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A regular analysis of strategic issues in the global asset management business

Deeper Perspectives

CDI emerging as UK DB schemes turn increasingly cashflow negative

Net contributions into the private DB schemes turned negative in 2011, and when investment income is also included, the private DB sector turned cashflow negative in 2015.

Currently most schemes finance their negative cashfows through divestment, meaning that they risk having to liquidate their assets in down markets and therefore crystallise losses. Cashflow driven investment is emerging as means of providing income for when they need to pay out their pensioners, while also providing access to growth assets.

In this Deeper Perspectives we explore some of the key themes from our most recent Insights report – UK Defined Benefit 2017.

Private sector DB schemes continue to mature, and, naturally this results in an increasing number of schemes turning increasingly cashflow negative. Net contributions turned negative in 2011, and once investment income is included, cashflow turned negative in 2015. Liquidity planning is therefore an increasingly important consideration for schemes, yet most schemes currently rely on divestment of assets to finance their negative cashflows. This means that schemes risk having to liquidate assets in a down market and crystallise these losses.

Cashflow driven investment (CDI) is gaining significant attention as a solution to this problem. CDI can be loosely defined as managing assets on a buy-and-maintain basis such that the income generated from the assets are timed to meet the expected liability payments, and asset managers and consultants are finding ways of incorporating higher yielding asset classes within these strategies, in order to provide greater access to liquidity, credit, or even 'complexity' risk premia.

Various approaches to CDI have been adopted by different types of industry participant. Such differences pertain to, for instance, the asset classes used within such a solutions, or the degree to which the solution is a 'whole-of-portfolio' approach or a standalone, commoditised 'income-bucket' that sits within the broader investment portfolio.

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Spence Johnson is a Data and Intelligence consultancy focused on the global asset management business.

Employers bear the cost of deficits and outflows

Net contributions into private sector DB turned negative in 2011, and overall net income turned negative in 2015. Employers continue to bear the cost of funding deficits in UK DB, through both normal contributions and deficit reduction contributions.

Net contributions into private DB schemes turned negative in 2011, with more money leaving the DB system through benefits than what is received through contributions from members and employers. When also considering investment income, and transfers in and out of DB pension schemes, the private sector DB system turned cashflow negative in 2015.

The implication of this is that schemes will have had to rely on the realisation of investments at maturity or the sale of assets, or additional contributions from the sponsoring employer, in order to meet their liability payments. Careful cashflow management is therefore an increasingly important consideration for schemes.

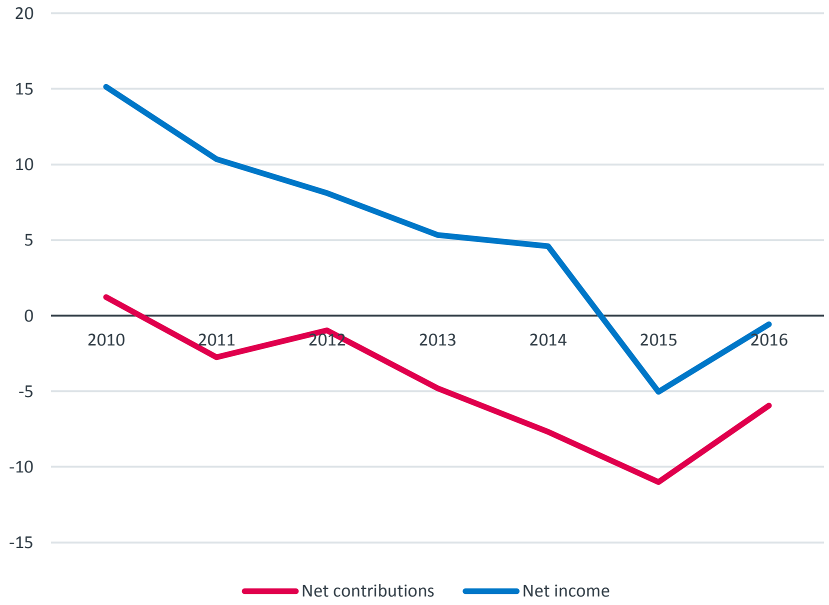
Please note:

- **Net contributions** comprises contributions minus all benefits paid to beneficiaries.
- **Net income** comprises net contributions as well as investment income, administration and other costs, and the effect of any transfer values in or out of schemes. It does not account for cash gained or spent on the sale, purchase or realisation of assets.

