

# The Trustee toolkit downloadable

## Funding your DB scheme

### Scenario two

At your last meeting, you and your fellow trustees discussed the valuation process. In this scenario Robert, the actuary, will report his initial results for the scheme funding valuation, and you will see how the calculations for past service and future service liabilities are made.

You and your fellow trustees will have to agree on the assumptions that Robert will use in the final calculations to set the technical provisions under the statutory funding objective.

As you work through this scenario you will be tested on your knowledge at decision points. Here you will have the option to work through a related technical tutorial before returning to the scenario or you can skip the tutorial. You can always work through the tutorial separately later if you would prefer. This scenario includes two tutorials:

- ▶ Calculating the liabilities
- ▶ Impact of assumptions

#### Glossary

A detailed glossary of technical terms can be downloaded from the Resources tab when you log in at [www.trusteetoolkit.com](http://www.trusteetoolkit.com)

The Pensions  
Regulator

## Valuation approaches

You have an email from Charlotte.

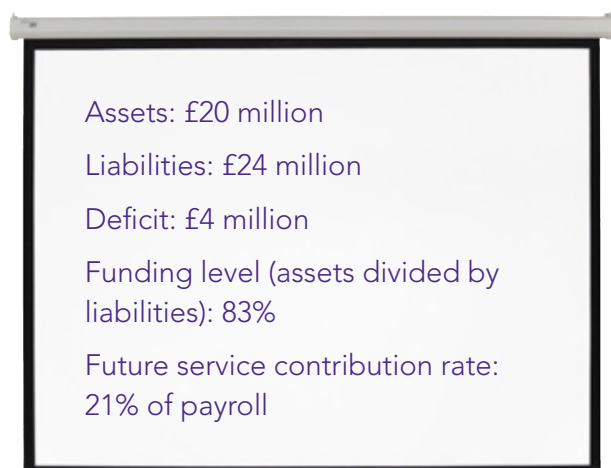
'Dear All

Please don't forget that Robert will be presenting his draft valuation figures at next week's meeting. He's sent me some of the documentation which I've attached for you to have a look at before the meeting.

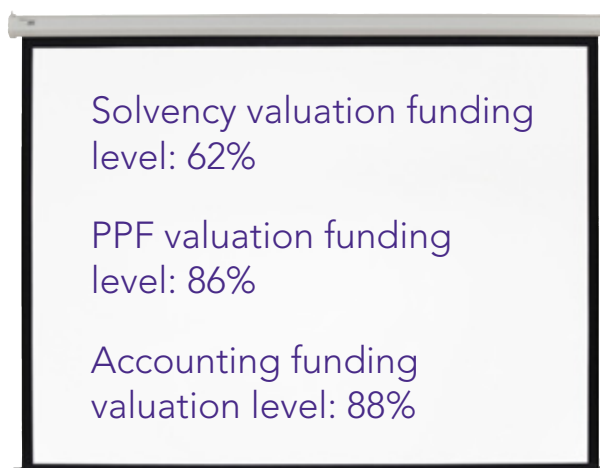
See you next week, Charlotte'

At the meeting the following Thursday Robert presents his figures.

Robert says: "I can now talk you through some of my initial results. Don't forget that these aren't the final figures. They depend a lot on the assumptions I've used, and it's your job as trustees to decide which assumptions you want to use in the final version.



This slide summarises my initial scheme funding valuation. As you see the fund has a deficit of £4 million and a funding level of 83%. The future contribution rate is 21% payroll (including 6% from members).



Here you can see the funding position using the other valuation methods. 'Solvency' is 62%, 'PPF' is 86% and 'Accounting' is 88%."

Alicia asks: "Robert, before we go on to discuss the assumptions, I've always wondered where all your figures actually come from. Is it possible to explain in simple terms how your calculations actually work?"

Tony adds: "You're not the only one Alicia. I get loads of requests from members asking how their future benefits are calculated."

Robert says: "Well, it's interesting that you mentioned members' benefits Tony – because that's really the key to working out the fund's liabilities. If I can work out all the past and future benefits for every member of the scheme, then I'm getting close to arriving at the scheme's overall liabilities. Some of the calculations are not as complicated as you might think. Alicia, you brought this up so let's use your benefits as an example."

Alicia answers: "Well one thing I'm always interested in knowing is what my lump sum on retirement will be."

Robert says: "Pension calculations are more complicated than calculations for lump sums because they require more assumptions. For example, the assumption for increases in pensions in payment and the length of your retirement aren't considered when calculating a lump sum. As a result, it will be simpler to demonstrate."



### Decision point: Alicia's lump sum liabilities

Robert needs two equations, one for past and one for future liabilities to calculate Alicia's lump sum. Can you identify them?

