Aon Hewitt
Retirement and Investment

Aon Investment Research and Insights

Cashflow Driven Investment Assets

Cashflow Driven Investment Series

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Empower Results®

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Executive summary

There are three reasons why a scheme may wish to consider Cashflow Driven Investments (CDI) as part of their investment strategy:

Meet outgoing cashflows

As discussed in the earlier paper on *Cashflow Management Strategy,* trustees may want income from their assets to meet outgoing cashflows and avoid regular disinvestments of capital.

Building a self-sufficiency portfolio

As discussed in the earlier paper on *Endgame Strategies,* if trustees are building a self-sufficiency portfolio as opposed to one focused on buy-out in the short to medium term. With a self-sufficiency endgame portfolio, the trustees' focus may be on maximising the chance of paying the pensions as they fall due with less focus on balance sheet volatility, the risk/return efficiency of the portfolio and ensuring liquidity for buy-out.

Good investment regardless of cashflow

Cashflow driven investments may make a good or reasonable investment regardless of the cashflows for some schemes. For example:

- For overall risk/return reasons
- Due to a preference for credit beta over other drivers of returns.
- As a way of making the LDI assets work hard, i.e. breaking down the traditional growth/matching split.

Introduction

This paper is the third in a series of three papers, which consider how meeting cashflows can be incorporated into wider considerations about schemes' investment strategies.

The purpose of this paper is to provide an overview of various CDI assets, and highlight considerations that clients should be aware of including:

- **Certainty of cashflows**
- **Liquidity**
- **Risk and return**
- **Liability matching properties**
- **Accessibility** – including pooled fund and segregated considerations.
- **Reinvestment risk**
- **Role of, and interaction with, Liability Driven Investments (LDI)**
- **Medium term view**

Asset class characteristics

There are a wide range of assets that can be considered as CDI. Trustees' preference for the type of assets they may wish to include in a portfolio will be determined by multiple priorities, including; the required return, liquidity and time horizon, as well as the trustees' beliefs and other objectives.

Cashflow driven investments can be grouped in to five broad areas:

1. **Strong Match**
   Low risk assets that very closely match liability cashflows, such as:
   – Cash
   – Gilts and Swaps / repos

2. **Liquid investment grade credit**
   Corporate bonds rated BBB and above. Typically accessed through:
   – Buy and maintain
   – Active or passive management
   – Credit Default Swaps (CDS)

3. **Liquid higher yield**
   Assets that provide contractual income, including:
   – Investment Grade Asset Backed Securities (ABS)
   – High yield debt
   – Emerging market debt
   – Bank loans
   – Insurance linked securities

4. **Illiquid income**
   Less liquid assets that provide contractual income, such as:
   – Long lease property
   – Real estate debt
   – Infrastructure debt
   – Direct lending

5. **Growth with income**
   Growth assets that provide income. For example:
   – Core property
   – Equities (income focussed)
   – Private rental sector property
   – Value add property funds
   – Infrastructure equity

It is worth noting that the majority of what is typically regarded as CDI assets fall within the middle three groups above (investment grade credit, liquid income and illiquid income) and are mainly focused on different forms of credit beta.

When assessing these different asset classes, and building a CDI portfolio, trustees should be aware of the different characteristics, including:

The default risk

For example, gilts have very low default risk followed by investment grade corporate bonds where default risk is also low. Default risk typically increases for cashflow driven investments categorised as liquid higher yielding but differs significantly across these asset classes. Some illiquid income assets may have very low default risk, such as infrastructure debt, and some may be more variable.

The certainty with which the timing of cashflows from each asset class can be predicted

Segregated gilt, investment grade credit and more liquid higher yielding assets can provide a medium to high degree of certainty around the timing of cashflows. There are some exceptions, for example investment grade Asset Backed Securities (ABS) where prepayment risk can reduce certainty of cashflows. Furthermore, assets with callable features and where the issuer has the option to repay its debt earlier can also provide uncertainty in terms of the asset's cashflow profile.

The type of cashflow (fixed or inflation linked)

The majority of CDI assets available provide fixed cashflows. Sourcing inflation linked cashflows is harder and typically means using some index-linked gilts and LDI. Other sources of inflation linked cashflows can include long lease property and some infrastructure debt. It is also worth noting that some assets, such as ABS and bank loans pay a floating rate, for example linked to the cash rate.

The liquidity of each asset class, typically represented by bid / offer spread or redemption period

Cash and gilts are very cheap to trade. Investment grade corporate bonds can have a bid offer spread of 0.7% to 0.8%. Liquid higher yielding assets will typically have a higher spread although can still be redeemed quickly with the possible exception of Insurance Linked Securities. Illiquid income assets can take considerably longer to redeem because they are typically accessed through closed ended vehicles which may, or may not, have a secondary market.

Yield over gilts or LIBOR

For example, investment grade corporate bonds at the time of writing yield around 1.2% above equivalent government bonds. Bank loans yield around 4.5% above cash and long lease property typically offers a net initial yields of between 3.5% and 4.5%.

