CDI Guide:

Rising to the challenge

Featuring:

- How the Covid-19 pandemic has kick-started greater interest in cashflow-driven investment and how DB schemes can implement this strategy
- How the time has come for cashflow-driven investors to adapt to investor, political and regulatory momentum around climate change
- Cashflow matching in pension asset management
- Company profiles

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Summary

- The market volatility and potential sponsor covenant issues from the Covid-19 pandemic may have caused DB schemes to keep a closer eye on their cashflows.
- Schemes that had implemented a cashflow-driven investment (CDI) strategy likely experienced lower volatility over the past year compared to schemes that did not.
- The predictability of CDI is a key benefit for DB schemes, particularly mature schemes that are increasingly cashflow negative.
- The number of CDI solutions provided by asset managers for schemes of all sizes to access is also helping drive CDI growth.
- Large schemes tend to prefer a bespoke solution for implementing CDI, while smaller schemes tend to use pooled CDI funds.

A wake-up call

Laura Blows explores how the Covid-19 pandemic has kick-started greater interest in cashflow-driven investment and how DB schemes can implement this strategy

The market volatility of the past year – a knock-on effect of the Covid-19 pandemic – may well have caused pension schemes to keep a closer eye on their cashflows.

"Covid-19 may have provided a wake-up call to many schemes. Although their assets may have been volatile, their cash outflows would have remained stubbornly constant, which can cause both sequencing risk and potentially higher transaction costs to fund these cashflows – two of the issues that cashflow-driven investing aims to overcome," AXA Investment Managers solutions strategist, Bruno Bamberger, explains.

Cashflow-driven investing (CDI) is an investment approach that tries to match the expected future cashflow requirements of the pension scheme.

"A properly constructed CDI portfolio ensures that cash is generated to meet pension benefits as they fall due, reducing the risk of being a forced seller of assets to meet benefits. This type of investing is typically well aligned to the long-term, predictable return profile pension scheme trustees look for," Hymans Robertson investment consultant, Ben Fox, clarifies.

"Where the liability discount rate is linked to the yield on CDI assets, this also reduces funding volatility and provides greater certainty to trustees and sponsoring employers. In many ways, CDI can be thought of as an extension of liability-driven investing, which many trustees have become comfortable with over the years."

Schemes that adopted a CDI strategy of holding contractual-income-focused assets and linking the liability discount rate with the yield on these CDI assets will have likely experienced significantly lower funding volatility over the past year, as widening, and subsequently contracting, credit spreads will have impacted both sides of the funding balance sheet, Fox expects.

"So long as the CDI asset cashflows were received as expected, a CDI portfolio will have done its job and pension benefits will have been paid," he adds.

However, the shadow of the pandemic has meant that company defaults and downgrades have been more likely, so schemes that had a CDI framework with "appropriate allowances for bad scenarios will have been able to withstand this better than those without".

Market conditions certainly play a role in whether CDI is an attractive strategy, Barnett Waddingham senior manager research analyst, Gaurav Gupta, highlights.

For example, the market impact from Covid-19 provided opportunities for the less risk-averse trustees to add more credit risk into their portfolio whilst credit spreads were wide, and coupons were high, he explains.

"However, fast forward to today, and credit spreads are tighter, and close to near all-time lows, making a CDI strategy more expensive to implement. This means when implementing a CDI strategy, investors need to be aware of the current market conditions and, from our experience, spread the investment over time, to get the average credit spread level, as it's very hard to time the market perfectly."

Timing market conditions may well be a consideration, but the internal changes and requirements of schemes themselves are a big driver for CDI implementation.

Rise in CDI

As HSBC Asset Management head of institutional sales for the UK, Scandinavia and the Middle East, Maria

Ryan, explains, the key benefit of CDI strategies is the predictability of the investment results.

"Predictability is particularly relevant for mature pension schemes that are increasingly cashflow negative," she states. "As this is the case for many UK DB pension schemes, the volume of pension assets – which are managed according to CDI strategies – can be expected to grow significantly."

