Aegon Asset Management

CASH FLOW-DRIVEN INVESTING

March 2019

Moving beyond a corporate defined benefit solution

Cash flow-driven investing (CDI) is just as the name would suggest, an investment approach focused on delivering a consistent, reliable stream of income to meet the obligations of an organization. CDI is growing in popularity and is most commonly presented as an investment solution for corporate defined benefit plans that must make regular benefit payments. But corporate defined benefit plans do not stand alone in this challenge. Public, multi-employer and healthcare plans as well as foundations and endowments have regular cash flow requirements. The same can be said for insurance companies and nuclear decommissioning trusts. Although each organization's cash payments may serve a different purpose, the need is the same: a programmatic and systematic approach to meet current and future liabilities.

C stands for customized

Cash flow-driven investing is an option for a wide variety of investor types because it is highly customized. No two organizations look the same; therefore, no two CDI portfolios should be identical. Each CDI portfolio can be tailored to an organization's specific circumstances, taking into consideration cash-flow predictability, expected contributions, risk tolerance, liquidity needs, tax considerations and the overall objective of the portfolio. Each of these factors contributes to the development of a customized investment solution (**Exhibit 1**).

Exhibit 1: Components of a CDI solution

Asset mix: Cash flows, comprised of principal and income, are typically generated by investing in a combination of investment grade-rated corporate bonds, high-quality structured finance, short-duration high yield corporates and emerging market (EM) debt. Additional yield can be sought through higher allocations to asset classes with a higher risk/return profile such as to high yield corporates and EM debt, bank loans and even distressed debt.

Curve positioning: Where traditional liability-driven investment strategies focus on investing further out on the yield curve to match long liabilities, a CDI portfolio focuses on investing on the front end of the yield curve where credit risk may be more appealing. Research analysts often have more transparency into the short-term viability of a potential investment and therefore, have stronger conviction in their credit recommendations.

Time horizon: A CDI portfolio can be constructed for a preset time horizon or it can be rolled forward as contributions are added on a periodic basis. Annual contributions create additional flexibility in portfolio construction and offer an opportunity to buy further out on the yield curve, which potentially translates to higher yields, spreads and total returns.

Different cash flow needs require tailored cash flow solutions

Public and multi-employer defined benefit plans

Scenario: Asset allocations vary significantly among defined benefit plans based on their respective funded status. Because a majority of these plans are still heavily invested in equities and alternatives, the fixed income allocation is a potential source of diversification and is often invested in a Barclay's Aggregate-like core bond portfolio.

Why Now? We see many defined benefit plans are already cash-flow negative or heading there soon. This phenomenon forces investment committees, advisors and consultants to spend a significant amount of time finding creative ways to make benefit payments. Often, plans are forced to sell assets to make payments. This could be an inefficient use of resources and an ineffective way to make investment decisions. For example, selling equities during a turbulent market period or following a major correction may not be a prudent approach.

Solution: Implementing a programmatic and systematic approach to managing short-term obligations equips investment committees with a solution designed to prevent the need to sell assets to satisfy cash-raising responsibilities. Using a CDI portfolio promotes the goal of funding obligations with a predefined set of asset flows. As shown in **Exhibit 2**, a CDI portfolio can provide similar diversification to a Barclays Aggregate portfolio but can be positioned with the goal of generating higher yields. For plans or trusts with an asset allocation that favors equity risk, having a CDI portfolio may help to hedge the portfolio during a market downturn.

Endowments and foundations

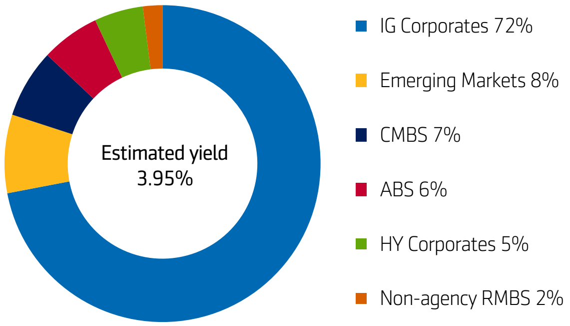
Scenario: Endowments and foundations, similar to pension plans, have a need to invest for the short and long term. The asset allocation mix is typically a blend of return-seeking growth assets and diversified, preservation-oriented assets with the goal of supporting today's expenses and tomorrow's growth.