Analysis of the breakdown of contributions shows that given the very low levels of active membership, employee contributions are very low. In 2016, employers contributions accounted for 94% of the £30.7bn paid into DB schemes through contributions.

After being on a downward trend since a 2017 peak of £17.6bn in 2012, the total value of deficit reduction contributions (DRCs) rebounded to £15.6bn. DRCs therefore accounted for 51% of total contributions in 2016, having been lower than normal employer contributions in 2014 and 2015.

Net income and net contributions into private DB
£bn, 2010-2016



ONS, Spence Johnson analysis

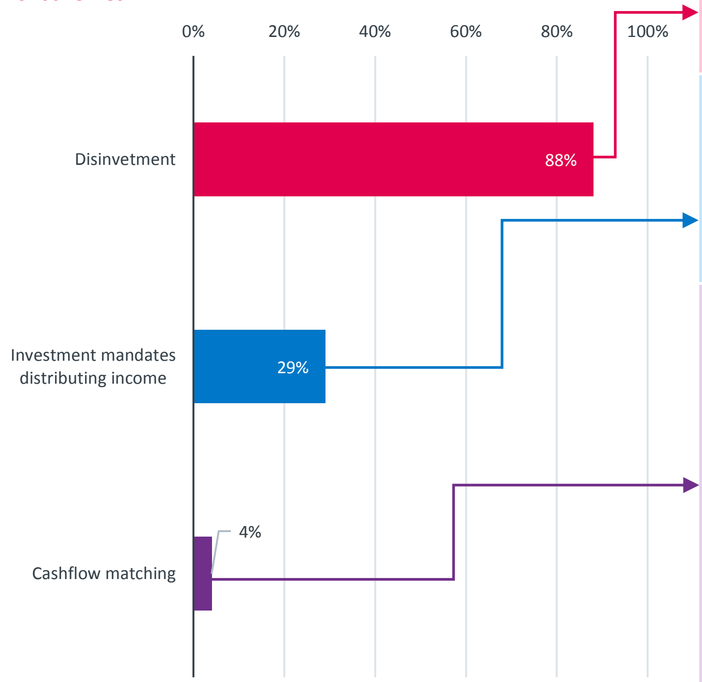
Total contributions and benefits paid for private DB
£bn, 2010-2016

ONS, Spence Johnson analysis

Most schemes currently rely on disinvestment

Most DB pension schemes currently rely on divestment of assets to meet their short term cashflow needs. Only 4% are using a ‘cashflow-driven investment’ approach, the rest relying on mandates distributing income.

Method of financing cash outflows
% of schemes



- Does not necessarily require a change in the asset allocation.
- Entails high risk of having to sell assets in inopportune moments.
- Requires liquid assets.

- Offer a steady income distribution as well as capital appreciation.
- Possibly more suitable for schemes only just entering cashflow-negative territory.
- Still suitable for schemes targeting buy-out, which requires liquidity.
- May rely more on uncontracted cash flows

- Entails holding assets on a buy-and-maintain approach, such that coupon and principal payments are timed to match the expected liability payments.
- The buy-and-maintain approach allows for the inclusion of illiquid asset classes.
- Implemented as either a whole-of-portfolio approach or as a specific cashflow-matching segment within the broader investment portfolio.
- The high level of bespoking and lack of liquidity comes at a cost of lower flexibility for schemes. For example, schemes may not be able to purchase a bulk annuity if they lack sufficient liquid assets. Also, schemes with highly leveraged LDI strategies may be constrained in terms of the illiquid assets that can be held.