This predictability of investment results is achieved by investing into more contractual type assets, such as bonds, and/or effective planning on how a pension expects to meet their cashflow obligations over the coming years, Gupta explains.

Another reason for the rise in CDI by pension schemes is the increase in the number of solutions provided by asset managers for pension schemes of any size to access, he adds.

"For example, three years ago 'maturing' buy and maintain pooled funds, a key component of any CDI strategy, were only offered by a small handful of providers, whilst now, that number has at least doubled. Whilst this may not sound a lot, we expect the universe to continue to grow, and more solutions to be launched, as pension schemes mature, de-risk their portfolio, and position their asset allocation to better meet expected cash outflows," Gupta says.

Bamberger expects the growth of CDI to continue for three key reasons.

First is the increasing number of DB schemes turning cashflow negative, "driving the need to invest in assets that pay income to offset these outflows".

Secondly, schemes are taking the opportunity to de-risk as their funding levels improve. "Rather than de-risk into cash, they can increase efficiency by implementing a CDI approach that provides both interest rate exposure and a return over government bonds," Bamberger says.

"Finally, pension schemes have become more comfortable with CDI as an investment approach to target both self-sufficiency and risk-transfer endgame options."

Options for access

The continued growth of CDI strategies is expected for DB schemes of all sizes. However, the ways in which they access CDI can differ.

"In our experience, we have found large schemes tend to prefer a bespoke solution where they can fully tailor the mandate to their individual cashflow, responsible investment views, risk and return objectives and investment beliefs," Bamberger says.

Meanwhile, Ryan finds that smaller schemes tend to use pooled CDI funds or a blend of suitable component funds. "However, the accuracy and individuality of a cashflow matching with pooled funds can be limiting. Every fund covers a comparatively broad range of maturities and only a few asset classes are represented in pooled CDI funds."

Rather than scheme size per se, Gupta finds that the approach to CDI depends on the amount of governance the trustees wish to take.

Broadly, there are three ways to access CDI, he says. There is the 'building blocks' approach, which takes the best-in-class funds from the asset manager universe and combines them into a CDI solution. "This has the greatest governance burden for trustees but can also produce excellent results. This is accessible for both small and large schemes as the best managers will often offer comingled versions of their strategies," Gupta explains.

Second is the 'one-stop shop' approach, where a manager offers a solution for combining their products into a CDI strategy given information on the client's cashflows and objectives. "This has the lowest governance burden for trustees as they work closely with one provider and can often be accessed by smaller schemes at a reasonable price," he explains. Third is a combination of the two approaches.

Considerations

No matter the approach taken, SEI, UK Institutional Group client strategy director, Alistair Jones, recommends schemes stress-test CDI strategies for liquidity shocks to help ensure CDI strategies are resilient in practice.

Gupta agrees that every scheme has its own set of circumstances. "As such there are a number of things to think through when considering: 'what would a CDI portfolio look like for my scheme?'; 'is CDI appropriate for my scheme today?' and 'how would I implement a CDI portfolio within my scheme?' The answers to these questions will be wholly scheme-specific. At the outset we believe it's vital not to see such an approach as 'all or nothing' and instead, think about it as a journey."

For most schemes, there is a balance to be struck between producing cashflows, generating return and managing funding level risk, he says.

"Schemes must also ensure that the CDI strategy meets its endgame target and remains consistent with its wider risk, return and climate objectives," Bamberger adds.

CDI strategies are also likely to evolve to meet schemes' changing requirements, such as incorporating climate change considerations into investment decisions.

"The coming years will usher in 'CDI 2.0' where *[CDI]* portfolios help schemes manage their climate and cashflow risk," he states.

But for now, it is the ripples from the pandemic that is affecting CDI take-up.

As Jones says, many pension schemes are now in a better position than they were pre-pandemic: "Although Covid-19 is still affecting people's daily lives, markets and funding levels react to future expectations. Those have now recovered for many schemes, meaning schemes may now be able to adopt a CDI approach that wasn't possible before."

