Trustee toolkit downloadable

Investment in a DB scheme

Case example 1 of 1: Downside protection arrangements

See an example of a downside protection arrangement using equity options.

This case example is linked to **Scenario 1**.

The Pensions Regulator

Some of the more common types of downside protection arrangement involve the use of equity options.

Equity 'put' option

A basic type of equity protection arrangement is to enter into a contract with an investment bank so that, in return for a payment from the scheme upfront, the bank will pay money back to the scheme if equity markets fall below a certain level.

This is known as 'buying an equity 'put' option' and the details of the contract would need to include the amount of assets covered, the timeframe, how much markets need to fall by before the bank has to pay out, and what equity market is concerned.

Example: One year 90% equity put option on UK equities

This means that if, exactly one year after the option is bought, the value of the UK equities covered is below 90% of their value when the option was bought, the bank will make good the shortfall back up to 90%.

In other words, if you bought an option covering £10 million of UK equities, and they had fallen to £8.5 million a year later, the bank would pay out £0.5 million. The cost of equity options varies according to market conditions.

At the time of writing, December 2014, this example UK equity option might have cost around £0.3 million.

'Call' option

Schemes typically meet the cost of downside protection by entering into another, opposite contract with the bank known as 'selling the bank a 'call' option'.

Under this contract, the bank will pay money to the scheme up front, and the scheme will have to make a payment to the bank if equity markets rise above a certain level. Again, the details will include the amount of assets covered, the timeframe, market level at which the bank has to pay out and equity market concerned.

This has the result that any gain in the reference portfolio above a pre-determined level is paid across to the bank. This level is set by the bank, to make the cost of this call option the same as the put option sold by the scheme, so that no money needs to change hands when the two options are put in place.

'Put' and 'call' option

This type of arrangement with put and call options is known as a 'collar'. This means that the scheme's potential return on the equity portfolio has both an upper and lower limit, ie there is a 'collar' around it.

At the time of writing, December 2014, the upper limit corresponding to 90% downside protection over one year is approximately 107%. So, if the £10 million UK equity reference portfolio in the example given had risen to £10.8 million a year later, the scheme would owe approximately £0.1 million to the bank.

Summary

An equity 'collar' is like taking out a policy to protect against severe market falls, and funding the cost by selling a policy that pays out to its purchaser if markets rise significantly. The downside to the pension scheme is reduced, but so too is the upside. The expected return, taking the full range of possible market outcomes into account, will depend on the exact design of the collar and the transaction costs incurred when putting it in place.

There are many further potential variations to this type of arrangement. If your scheme has one, then you will need to understand what it is and how it works.

You have now reached the end of this case example.