Mercer, Spence Johnson analysis

Schemes have generally largely been concerned with the absolute value of their assets relative to their liabilities, and for this reason LDI has firmly established itself as a core part of the DB investment landscape. However, LDI strategies will not necessarily offer the liquidity needed to pay out the liability cashflows when they fall due. As schemes close, and schemes turn cashflow negative, the need for managing the liquidity needed to pay member benefits becomes increasingly important. A recent survey of DB pension funds identified three different broad methods used by schemes to finance negative cashflows:

1. Disinvestment:

88% of schemes finance negative net cash outflows through divestment of their assets. While this may seem suitable for a fully-funded scheme, it runs the risk that assets will be sold at inopportune moments in a down-market. Absolute-return investment mandates aim to reduce this market risk through their strong focus on capital appreciation and low drawdown.

2. Investment mandates generating income:

A further 29% of schemes aim to generate the cashflow needed to meet liability payments through investing in income-generating mandates. Such strategies may offer a regular income stream as well as capital appreciation of the underlying investment. This might include certain fixed income strategies, as well as some multi-asset income and equity income, as well as investment in some alternative asset classes. The income generated by these investment mandates may not in itself be enough to match the cash payments generated by schemes if the scheme is very mature and deeply cashflow negative.

3. Cashflow matching:

Only 4% of schemes stated that they were using a ‘cashflow matching’ approach. This type of strategy involves managing investments on a buy-and-maintain basis, with coupon and redemption payments timed to match the scheme’s liability outflows. Some strategies may make significant use of illiquid assets. Some consultants and managers are making significant innovation in this space, taking the view that use of these strategies will become more popular as the UK DB market becomes increasingly cashflow negative. This update will go on to discuss these strategies in more detail.

Buy-and-maintain is a core part of CDI

Buy-and-maintain credit is emerging as a core component of cashflow matching investment strategies. Further, the notion of schemes having 'growth' and 'matching' portfolios may be expanded to include an 'income' portfolio.

Because it can be tailored to scheme-specific circumstances, and match the scheme's expected cash outflows, buy-and-maintain credit is emerging as a core component to cashflow-matching investment strategies.

Aviva Investors have produced an example of how buy-and-maintain credit, in combination with alternative income, could be used within a scheme's investment portfolio. This represents an expansion of the established 'growth' portfolio and 'matching' portfolio approach, to also include an 'income' portfolio.

1. Growth assets

The portfolio may contain a typical 'growth' portfolio, comprising, for instance, equities or a DGF such as Aviva Investors Multi-Strategy (AIMS) Target Return.

2. Buy-and-maintain credit

The portfolio may contain buy-and-maintain credit as part of an 'income' bucket, put in place to generate stable and predictable cashflows that can match a scheme's liability outflows. This may be customisable through bespoke hurdle rates, duration management and risk preferences.