Written by Laura Blows

How to build a climate-aware cashflow driven strategy

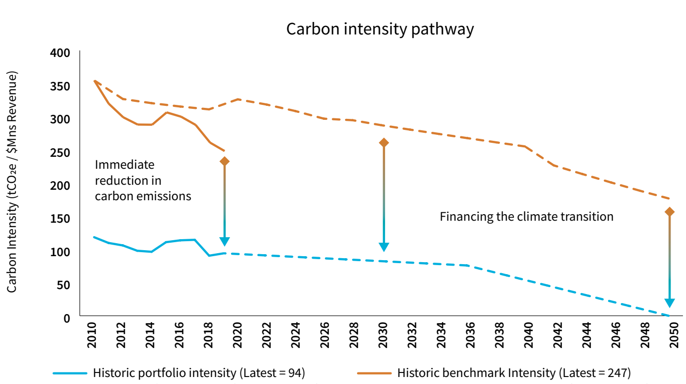
Pension schemes often have a long-term focus, aiming to build resilience both for today and for decades to come. This focus has made climate-aware investing an inescapable part of portfolio construction. Our approach is designed to address the physical risks of climate change and how investor, political and regulatory momentum around the issue will impact asset values. We believe the time has come for cashflow-driven investors to adapt to this new reality

Investors must act with urgency. We have seen a steady flow of new policy announcements and corporate commitments designed to align economies and companies with the goals of the Paris Agreement. This represents an acknowledgment of the risks that rising temperatures bring – emerging and material risks that clash with the predictability required in cashflow-driven investment (CDI). Put simply, climate change could significantly affect the performance of credit markets, one of the core components in CDI strategies.

Long-term credit has a natural alignment with the time horizon over which climate-related risks can materialise – what you invest in today should deliver sustainable cashflows for members by seeking to either allay climate-related risks or benefit from the transition to a low-carbon economy.

As the world moves towards the goal of carbon neutrality, we believe investors can 'AIM for Net Zero' by following a three-step process: **Assess, Integrate and Monitor.** Using this AIM approach to portfolios, we think pension schemes can effectively apply a climate lens to support the goal of resilient, sustainable cashflows to pay their members.

ASSESS – A surge in the volume and quality of data available around climate change has made it possible for investors to gain effective insights into how their portfolios are positioned from a climate perspective. It has also coincided with increased regulatory scrutiny around climate for institutional investors. Larger UK pension schemes, for example, must make disclosures around climate risks in line with the requirements of the Task Force on Climate-related Financial Disclosures (TCFD) from October 2021.



Considering these changes, pension schemes can assess how well-aligned their existing holdings are to the goals of the Paris Agreement, and how they can expect to perform in a transitioning world. Being aligned to the Paris Agreement is often interpreted as the pursuit of net zero greenhouse gas emissions by 2050, with interim goals in place to smooth the journey. This explains why carbon emissions are often discussed as a first step in assessing portfolios. We believe investors should look to the carbon pathway of companies, rather than simply the current emissions. Using a forward-looking approach could help to find best-in-class companies that are targeting decarbonisation or providing climate solutions. Investors may also begin to appreciate previously unrecognised climate-related risks and opportunities within their portfolios – which should help to improve the resilience of their cashflows.

Jargon buster

Cold-washing – While 'greenwashing' refers to the risk of companies failing to deliver on environmental-related commitments, cold-washing relates to the risks of investors optimising portfolios to create the lowest possible emissions. This might look appealing at the outset but could fail to drive wider and longer-term industry decarbonisation, one of the fundamental principles of the Paris Agreement. We believe there should be a healthy balance between low carbon and transitioning companies to fulfil investors' financial and climate objectives.

INTEGRATE – We do not see any viable passive route to building climate-aware portfolios. Once the assessment is complete, security selection is crucial in building investor portfolios that can both mitigate emerging climate risks and harness the opportunities presented, to secure their required financial returns over time.