Why Now? Endowments and foundations rely heavily on fundraising to remain sustainable, which can be unpredictable. If current year fundraising is needed to meet the current year's spending budget and goals are not met, organizations could be forced to liquidate assets and are left with no new money to invest for future growth. The likelihood of a fundraising shortfall is increased during economic slowdowns, when asset prices are also more likely to be depressed.

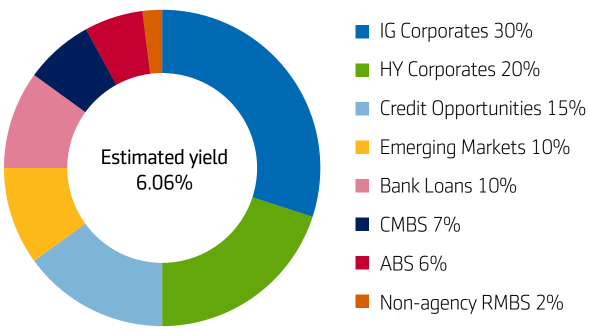
Solution: A CDI portfolio can be designed with the goal of creating a cash flow stream to account for a portion or all of a fund's annual budget needs. Using a strategy that doesn't rely on current year fundraising to meet the projected cash flows, relieves some of the pressure for fundraising. This also gives the investment committee freedom to use the annual fundraising as they best see fit—whether that is in new long-term investments or further investment in their CDI portfolio. Either way, with short-term concerns planned for, it allows for a more dynamic and flexible approach to the remaining asset allocation of the fund.

Exhibit 2: Diversification of a CDI, CDI Plus and Core Aggregate portfolio

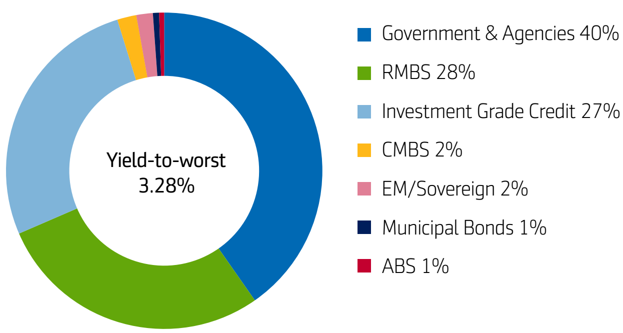
CDI hypothetical portfolio



CDI Plus hypothetical portfolio*



Bloomberg Barclays US Aggregate Index



Source: Bloomberg and Aegon AM US as of December 31, 2018. *Enhanced version of a CDI portfolio through allocations to asset classes with a higher risk/return profile.

Hypothetical examples for illustrative purposes only. Individual accounts may vary based on restrictions, substitutions, cash flows and other factors. This information should not be considered a recommendation to purchase or sell any particular security. It should not be assumed that a client's portfolio will mirror the characteristics shown or any of the holdings listed were or will be profitable. As with any investment strategy, there is potential for profit as well as the possibility of loss. There is no assurance that the intended benefits stated above will be achieved. Refer to appendix for important disclosures regarding the estimated yield calculations.

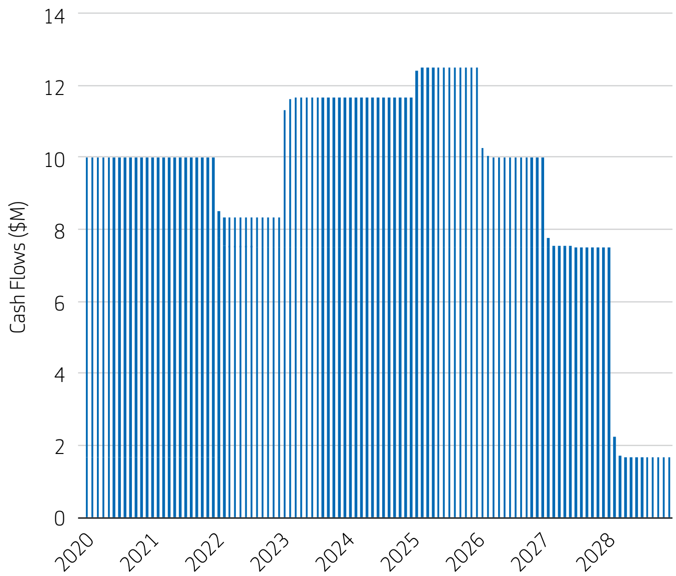
Nuclear decommissioning trusts

Scenario: Over their lifespan, nuclear power plants have been investing money in a trust in an effort to ensure sufficient capital is available for the decommissioning process. During this phase, the fund is invested with an accumulation objective.