The mark to market duration of each asset class (which could contribute to matching liabilities)

Assets such as gilts, corporate bonds, some liquid high yield assets and some illiquid income assets have duration. This means their price will move with interest rates, or government bonds, of the same duration. These assets will provide some level of liability hedge. Investment grade corporate bonds, high yield debt and emerging market debt are typically shorter duration than gilts. Note overseas assets will not move with UK interest rates — see section on Accessibility and Role of LDI.

The time period over which cash flows are received (and hence over which they can be used to match benefit payments)

It is possible to buy gilts which will provide cashflows over up to 50 years. Investment grade corporate bonds, high yield debt and emerging market debt typically provide shorter-term cashflows than gilts. Long lease property and infrastructure debt can provide cashflows over 20 years. Reinvestment is required when the assets do not provide cashflows to cover a scheme's longer-term cashflows — see section later.

The historic worst period drawdown

Additional yield can come at a price. It is useful for trustees to think about how different assets may act under different scenarios including historical ones.

Accessibility

Due to governance constraints and minimum investment limits, trustees with smaller pension schemes may not be able to access all these assets.

Pooled funds may offer smaller schemes a multi asset approach to access some of the assets listed above, particularly within the liquid income and growth with income categories. For example managers have income focussed Multi Asset Credit funds that pay out distributions. A multi-asset approach is more complicated for illiquid assets.

Trustees should also understand what they are getting when investing in "buy and maintain" pooled funds relative to segregated portfolios.

Buy and maintain credit segregated portfolios

Buy and maintain credit is implemented most efficiently through segregated mandates matching scheme specific cashflows. However, for smaller schemes, this approach may not be possible or affordable. The minimum size for a Buy and Maintain segregated mandate is typically £100 million.

Trustees should consider the following when using segregated buy and maintain credit as part of their CDI strategy:

- **How much credit risk do they wish to take?**
  Typically we expect most clients to focus on investment grade in this part of the CDI portfolio, but some trustees may be comfortable with lower grade bonds.

- **How much freedom to give the manager?**
  For example, if the rating of a bond changes should the manager sell or if the manager's view of the bond changes should the manager replace.

- **The majority of corporate bonds pay fixed rather than inflation linked payments.**
  In order to match any inflation linked liability cashflows, an allocation of other inflation linked CDI assets is required or use of inflation hedging via a LDI portfolio is needed.

- **Matching cashflows at longer dates is more difficult with corporate bonds than government bonds.**
  There are few long dated corporate bond issues (28% of the iBoxx £ Non-Gilts Index bonds are over 15 years). Longer dated bonds have higher sector concentration e.g. utilities bonds are often longer dated.

  In order to match longer dated cashflows, gilts or swaps may be required; these could be efficiently managed as part of a geared LDI portfolio.

- **There are relatively few UK corporate bond issues (1,000 UK versus c.10,000 global).***
  Global mandates are therefore preferable; however, this poses additional problems for UK pension schemes.

  **Source: Goldman Sachs, 15/11/2016*

  – Both currency risk and foreign interest rates should be hedged back to GBP in order to efficiently match the schemes cashflows.

This process will increase both the complexity and cost of the buy and maintain portfolio.

Buy and maintain credit pooled funds

There are two approaches to buy and maintain credit pooled funds. "Evergreen" funds are designed to maintain a constant duration and roll over the assets as they approach maturity. These funds typically only pay out the coupon income from the portfolio. The funds are also benchmarked against a customised investment grade credit index, bearing a resemblance to alternative indexation products. We do not believe that this is a suitable approach for schemes looking to match cashflows.

The second pooled fund approach is through the use of "decaying" funds with a target date for maturity. These funds are constructed to deliver cashflows from coupons and redemptions which run down over time in a similar way to pooled LDI funds. These funds are offered in "vintages" which target a specific range of maturities (e.g. 15–20 years). This is a more approximate solution than a segregated mandate and we believe this is a suitable approach for smaller schemes that want to include buy and maintain credit to match a portion of their cashflows.

Reinvestment risk

Many CDI assets have shorter maturities than most pension schemes. As a result, these positions will need to be rolled over to match longer term cashflows as income and capital are returned.

The risk is that when purchasing new CDI assets, the assets have become more expensive, for example due to:

- **Credit risk**
  This is the risk that the credit spread may move.
- **Interest rate risk**
  If interest rates fall the price of purchasing fixed income assets at a later date will become more expensive. This risk could be hedged by using LDI to cover the interest rate risk not covered by the CDI assets – see next section.

We recommend that clients are aware of market conditions when they reinvest and choose assets that are most appropriate at that time, i.e. the CDI portfolio chosen today may be very different to one in a few years' time. See section on medium term views for more information.

Role of LDI and interaction with other CDI assets

As mentioned in the sections above, in order to match inflation linked and long term liability cashflows, and to reduce the interest rate component of reinvestment risk an LDI mandate can be used alongside CDI.