3. Alternative Income

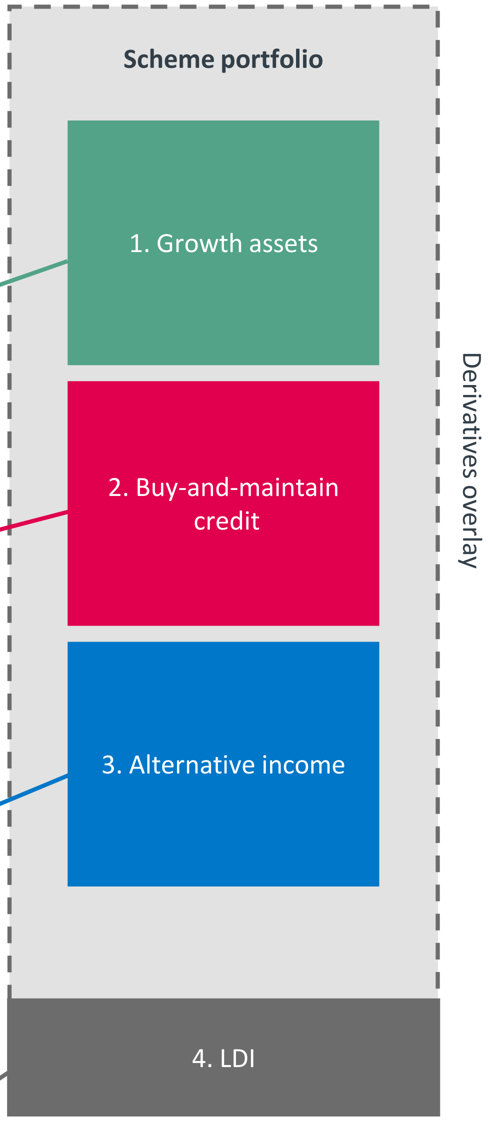
The 'income' bucket may supplement the buy-and-maintain credit approach with an 'alternative income' portfolio, which invests across a range of non-core fixed income products including real estate debt, infrastructure debt, private corporate debt and structured finance. This may be customisable segregated strategy. Aviva launched a pooled, open-ended 'Alternative Income Solutions Fund' launched in February 2017 bringing these asset classes within a pooled fund offering, targeting a BBB-investment grade credit risk profile, and a target income of 3M LIBOR+2%.

4. LDI

The traditional 'matching' LDI component could be implemented using a separate LDI strategy, or as a derivatives overlay across the scheme's entire investment portfolio.

Example of how CDI may be implemented across a scheme portfolio

Illustration of different portfolio 'buckets'



Aviva Investors, Spence Johnson analysis

Janus Henderson offer 'amortising' CDI strategy

In contrast to some of the consultant approaches that are implementing a cashflow driven investment philosophy across a scheme's entire investment portfolio, some asset managers are considering CDI as specific strategy type to be used within a portfolio.

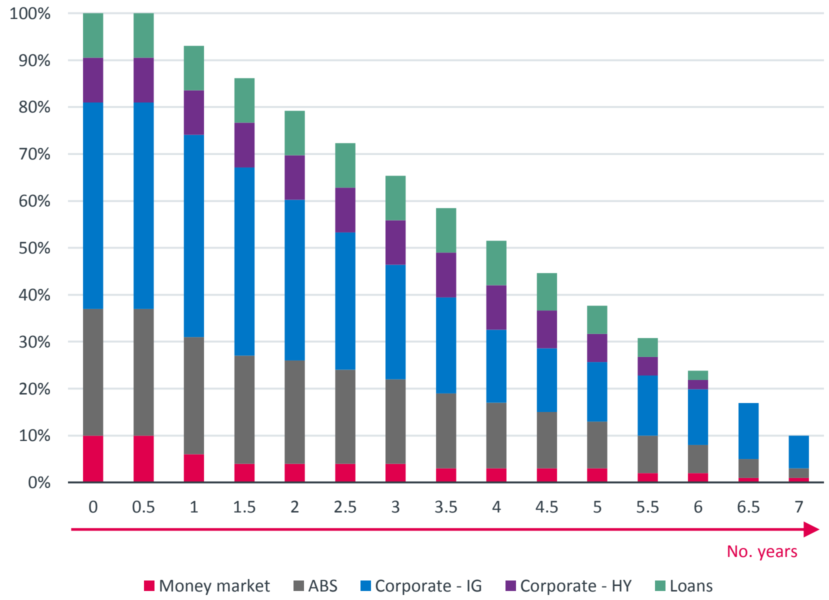
While consultants are more likely to consider implementing CDI as an investment philosophy across a scheme's entire investment portfolio, some asset managers may be more likely to consider CDI as a specific strategy type that can be used as a component within the broader investment portfolio, in a similar fashion to the way that LDI is now broadly considered as an asset class.