Why Now? Many nuclear power plants are nearing the end of their licensure and are beginning to decommission. Preparing for that eventuality is a massive undertaking. Once the decommissioning timeline is set, cash flows associated with estimated costs can be determined. If funding levels are adequate, investment strategies may shift from accumulation to preservation. **Exhibit 3** captures the hypothetical cash flows (expected costs) of a plant whose responsible party, whether an owner or contractor, has decided to fully decommission the site over a 10-year period.

Solution: A CDI portfolio, comprised of a variety of fixed income asset classes may add significant value over a portfolio of duration-matched Treasurys or other investment strategies currently employed. A combination of corporate credit and structured finance assets with little prepayment or extension risk have potential to generate higher yields. By designing the portfolio in a laddered fashion and building in a buffer for potential cost overruns, liquidity risk is thoughtfully managed. Additional liquidity can also be built into the portfolio to allow for additional funding should unexpected costs arise.

Exhibit 3: Hypothetical decommissioning costs



Source: US Energy Information Administration. As of November 2018.

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Explore your options with a trusted service provider

Aegon Asset Management US specializes in multi-sector, fixed income investing, an expertise built over decades of working closely with insurance company clients. Having evolved from the customized benchmarking and asset-liability management approach used by life insurance companies, we have adapted skills and developed infrastructure to help match asset cash flows with anticipated liabilities. Our highly customized approach to finding relative value at each part of the yield curve is born from the strategy life insurance companies utilize to match their highly complex, unique liability streams.

We combine the full complement of our deep, fundamental, bottom-up research culture, our global top-down house view process, and our risk management systems, to provide customized solutions for all types of clients.

Although the investment approach is consistently applied, the partnership between clients, advisors, actuaries, investment consultants and investment professionals is essential to developing and implementing a customized investment solution that meets the unique needs of each investor.

Disclosure

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Specific sectors mentioned do not represent all sectors in which Aegon AM US seeks investments. It should not be assumed that investments of securities in these sectors were or will be profitable.

Diversification does not ensure a profit nor guarantee against loss.

The hypothetical portfolio shown is based on Aegon AM US' investment process and assessment of the market and reflects a portfolio of securities similar to one which the team would construct today if they were awarded a mandate of similar market value to the portfolio shown. The portfolio is based on sample guidelines and the credits selected are reflective of similarly managed portfolios, but do not reflect an actual portfolio currently being managed by Aegon AM US.

Portfolio holdings and other characteristics in individual accounts may vary depending on a variety of things, including but not limited to, account size, cash flows, account restrictions, and other client-specific factors. Holdings selected may positively or negatively affect performance. Portfolio holdings are subject to change daily. The hypothetical portfolio has been provided for purposes of comparison and as an example of a potential allocation. It should not be assumed that a client's portfolio will mirror the characteristics of the example shown. The hypothetical portfolio characteristics shown are not taken from a representative account, although Aegon AM US manages accounts in similar strategies. The specific characteristics provided may not represent the entire universe in which Aegon AM US seeks investments.

Hypothetical examples are for illustrative purposes only. Hypothetical or simulated examples have several inherent limitations and are generally prepared with the benefit of hindsight. There are frequently sharp differences between simulated results and actual results. In addition, there are numerous factors related to the markets in general or the implementation of any specific investment strategy which cannot be fully accounted for in the preparation of simulated results, yet all of which can adversely affect actual results. No guarantee is being made that results shown will be achieved.

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The estimated yield calculations shown for the CDI and CDI plus hypothetical fixed income allocations were calculated using the following market indices as proxies for asset class allocations. All yields used in the calculations are as of quarter end. The yields for each asset class were weighted by the allocation weighting to calculate an estimated yield for each investment strategy.

IG Corporates: Bloomberg Barclays US Intermediate Credit Index

Emerging Markets: Bloomberg Barclays Emerging Markets USD Aggregate 3-5 Year Index

CMBS: Bloomberg Barclays CMBS 1-3.5 Year IG Index

ABS: Bloomberg Barclays ABS Index

HY Corporates: Bloomberg Barclays US High Yield Ba/B 1-5 Year Index

Non-agency RMBS: Bloomberg Barclays US Treasury 1-3 Year Index

Credit Opportunities: Bloomberg Barclays US High Yield CCC Only Index

Bank Loans: Credit Suisse Leveraged Loan Index

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