

# The Trustee toolkit downloadable

## Investment in a DB scheme

### Tutorial five: Changing the asset allocation strategy

By the end of this tutorial you will better understand:

- ▶ the main changes trustees are likely to make to a scheme's investment strategy
- ▶ the likely impact to risk and return of making those changes to the scheme's investment strategy

This tutorial is part of **Scenario three**.

#### 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  
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## Introduction

In the previous tutorials you learned about the tools and approaches that can be used to examine the riskiness and potential rewards of different investment strategies including stress testing, scenario analysis and stochastic modelling. In this tutorial, we will look at the typical ways the riskiness and potential reward of an investment strategy can be changed by the trustees.

### Integrated risk management framework

As you know, investment strategy, funding strategy and the sponsor covenant are interlinked. Changes to any one of these could potentially affect the others. Therefore, material changes to your scheme's employer covenant or to the funding strategy may require trustees to consider changes to the investment strategy.

### Asset allocation strategy

As you work through this tutorial we will use the simplified example asset allocation strategy from previous tutorials, and work through a number of possible changes to this strategy. The changes we will work through are illustrative and might not be appropriate for your scheme. When your scheme carries out an investment strategy review, it is important to take professional advice based on your scheme's circumstances.

### Understanding the advice you are given

As part of an investment strategy review, your advisers may recommend changes to your scheme's investments. It is important to understand the effect of these on the risk and expected return of your scheme's overall investments, as well as the specific risks attached to any proposed new investments.

## Main types of investment strategy change

Investment strategy changes generally involve:

- ▶ altering the growth/matching assets
- ▶ better matching of the liabilities
- ▶ spreading the growth assets more widely, ie diversifying them further
- ▶ putting in place, adjusting or removing downside protection strategies

We will now look at each in turn, focusing on the typical impact on investment risk and return.

## 1. Altering the growth/matching assets mix

In the example scheme there is currently a 40% target allocation to growth assets (global equities and diversified growth strategy) and 60% to matching assets (sterling bonds).

Altering the mix between growth and matching assets would mean changing those percentage figures so that there is more in growth assets and less in matching assets or vice versa.

Following an investment strategy review, the trustees in this scheme are considering an increase to the target allocation to matching assets and reduce the target allocation to growth assets, as shown in the table.

Assets	Class	Target weight (%)	
		Current strategy	New strategy
Growth	Global equities	20	15
	Diversified growth strategy	20	15
Matching	Sterling bonds	60	70
<b>Total</b>		<b>100</b>	<b>100</b>



### 1. Impact on risk and reward

Take a look at the current and new strategies in the table. What impact is the change to a higher target allocation to matching assets likely to have on the scheme's investment strategy? (Pick two)

1. Increase the risk level
2. Reduce the risk level
3. Risk level would be the same
4. Increase the expected return
5. Reduce the expected return
6. Expected return would be the same

### 1. Answer and feedback

The correct answers are two and five. These changes are likely to reduce the riskiness of the scheme's investments, and it is also likely that they will reduce the expected return on the investments. This is because equities are usually more volatile than bonds relative to scheme liabilities, which means they carry a higher risk but they generally also offer a higher expected return than bonds. The same applies to diversified growth strategies. Therefore reducing the target weight to growth assets is likely to reduce both the risk level and the expected return. The changes made to the investment strategy may have implications for the funding strategy, which will need to be considered as part of the scheme's integrated risk management approach.

If your scheme has a 'flight path' arrangement, it is likely to include 'triggers' that change the benchmark so that investments are switched from growth to matching assets. These triggers are frequently based on the scheme's funding level, which is monitored regularly. The triggers typically operate if there are faster-than-expected improvements in funding, say because of unusually strong performance from the growth assets. The rationale is that following the improvement, less return will be needed in future to reach the funding target, so the scheme can 'afford to de-risk'.

## 2a. Making the matching assets a better match for the liabilities

In the example scheme there is currently a 40% target allocation to growth assets (global equities and diversified growth strategy) and 60% to matching assets (sterling bonds). Making the matching assets a better match for the liabilities (so that they provide predictable income streams that are more similar to scheme benefit payments) does not change the overall target allocation for matching assets from 60%. However the types of assets used for matching and the proportions they are held in may change.

In this example the 60% target allocation to matching assets in sterling bonds is actually split equally into two different asset types: investment grade corporate bonds and index-linked gilts.