While LDI is a solution aimed at matching the mark-to-market value of the scheme's assets to its liabilities, CDI proposes a means of matching short and medium term liability cashflows with cashflows generated by a portfolio managed on a buy-and-maintain basis. The investment portfolio can be structured such that the periodic coupon and redemption payments received upon the maturity of the underlying assets are timed to be synchronised with the liability cash outflows. Therefore, the scheme will not have to raise cash by selling assets.

The adjacent example describes Janus Henderson's CDI proposition. The 'amortisation' approached used in such a strategy outlines how the absolute value of assets within the portfolio declines over time, as the cashflows are paid out to the scheme. Janus Henderson have indicated that the typical length of solution may be 5-10 years, and offer diversification across a range of different asset classes within fixed income.

This type of solution, at least in the short term, is most likely to be offered on a customisable basis to individual schemes. For example, schemes may wish to bespoke the offering based on their risk appetite, target return, the underlying asset classes being used, and the profile and timing of cashflows in order to get the best possible match. Depending on scheme demand, we may expect that cashflow-driven investment may evolve through the development of pooled fund offerings, either as 'profile-funds' or 'bucket-funds', in a similar fashion to the evolution of pooled LDI.

Amortising nature of Janus Henderson's proposed CDI portfolio – illustrative example
% of total assets by asset class



Janus Henderson

Janus Henderson's cashflow driven investment strategy
Key features

Aims	Help DB pensions schemes meet their shorter-term cash-flow requirements, "while avoiding selling down assets at inappropriate times or holding high cash balances".
Timeframe	Shorter term cash flow needs (5-10 years)
Asset classes used	▪ Asset backed securities ▪ High yield ▪ Credit ▪ Government bonds ▪ Secured loans
Customisation	The characteristics of the CDI portfolio are bespoked to individual client needs based on: ▪ Target yield ▪ Asset and rating mix ▪ Profile and timing of cashflows

Janus Henderson

Mercer are implementing 'CDF' for schemes

Mercer have implemented a "cashflow-driven financing" approach across a scheme's entire investment portfolio. This included removing the scheme's entire allocation to equities, and DGF - while credit now accounts for 50% of the scheme's assets.

The adjacent graphic describes an example of a 'cashflow-driven financing' approach implemented by Mercer across a scheme's entire investment portfolio.

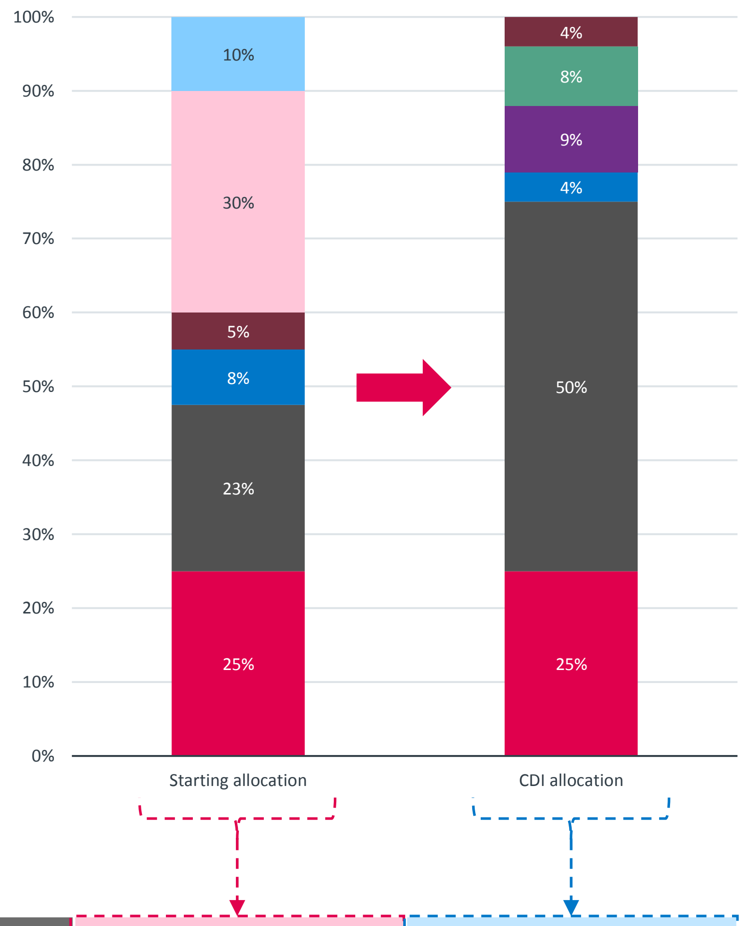
Significantly, the entire allocations to DGFs and equities, that were 30% and 10% of total assets respectively, were entirely removed as a result of the implementation of the CDF approach. In its place, the allocation to credit was increased substantially, from 23% to 50%, and the scheme also introduced a 9% allocation to private debt, and an 8% allocation to multi-asset credit.