The vibrant green bonds market will form part of the solution. Additionally, using a best-in-class approach across all sectors can allow schemes to maintain diversification while allocating capital to market leaders to ensure a whole-of-market transition. The maturity of bonds bought is also important as some climate risks are more likely to emerge over time, reducing the appeal of climate laggards at the long end. We use metrics such as Climate Value at Risk to guide investment decision making in a variety of scenarios, backed by deep fundamental analysis from our 40-strong credit research team and a conviction-led, climate-focused engagement programme.

Jargon buster
Climate Value at Risk (CVaR) – This method of data analysis enables us to estimate the effect on assets in a variety of climate/temperature scenarios, from a 'cool' 1.5°C scenario to a 'hot' 3°C warming scenario. A cashflow driven investor can then see the potential performance of their climate-aware credit portfolio relative to a reference universe under those scenarios. The goal when creating and monitoring portfolios is to reduce the magnitude of the CVaR in absolute terms and to narrow the range of outcomes across likely scenarios – seeking to build resilience against the potential market impacts.

MONITOR – Climate investing is constantly evolving. Monitoring the steady flow of new commitments and data is critical if investors are to properly understand whether their climate-aware credit portfolios are achieving their financial and climate objectives.

The next few years will likely see further improvements in the quality and availability of data from issuers. This may include clearer assessments of so-called Scope 3 emissions which relate to the indirect effects of company products and services. More generally, there is significant impetus around the greater use of Science-Based Targets which will aid transparency and the ability of pension schemes to monitor their climate impact.

Cashflow driven investors should expect their climate profile to consistently improve over time as more issuers make more ambitious commitments and as our portfolio managers re-invest in bonds selected to achieve clients' cashflow goals while supporting the transition to a more sustainable economy.

Jargon buster
Engagement – A dialogue with companies is a key pillar for any climate framework. Investors can help protect their investments by encouraging changes in business strategy such as committing to net zero by 2050. It is essential as a risk-monitoring and mitigation tool, particularly given the long time horizon for many cashflow driven investors. AXA IM has encouraged some of the world's largest greenhouse gas emitters to lower their carbon footprint and commit to robust decarbonisation plans. And in both 2019 and 2020, climate issues represented the greatest portion of our engagement activity with management . We think CDI-style strategies can have greater influence over target companies as they are stable, long-term providers of capital.

AIMing high

We believe that by complementing traditional portfolio construction with climate analysis, portfolio managers can seek to construct a resilient, long-term credit portfolio that offers predictable cashflows. Owing to the long-term nature of CDI portfolios it is essential that investors start to incorporate this climate analysis now to avoid embedding risks into cashflows for years to come. Care must be taken as we navigate the path that the world is taking towards net zero.

Our goal through deploying this AIM process for clients' long-term, cashflow-oriented credit portfolios is to avoid the climate-driven financial risks and to benefit from the positive performance of climate leaders. At the same time, we continue to monitor the issuers to whom we allocate capital against their transition pathway and engage vigorously to generate better financial outcomes for pension scheme members and the world in which we live.

PENSIONSAge AWARDS 2020 WINNER
CASH-FLOW DRIVEN INVESTMENT (CDI) MANAGER OF THE YEAR

Written by AXA Investment Managers head of buy and maintain credit, London, Lionel Pernias

In association with AXA Investment Managers

A perfect match

Sandra Gueth explores cashflow matching in pension asset management

When managing defined benefit pension assets, two types of risk may be considered:

• **Valuation risk**

The valuation risk is the risk of a decrease in the funding ratio of the pension scheme at a point in time. To hedge this risk, the market value of the assets should be synchronised with the present value of the liabilities.

• **Economic risk**

Whereas funding ratios during the lifetime of the liabilities are only snapshots, the funding ratios of liabilities at their maturity dates are of long-term economic relevance. The risk of being underfunded at the maturity dates of the liabilities is thus referred to as economic risk.