Assets	Class	Target weight (%)	
		Current strategy	New strategy
Growth	Global equities	20	20
	Diversified growth strategy	20	20
Matching	Investment grade corporate bonds	30	15
	Index-linked gilts	30	45
<b>Total</b>		<b>100</b>	<b>100</b>

Following an investment strategy review, the trustees in this scheme are considering a change to the target allocation for the matching assets so they better match the liabilities. In this example they do it by reducing the target allocation to corporate bonds, and increasing the target allocation to index-linked gilts, but the overall target for matching assets remains at 60%.



### 2a. Impact on risk and reward

Take a look at the current and new strategies in the table. What impact is the change to a higher target allocation to matching assets likely to have on the scheme's investment strategy? (Pick two)

1. Increase the risk level
2. Reduce the risk level
3. Risk level would be the same
4. Increase the expected return
5. Reduce the expected return
6. Expected return would be the same

## 2a. Answer and feedback

The correct answers are two and five. Investment grade corporate bonds are riskier than gilts as the companies issuing them have a higher risk of defaulting on their coupon and interest payments when compared to the government. This is one of the reasons why gilts are often considered to be a more secure match for pension liabilities than corporate bonds. Gilts and index-linked bonds are generally a better match because they provide an income stream linked to inflation, and pension payments are often also linked to inflation. Fixed interest bonds pay a fixed amount which could be more or less than inflation. (Schemes are required by law to give annual pension increases that are linked to inflation, although not all pensions (or parts of pensions) benefit from this requirement.)

Increasing the target allocation to index-linked gilts is therefore likely to reduce risk, due to the reduced risk of default on the bond portfolio payments and their greater inflation-linking. It would also reduce the expected return on the scheme's assets because corporate bonds offer a higher yield to compensate for their higher risks. This lower expected return may affect the funding strategy, which would then need to be reconsidered as part of the scheme's integrated risk management approach.

Why hasn't the example scheme chosen to invest in index-linked corporate bonds? This would achieve better matching by having inflation-linked bond payments, whilst retaining the higher expected return of corporate bonds. There are not that many of these, especially in relation to the amount of index-linked gilts and fixed interest corporate bonds available. They are generally already owned by pension schemes and insurance companies that do not wish to sell them on to other investors. Building up an allocation would likely be difficult, possibly expensive, and take some time to achieve.

## 2b. Liability driven investment (LDI)

In the previous example we saw that gilts are often considered to be a better match for pension scheme liabilities than corporate bonds. An even better match, would be a LDI portfolio. In an earlier tutorial you learned that LDI portfolios are put together to provide a particularly close match for scheme liabilities, and are made up of cash, bonds and various types of fixed interest derivative instruments.

Bearing this in mind, take another look at the example scheme. This time the example scheme could make the matching assets a better match for the liabilities by reducing the benchmark weight to index-linked gilts and introducing an LDI portfolio.

Assets	Class	Target weight (%)	
		Current strategy	New strategy
Growth	Global equities	20	20
	Diversified growth strategy	20	20
Matching	Corporate bonds	30	30
	Index-linked gilts	30	10
	LDI portfolio	0	20
<b>Total</b>		<b>100</b>	<b>100</b>



## 2b. Impact on risk and reward

Take a look at the current and new strategies in the table. What impact is the change in matching assets to include an LDI portfolio likely to have on the scheme's investment strategy? (Pick two)

1. Increase the risk level
2. Reduce the risk level
3. Risk level would be the same
4. Increase the expected return
5. Reduce the expected return
6. Increase or reduce the expected return depending on the structure of the LDI portfolio

## 2b. Answer and feedback

The correct answers are two and six. The LDI portfolio would be designed to reduce the scheme's investment risk. That is why schemes invest in them, rather than the more basic approach of holding gilts and corporate bonds.

The impact on the expected return would depend on how the LDI portfolio was put together. Some LDI portfolios include derivative instruments based on corporate bonds in order to have a higher expected return than gilts. Others target more gilt-like returns. The impact on expected return would also depend on bond market conditions at the time of making the change.

For example, when interest rates are low, pension schemes typically delay the implementation of LDI portfolios because they prefer to wait until interest rates are higher. This is on the assumption that the increase in interest rates will benefit their funding level. They therefore take more investment risk than they intend to in the longer term. As part of an integrated risk management framework, it is important that this higher level of risk is supportable by the employer's covenant.