However, the use of geared LDI in combination with CDI can present issues that will need to be taken in to account before implementation, including:

- A CDI portfolio will have liability matching properties and so should be taken into account when constructing a liability benchmark. Trustees may want to consider a "haircut" when taking into account these assets, depending on the certainty of cashflows. This haircut is similar to the actuary not allowing for the entire yield in the discount rate of CDI assets.
- LDI portfolios may require collateral to be posted following a rise in yields or fall in inflation. Many of the assets listed above are unsuitable to use as a source of collateral should this be required. It is therefore very important for schemes to consider how they will source collateral. For example, trustees may wish to include a non CDI part of the investment strategy that allocates to liquid, low risk/return and uncorrelated assets/strategies such as Absolute Return Bonds.

If a global buy and maintain credit portfolio is constructed and currency and interest rate risk is hedged, these will also require collateral to be posted. It is usually more efficient for a single manager to manage these exposures alongside the LDI collateral.

"A CDI portfolio will have liability matching properties and so should be taken into account when constructing a liability benchmark"

Medium term views

The use of CDI in a portfolio is intended as a long term strategy. However, we believe that is important that trustees consider their medium term views of an asset class before making an investment.

For example, at the time of writing, we have a positive medium term view for Insurance Linked Securities, Direct Lending, Real Estate Debt and for the Private Rental Sector relative to other asset classes.

Examples of more negatives views include:

- Infrastructure debt is relatively expensive, due to its popularity amongst insurers and banks.
- UK corporate bonds are not offering enough spread above gilts that we would consider them good value, particularly given uncertainty around Brexit and the risk of reduced supply, liquidity and higher transaction costs.

Discount rate considerations

It is reasonable to use a CDI based discount rate if a CDI based investment strategy is implemented.

Trustees will need to take prudent account of the yield; in particular a margin for default risk, and reinvestment risk will need to be considered and also some level of haircut may need to be applied for those assets with less certain cashflows.

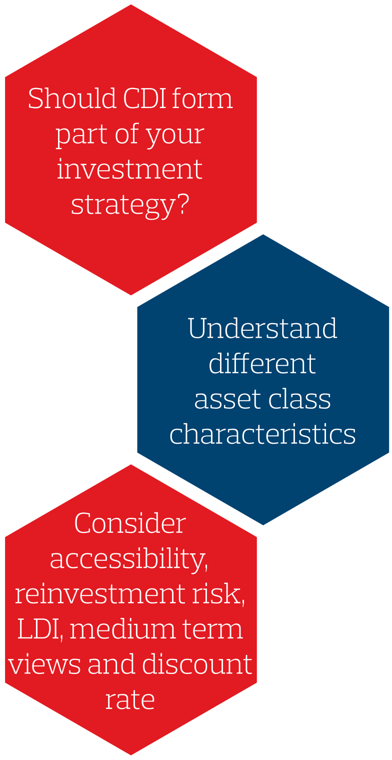
Trustees may also wish to limit a CDI based discount rate from increasing above certain levels. For example, how would trustees react if investment grade credit spreads reached around 5% as in 2008? Trustee's should be prepared for this kind of scenario, with thought put into the balancing the increase in expected yield/ return from an increase in credit spread versus the potential increase in defaults in this type of situation.

It is important for Trustees to assess the risk of their investment strategy through multiple lenses including beliefs, economic scenarios and risk breakdown. For example, CDI portfolios typically have a high allocation to credit risk. However asset risk, for example as measured by Value at Risk, may appear low when viewed relative to a CDI discount rate compared to a gilts discount rate.

Conclusion

CDI includes a wide range of assets, typically with a high element of credit. The different characteristics of these assets should be considered alongside the objectives and beliefs of trustees.

Furthermore, trustees should be aware of how accessible these assets are for them and how they manage the risks such as reinvestment risk together with the interaction with LDI and the impact on funding.



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For more information visit
aonhewitt.com/investment
or contact your Aon representative.

Contacts

John Belgrove
Senior Partner
john.belgrove@aonhewitt.com
+44 (0)20 7086 9021

Kate Charsley
Partner
kate.charsley@aonhewitt.com
+44 (0)117 900 4414

Sion Cole
Senior Partner and Head of Client Solutions
sion.cole.2@aonhewitt.com
+44 (0)20 7086 9432
Follow me on twitter – @PensionsSion

Tim Giles
Head of UK Investment Consulting
tim.giles@aonhewitt.com
+44 (0)20 7086 9115

With thanks to our authors

Louis-Paul Hill
Principal Investment Consultant

Josh Bull
Investment Analyst

Paul Whelan
Principal Fixed Income Manager Research

Kareena Moledina
Senior Fixed Income Manager Research

Oliver Hamilton
Principal Real Estate Manager Research

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Registered Office:
The Aon Centre
The Leadenhall Building
122 Leadenhall Street
London EC3V 4AN

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