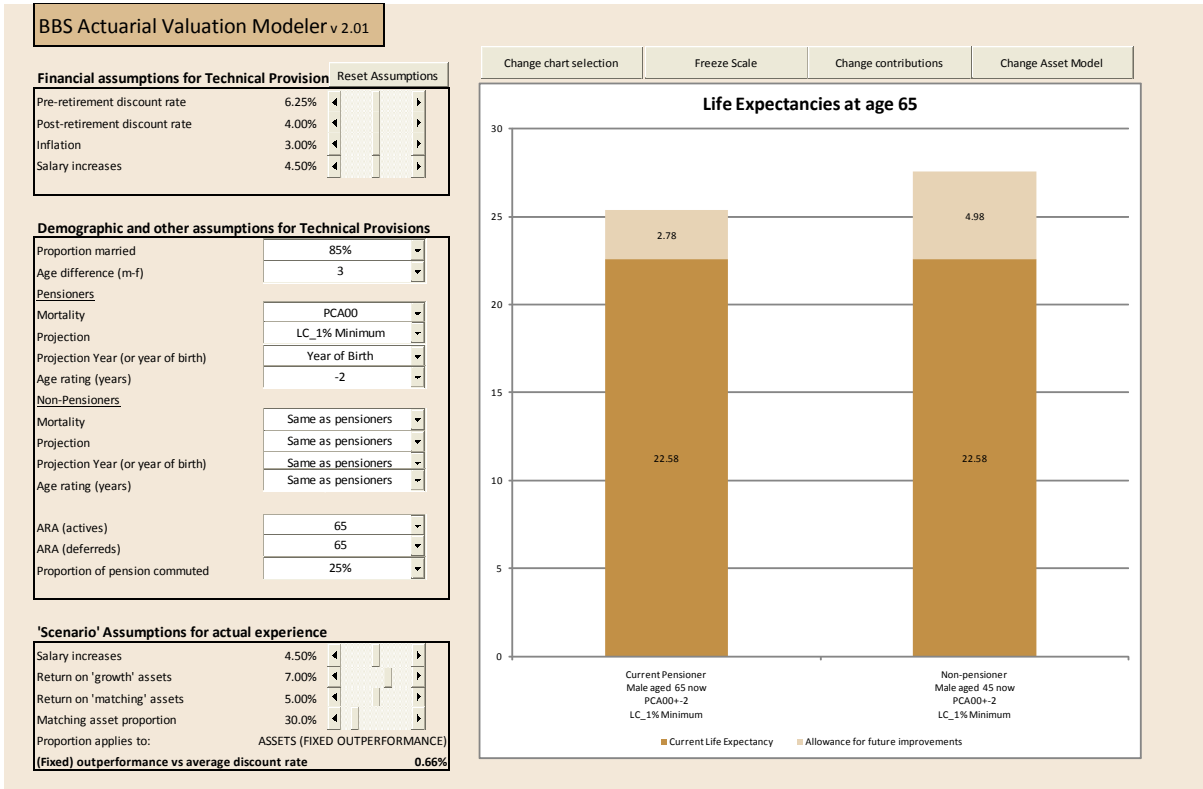
HOW DOES CHANGING THE ASSUMPTIONS AFFECT EACH OF THE COMPONENTS OF THE CURRENT VALUATION:



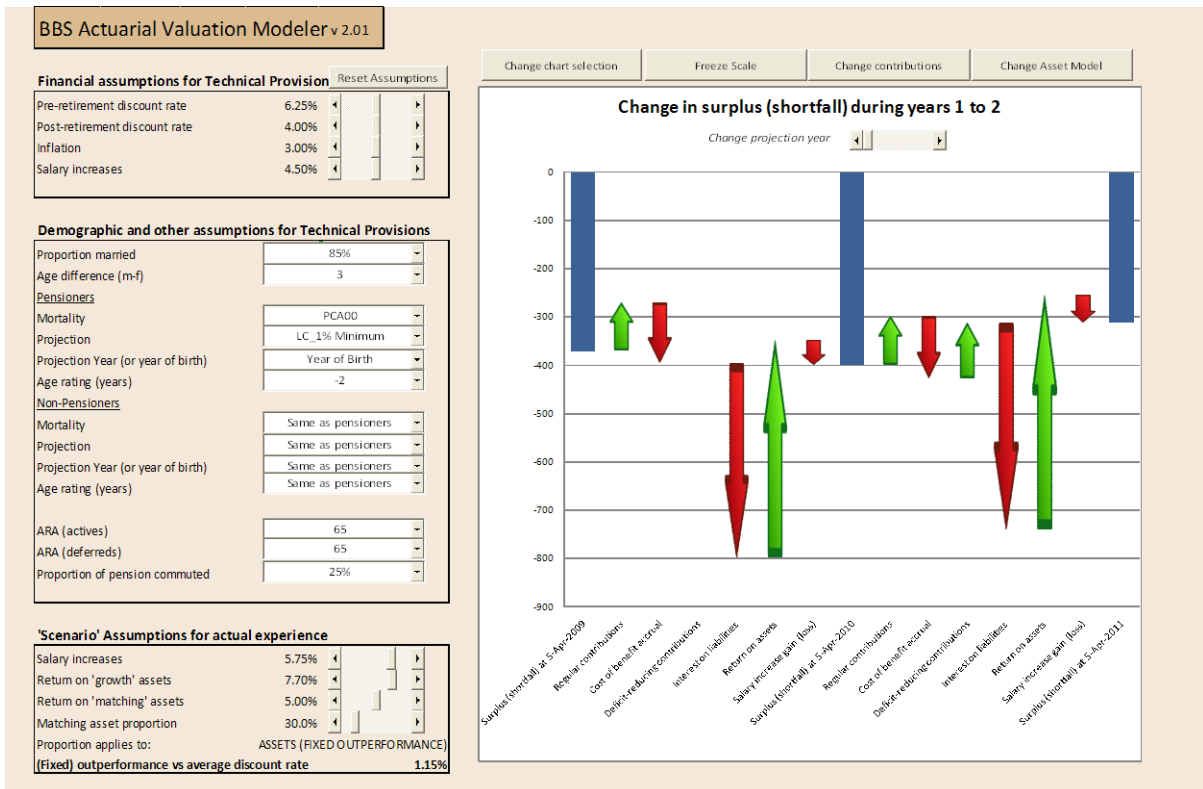
COMPARING THE RESULTS ON ONE SET OF ASSUMPTIONS WITH ANOTHER:



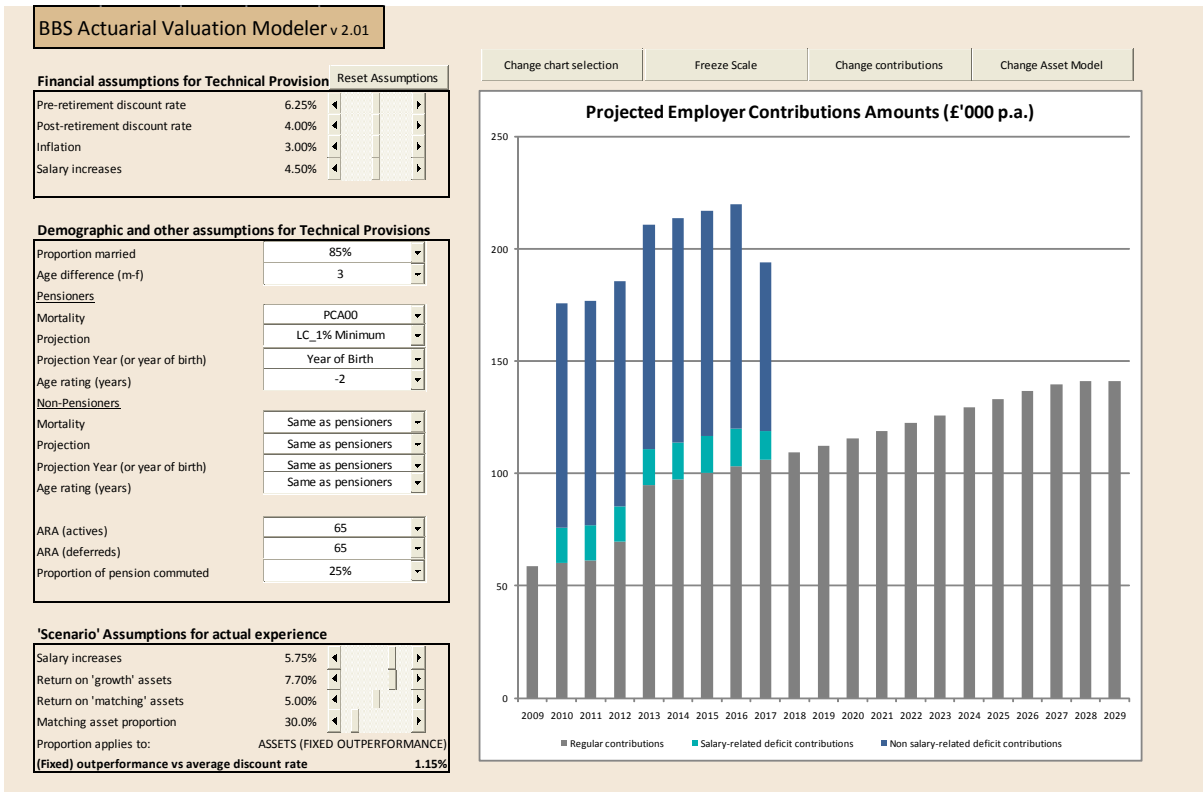
COMPARING MORTALITY ASSUMPTIONS (LIFE EXPECTANCIES) INCLUDING THE ALLOWANCE FOR FUTURE IMPROVEMENTS:



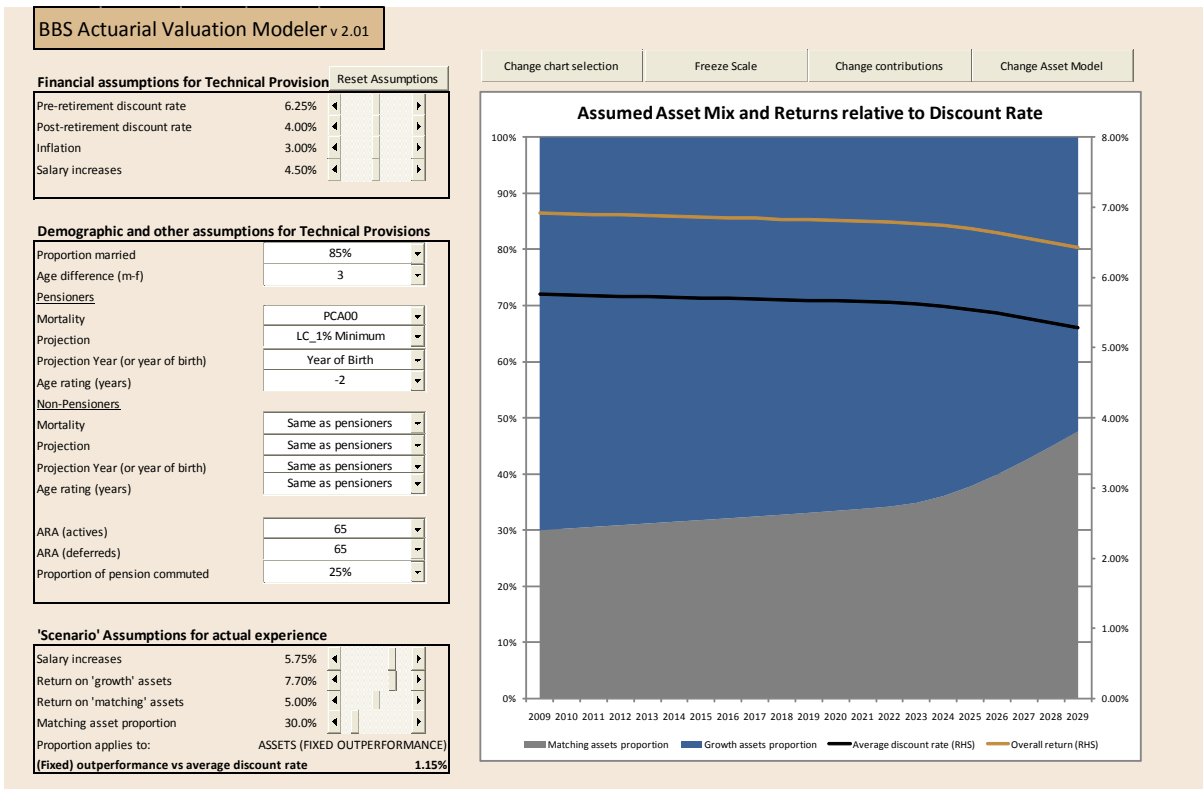
ANALYZING THE DIFFERENT FACTORS THAT CONTRIBUTE TO THE CHANGE IN FUNDING POSITION FROM ONE YEAR TO THE NEXT:



PROJECTING FUTURE CONTRIBUTION REQUIREMENTS:



LOOKING AT THE EFFECT OF DIFFERENT ASSET ALLOCATION MODELS – THIS ONE WORKS OUT THE ASSET SPLIT REQUIRED TO ACHIEVE A SPECIFIED LEVEL OF OUTPERFORMANCE RELATIVE TO THE DISCOUNT RATE:



SHOWING CONTRIBUTIONS AND PROJECTED FUNDING LEVELS AT THE SAME TIME:

BBS Actuarial Valuation Modeler v 2.01

Financial assumptions for Technical Provision

Reset Assumptions

Pre-retirement discount rate	6.25%	◀	▶
Post-retirement discount rate	4.00%	◀	▶
Inflation	3.00%	◀	▶
Salary increases	4.50%	◀	▶

Demographic and other assumptions for Technical Provisions

Proportion married	85%
Age difference (m-f)	3
Pensioners	
Mortality	PCAO0
Projection	LC_1% Minimum
Projection Year (or year of birth)	Year of Birth
Age rating (years)	-2
Non-Pensioners	
Mortality	Same as pensioners
Projection	Same as pensioners
Projection Year (or year of birth)	Same as pensioners
Age rating (years)	Same as pensioners
ARA (actives)	65
ARA (deferreds)	65
Proportion of pension commuted	25%

'Scenario' Assumptions for actual experience

Salary increases	5.75%	◀	▶
Return on 'growth' assets	7.70%	◀	▶
Return on 'matching' assets	5.00%	◀	▶
Matching asset proportion	30.0%	◀	▶
Proportion applies to:	ASSETS (FIXED OUTPERFORMANCE)		
(fixed) outperformance vs average discount rate	1.15%		

Change chart selection

Freeze Scale

Change contributions

Change Asset Model