If your scheme has a 'flight path' arrangement in place, it is likely to include triggers for adjusting the matching assets, to be a better match to the scheme's liabilities, when market conditions are most favourable. These triggers will typically be based on bond market statistics that show the relative value of different bonds and related derivatives.

## 3. Spreading the growth assets more widely

In the example scheme there is currently a 40% target allocation to growth assets (global equities and diversified growth strategy) and 60% to matching assets (sterling bonds).

Spreading the growth assets more widely does not change the overall target allocation for growth assets from 40%. However the types of assets used for growth may be changed, or diversified further.

The example scheme has already made a decision to diversify its growth assets, and has an allocation to a diversified growth strategy.

But the scheme could decide to diversify further and in this example it does so by investing in a property portfolio.

Assets	Class	Target weight (%)	
		Current strategy	New strategy
Growth	Global equities	20	15
	Diversified growth strategy	20	20
	Property	0	5
Matching	Sterling bonds	60	60
<b>Total</b>		<b>100</b>	<b>100</b>

### A reminder: Diversified growth strategies

Pension schemes typically access diversified growth strategies by investing in diversified growth funds. These are pooled funds put together by investment managers. They are intended to offer less risk than investment in equities but a broadly comparable expected return over the medium to long-term. The intended reduction in risk comes from investing in a variety of underlying assets that are exposed to different economic factors, so they do not all rise and fall in value at the same time. This is intended to smooth out the return of the fund as a whole.

The exact make-up of diversified growth funds varies from fund to fund, sometimes significantly. If your scheme invests in one, it is important for you to understand the main principles of its construction, and how it is expected to perform in different market conditions.



### 3. Impact on risk and reward

Take a look at the current and new strategies in the table. What impact is the change in the types of growth assets likely to have on the scheme's investment strategy? (Pick three)

1. Increase the risk level
2. Reduce the risk level
3. Increase the expected return
4. Reduce the expected return
5. Increase the liquidity risk
6. Reduce the liquidity risk

### 3. Answer and feedback

The correct answers are two, four and five. Reducing the target allocation to equities and including a property portfolio is likely to reduce some of the scheme's investment risks, since equity and property markets do not move in the same cycle, ie equity and property markets do not generally have highs and lows at the same time.

An investment spread across both will offer a smoother overall return than either would individually. It would, however, increase the scheme's liquidity risks. Property is more difficult and costly to sell than a typical equity portfolio. This illiquidity is one of the factors which should be considered by the trustees before deciding to make the investment.

The effect on the expected return would depend on the property portfolio in question. Generally, property tends to have a lower expected return than equities, so there would be a loss of expected return as a trade-off for the smoother ride.

## 4. Putting in place, adjusting or removing downside protection strategies

Earlier in this module, we mentioned that schemes can put downside protection arrangements in place to protect the scheme's overall funding level from adverse changes in market conditions. We described one of the more common types, an equity 'collar', in the case example 'Downside protection arrangement'. This uses 'options' to protect the value of an equity portfolio against market falls, whilst also limiting the portfolio's gains if markets rise.

In the example scheme, there is currently a 20% allocation to global equities. Following an investment strategy review, the trustees decide to put in place a collar around this allocation.

Assets	Class	Target weight (%)	
		Current strategy	New strategy
Growth	Global equities	20	0
	Global equities (with collar)	0	20
	Diversified growth strategy	20	20
Matching	Sterling bonds	60	60
<b>Total</b>		<b>100</b>	<b>100</b>



### 4. Impact on risk and reward

Take a look at the current and new strategies in the table. What impact is putting the collar around the global equities likely to have on the scheme's investment strategy? (Pick two)

1. Increase the risk level
2. Reduce the risk level
3. Increase the expected return
4. Reduce the expected return
5. Expected return would be the same or would reduce, depending on the design of the collar and the transaction costs incurred when putting in place



#### 4. Answer and feedback

The correct answers are two and five. The equity collar is intended to offer the scheme protection in extreme downside market conditions, ie to reduce the risk level. It also places a limit on the scheme's potential participation in equity market growth.

The effect on the expected return depends on the balance between the downside protection and the limit on participation in growth, and also on the transaction costs involved.

Downside protection differs from diversification, in that even a diversified investment strategy can suffer heavy losses if many asset classes fall in value at the same time, as happened in the global financial crisis of 2007/2008.