You will need this information about Alicia and the scheme.

- ▶ 35 years old, current salary is £18,000, member for seven years and is hoping to retire at 65.
- ▶ The scheme provides for a lump sum of 1/80th of final pensionable salary for each year of service.
- ▶ Assumptions: Future salary increases are 3% pa, investment return is 5% pa.

Equation A:  
 $(35 / 80) \times 18,000 \times (1.03 / 1.05)^{65}$

Equation B:  
 $(30 / 80) \times 18,000 \times (1.03 / 1.05)^{30}$

Equation C:  
 $(7 / 80) \times 18,000 \times (1.03 / 1.05)^{30}$

Equation D:  
 $(65 / 80) \times 18,000 \times (1.05 / 1.03)^{30}$

### Possible answers:

1. A calculates past service liabilities, D calculates future service liabilities
2. C calculates past service liabilities, A calculates future service liabilities
3. C calculates past service liabilities, B calculates future service liabilities
4. A calculates past service liabilities, B calculates future service liabilities

Answers at the back



Need help with this question? Read the Tutorial 'Calculating the liabilities'

## Over to the trustees

Robert has now finished presenting the valuation figures. Robert says: "Well you've seen all my figures. It's now up to you, the trustees, to adopt a set of assumptions which you think is appropriate for the scheme funding valuation. I can help you by working up some alternatives if you would like me to."

Charlotte responds: "Thanks Robert. As I understand it, for the scheme funding valuation, we have quite a lot of leeway in the assumptions, don't we?"

Robert says: "Well it is true that we choose the assumptions but we must be prudent and keep the employer covenant at the forefront of our minds. If the valuations aren't realistic, the members' benefits could be undervalued and that could put them at risk."

Charlotte says: "Well I suggest we look at each of these assumptions in turn. As Robert indicated, the important ones are: the rate of salary increases, longevity (how long the member will live in retirement), inflation rates, and the return on investments (or discount rate.)"

Rodney says: "Well, I'm sure Robert knows what he's doing – let's just rubber stamp the assumptions he's made."

Alicia says: "I think we should be really prudent with our assumptions, bearing in mind the recent management buy-out and weakening covenant, to give a strong basis for the valuation. That's the safest thing to do. The deficit will be big but this won't be a bad thing as we'll be able to push for higher employer contributions."

John says: "I don't think that's the best thing to do. The company is under huge financial pressure and speaking with my 'company hat' on, if the contributions are too big it could push the company into insolvency..."

Charlotte interjects: "Don't forget we're here as trustees, John; we have to keep the members' benefits uppermost in our minds."

Adrian says: "John does have a point. I wonder whether we should use a weaker basis to give Edmund a bit more breathing space, especially as the newco has to service a huge loan. Otherwise the company could consider withdrawing benefits for future service to avoid the risk of insolvency."

Robert warns: "Well, I must warn you that The Pensions Regulator (TPR) expects you to choose prudent assumptions consistent with the investment strategy as well as bearing in mind the covenant strength. If you make them too weak you could be storing up trouble for the future, and what's more, TPR could become involved."



### Decision point: Reaching agreement

The following statements were made during the trustees' discussion of assumptions to be used in the ongoing valuation. Which two are correct?

1. Because the employer covenant is weaker than it was we should use weaker assumptions
2. If we want the basis to be stronger, we should set the discount rate with only a limited margin above bond yields, rather than based on the expected return on equities
3. The basis is weaker this time because we're using a higher rate of inflation
4. The Pensions Regulator (TPR) may become involved if our statutory funding objective is set too low
5. The safest course of action is to accept all of Robert's assumptions

Answers at the back



Need help with this question? Read the [Tutorial 'Impact of assumptions'](#)

## Rounding up

In the next scenario you and your fellow trustees have to deal with a complaint from a former member who considers that he has lost out as the result of a bulk transfer.

Now that you have completed this scenario we would recommend that you begin to work through the 'Check your scheme' worksheet for this module.

## Answers

### Decision point: Alicia's lump sum liabilities

Statement three is correct. Equation C calculates past service liabilities, and equation B would be used to calculate future service liabilities.

### Decision point: Reaching agreement

Statements two and four are correct.

The trustees should not simply rubber stamp the assumptions made by the actuary without discussing them first and then reaching agreement.

Bond yields assume a lower rate of return than equities, so give a stronger basis for the valuation, as would the assumption of higher inflation.

It's true that the employer covenant is weakened recently. So the trustees should consider stronger rather than weaker assumptions.

And finally, TPR may certainly become involved if the statutory funding objective is below what it thinks is appropriate.