Case Study: Cashflow Driven Investment (CDI)

Understanding the need

We have been working with the trustees of a £160m scheme for over 10 years. The scheme has a long history of providing benefits to members, having been established in 1975. The scheme closed to new members in 1999 and when we started working with the trustees in 2005 the scheme was already mature with a large proportion of pensioners.

With the scheme well-covered on its statutory funding basis, the trustees were focused on longer term funding objectives and were keen to reduce the exposure of the portfolio to the ups and downs of the market. The scheme is very mature relative to the broader pension community; it is currently expected to pay out c. £8m every year in benefits - that’s 15% of assets every three years!

Historically the scheme had used its Liability Hedging Assets¹ to provide cashflow. However, our analysis suggested this was no longer a prudent approach as, without periodic rebalancing, this would reduce the allocation to Liability Hedging Assets, thereby increasing the allocation to Growth Assets over time. This would result in an increasing risk profile which was contrary to the trustees’ goal of reducing risk.

A key challenge for the trustees was the size of the scheme. Small schemes tend to enjoy less investment flexibility than their larger peers with most available investment products ‘pre-packaged’. River and Mercantile, though, believes size should not be a barrier to accessing investment solutions, this led us to develop an innovative CDI solution which could be accessed by schemes of all sizes.

Building the solution

For many years, one of the main constraints on implementing a CDI approach was that a scheme would need at least £75m - £100m to implement a segregated cashflow matching portfolio, making this type of solution inaccessible to many schemes.

In our view the solutions available to smaller schemes, i.e. constant duration or short-dated, weren’t optimal to match cash flows, as they weren’t tailored to a scheme’s specific cashflow needs.

After assessing over 40 managers, we selected one which had the capabilities to launch a pooled fund range. We worked with the manager to be part of the seeding capital for these funds. This fund range is designed to bring a number of benefits to small schemes which had not been available previously.

Benefits of pooled CDI solution

- Flexibility to match liability cashflows at different terms
- Capped fund expenses and competitive management fees
- To access more attractive yields overseas
- Distributed all bond cashflows
- To provide access for smaller clients
- To match declining duration of the liabilities
- Low minimum investment
- Declining duration
- Low transaction costs and active management risk
- Buy and maintain

¹A segregated portfolio of gilts and swaps used to mitigate the interest rate and inflation risk in the liabilities.
How pooled CDI works in practice

Our preferred manager operates a range of six funds. Each fund purchases investment grade bonds which are due to mature within a specific 5 year period, e.g. between 2026-2030. An investor receives both the regular coupons and final payment at maturity through quarterly distributions.

For example, a £1m investment in the 2026-2030 fund is expected to deliver c. £1.05m in cashflow over 12 years, with the majority of cashflow being provided in the final 5 years.

By investing a specific amount in each of the six funds, we create a portfolio which is tailored to a scheme’s cashflow needs, as and when they are due.

As with all bond investments there is a risk of default or downgrade, meaning that an investor may not receive the cashflows they budgeted for. Credit risk is controlled by the manager through the selection and ongoing monitoring of individual bonds. The average credit rating of each fund is at least A-2 and the manager has a strong track record of avoiding defaults.

Whilst we would normally recommend holding this investment to maturity, if a scheme’s needs change then it is possible to exit the funds with reasonable liquidity. The manager also offers in-specie transfers and a liquidity vehicle to reduce transaction costs.

Improving the outcome

Following our advice, the trustees implemented three key strategic changes with the aim of protecting the scheme against short-term capital losses and improving capital efficiency. They:

a. Introduced the pooled credit CDI solution, with the liability hedge updated to integrate the interest rate exposure from the CDI assets;

b. Reduced exposure to return seeking assets, retaining a proportion in multi-asset credit and diversified growth funds to align with the actuarial valuation assumptions;

c. Implemented a synthetic equity solution using derivatives and existing liability hedge gilts as collateral; this provides exposure to rising equity markets but protects against market falls.

Source: R&M Solutions, 30/04/2019
### Strategy Comparison

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<tr>
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<th>Previous Strategy</th>
<th>Proposed Strategy</th>
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<tbody>
<tr>
<td><strong>Target return</strong></td>
<td>Gilts + 2.2%</td>
<td>Gilts + 2.4%</td>
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<td><strong>Impact of market shocks on deficit (£m)</strong></td>
<td>30.9</td>
<td>29.7</td>
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<td><strong>Cashflow coverage (20 year)</strong></td>
<td>66.9%</td>
<td>92.5%</td>
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<td><strong>Cashflows at risk (20 year)</strong></td>
<td>13.4%</td>
<td>10.4%</td>
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**Notes:** Figures are calculated by River and Mercantile Solutions as at 31 March 2019 based on a c. £160m scheme with a duration of 14 years.  
1. Market shocks assume a 1.0% fall in interest rates, 0.5% rise in inflation, 20% fall in equity markets, 4% rise in high yield credit spreads, 1% rise in investment grade credit spreads.  
2. Calculated as an instantaneous shock with income falling by an amount equivalent to the 95th percentile of historic loss rates.

The structured equity solution is designed to evolve progressively over time, reducing equity market exposure and increasing capital protection as the scheme matures, without the need to physically sell assets from growth into matching.

This enabled the trustees to maintain their focus on improving longer term funding by sustaining the same level of target return as a traditional approach.

Crucially, based on our advice, the trustees now have the comfort that they can pay the next 20 years of benefits to their members with a higher degree of certainty.

We are currently working with the trustees to implement a second tranche of CDI investment to take advantage of market conditions, and to bring them one step closer, therefore, to reaching their end goal – a self-sufficient portfolio.

### 2029: The End Goal self-sufficiency portfolio

- **Diversified Growth**: 25%
- **Global Bonds**: 30%
- **Cashflow Matching**: 20%
- **Gilts**: 25%

### Business Development

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