Cashflow matching, ie generating cash inflows on the asset side that align to the timing and amount of cash outflows for the payment of member benefits (liabilities), is a key instrument for managing both types of risk. However, the different types of risk require different forms of cashflow matching. As liabilities are discounted with market interest rates, the valuation risk can most effectively be hedged by means of risk-averse, liquid bond portfolios. In contrast, reducing the economic risk of a pension scheme often requires returns above the discount rates of the liabilities. For achieving such returns, higher yielding instruments in the liquid fixed income and the illiquid alternative investment space can be used.

As the maturity of a pension scheme increases, economic risk becomes more relevant. As many DB pension schemes close and become cashflow negative, a shift towards cashflow matching with comparatively high yielding instruments – such as securitised and emerging market debt or direct lending – can be expected.

However, the maturity of the scheme is not the only aspect that needs to be considered when designing investment strategies for pension schemes. Other characteristics of the scheme such as the nature, timing and duration of the liability profile also have to be taken into account. For small pension schemes, for example, uncertainty about liability future cashflows may be higher than for schemes with a larger liability volume. In order to avoid unplanned sales of illiquid assets to cover cashflow shortfalls, small pension schemes may prefer to have a higher allocation to liquid assets.

Due to the impact of scheme-specific requirements, there is no unique 'optimal' investment strategy for all pension schemes. For every scheme, an individual strategy should be developed, which is aligned to the scheme-specific needs.

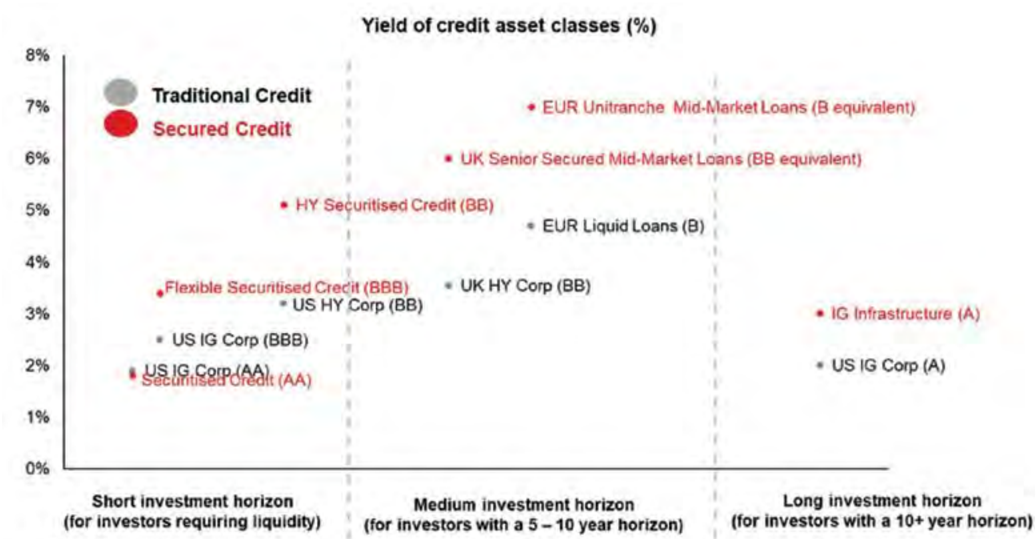
Such scheme-specific investment strategies consist of two components – a target strategy and a process for transitioning the current investment portfolio into the target strategy.

The key drivers for the development of the target strategy are:

• The characteristics of the pension liabilities (nature, timing and duration)

• The scheme-specific requirements

• The available range and relative valuations of financial market instruments



Source: Corporate bond yields, HSBC Global Research as at 7th April 2021; Secured income yields: HSBC Asset Management as at 31st March 2021. For illustrative purposes only

All three parameters can best be taken into account by a cashflow-driven approach. The idea underlying this approach is to invest every component of the asset portfolio according to its specific investment horizon. This allows the scheme to very accurately align the asset portfolio with the underlying liability cashflow profile. In particular, it can be considered that different asset classes are suitable for different investment horizons. For example, securitised credit is attractive for shorter investment horizons, infrastructure debt is an interesting option for longer horizons.