The scheme has moved towards holding assets on a 'buy-and-maintain' basis, whereby the underlying coupons and redemption payments at maturity of the underlying assets are matched to the scheme's forecast liability cashflows. This affords greater certainty over the amount of cash that will be generated by these asset classes over the short to medium term, and minimises the risk that the scheme would have to generate cash by selling assets in falling markets. This approach can also be implemented using illiquid assets, such as private debt, where the scheme may also benefit from an illiquidity premium.

The removal of equities and DGFs from the portfolio has had the effect of reducing the expected yield of the portfolio, from gilts +2% p.a. to gilts +1.5% p.a. However, the fact that assets are now managed on a buy-and-maintain basis has allowed the scheme to move away from a funding discount rate basis of gilts plus a fixed margin, to a 'dynamic' funding approach, where the discount rate is based on the yield of the buy-and-maintain bonds, and is reviewed on a monthly basis by the scheme actuary. The change in the funding basis used has the implication of improving the scheme's funding level, and also of reducing the volatility of the value of the scheme's liabilities. Further, the scheme's hedge ratio increased from 33% to 100% as a result of the adjustment.

'Cashflow-driven financing' approach case study'

Change of investment portfolio



Expected yield	Gilts +2% p.a.	Gilts +1.5% p.a.
Hedge ratio	~33%	~100%
Discount rate	Set as suitable gilt yield plus a fixed margin	Set as yield on assets held, less a margin for prudence that varies over time

Mercer

Previous editions

Previous editions Available from http://www.spencejohnson.com/

October 2017 – Number 50 – APAC institutions to outsource US$12trillion by 2021
In this Deeper Perspectives we explore some of the key themes from our most recent Market Intelligence report, APAC Institutional Client Opportunities - Rising 3Cs: Collaborate, Centralise, Consolidate.

July 2017– Number 49 – UK Drawdown's long road to opportunity
The impact of pension freedoms and its rapid transformation of the retirement income market in the UK is becoming clearer. It is evident that pensions in drawdown are now the first choice product for new retirees.

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April 2017 – Number 44- The rise of ESG and Factor-Investing in Euro DC Pensions
Despite the huge diversity in the characteristics of each DC market, factor-investing and the incorporation of ESG considerations within investment policy are emerging as two pervasive trends across European DC pensions.

March 2017 – Number 43- Insurance Asset Management
In the past, asset managers may have seen selling to insurers as pitching a range of products. In reality, due to the particular demands of insurers, outsourcing is an opportunity for asset managers to be active and help create a bespoke solution, unique to the issues faced by each insurer.

January 2017 – Number 42 – 2017 DGF's
Diversified growth funds have traditionally been focused on the UK institutional market, and DB pension schemes in particular. However, with lower forecast growth of DB for DGFs relative to DC, DGF providers are re-thinking their proposals.

December 2016 – Number 41 – 2016 Special Edition
In this special edition of Deeper Perspectives we look at three of the major themes prominent in the global institutional asset management business in 2016

September 2016 – Number 40 – UK DB: LGPS Reforms
Local authority pension schemes are merging into at least 6 pools. This means that asset managers will have to adjust to a vastly different competitive environment