The cashflow-driven approach is implemented by allocating the assets to the different expected liability cashflows and thereby generating virtual sub-portfolios. For every sub-portfolio, an investment strategy is identified that best meets the pension scheme's funding objectives. Importantly, the sub-portfolios corresponding to the different liability cashflows are not entirely independent. This is because the cashflows generated across the entire lifetime of long-term investments are integrated into the relevant sub-portfolios together with cashflows generated from shorter investment horizon assets. The investment strategies for the different sub-portfolios are thus developed successively, starting with the sub-portfolio corresponding to the most long-term liabilities. The resulting investment strategies on the cashflow level are then aggregated to the target strategy for the overall scheme portfolio.

Applying this cashflow-driven approach does not imply that the target strategy consists only of buy and maintain investments. Other instruments, such as derivatives for hedging risks on the liability side or growth investments, can also be represented. Hedging instruments, for example inflation swaps, allow the scheme to capture the uncertainty on the liability side. Growth asset classes may contribute to closing funding gaps or to building up risk buffers. However, buy and maintain investments often are core components of target strategies for pension portfolios. As far as the default risk can be effectively controlled, buy and maintain investments on the one hand reduce the uncertainty about future cashflows on the asset side. On the other hand, they can serve the same purpose as growth assets. Investments with a yield above the discount rate of the liabilities improve the relation of assets and liabilities at the maturity of the liabilities. Due to the broad range of potential buy and maintain investments, the risk-return profile of the buy and maintain component can be very flexibly adjusted to the requirements of the pension scheme.

Within the buy and maintain universe, traditional credit typically forms the core of most portfolios. However, there are many opportunities in 'secured credit' asset classes to meet the liquidity and risk-return profiles of investors. Such assets are often overlooked. And consequently, even in liquid segments of the market such as securitised credit, there is typically a yield premium versus traditional credit, particularly further down the credit spectrum, owing to the complexity of the asset class. The chart illustrates the yield premium secured credit opportunities across the risk, return and liquidity spectrum over traditional credit assets.

Where schemes have a longer investment horizon and more certainty as to their liability profile, illiquid credit asset classes such as direct lending and infrastructure debt may be attractive, providing long-term predictable cashflows and at a yield premium to traditional liquid credit. We estimate that the yield premium in these secured credit asset classes is approximately 1-3 per cent over liquid credits with similar risk profiles. Therefore, where schemes have longer time horizons, and given the magnitude of the illiquidity premium, there is an argument to be made that such schemes consider these long-term and higher-yielding assets.

For pension schemes wishing to move forward with adopting a cashflow approach, key first steps include evaluating the cashflow profile of the existing portfolio including the current buy and maintain component, if any, determining the scheme-specific target strategy, and evaluating overlap and transition optimisation. By definition, the long-term result of a buy and maintain investment is determined by the market conditions at the starting-point of the investment. For buy and maintain investments, smoothing returns by a phased implementation is thus particularly relevant. Moreover, it needs to be considered that investments in the alternative space have significant set-up periods and so may impact the target strategy. Not only the design, but also the transition to and the ongoing management of the target strategy including the buy-and-maintain components are therefore key to efficient pension asset management and pension fund mission achievement.

Written by HSBC Asset Management Germany head of asset liability and overlay management, Sandra Gueth

In association with

HSBC Asset Management

AXA Investment Managers

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AXA IM is a leading investor in green, social and sustainable markets, managing c£500 billion of ESG-integrated, sustainable and impact assets. We are committed to reaching net zero greenhouse gas emissions by 2050 across all our assets, and integrating ESG principles into our business, from stock selection to our corporate actions and culture.

Whether looking to secure cashflows, enhance growth portfolios or make an impact, our goal is to provide clients with a true value responsible investment solution, while driving meaningful change for society and the environment.

AXA IM employs over 2,440 employees around the world, operates out of 27 offices across 20 countries and is part of the AXA Group, a worldwide leader in insurance and asset management.

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Pensions Age Awards 2020 Winner
Cash-flow driven investment (CDI) manager of the year

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