

Carefully underwritten commercial mortgage lending strategies can serve as an attractive addition to LDI investor portfolio allocations. Commercial mortgage loans can offer a variety of benefits including diversification, relative value to investment grade corporate bonds and liability duration matching.

Liability-driven investing (LDI) is a portfolio strategy designed to help pension plans determine whether they have enough assets to cover their current and future payments. Traditional LDI portfolios primarily consist of Treasuries and investment grade corporate bonds. However, as discount rates have increased and funded status has improved, corporate pensions have sought different ways to de-risk through broadening their LDI opportunity set.

Commercial mortgage loans (CMLs) and construction permanent loans (CPLs) have historically been most prevalent within life insurance general account portfolios. At Aegon Asset Management (Aegon AM), we believe well-funded corporate defined-benefit (DB) plans intent on immunizing liabilities, share many of the same objectives as general account insurance portfolios. Although an allocation to CMLs/CPLs may represent a first-time allocation for some corporate pensions, Aegon AM contends they represent a strong solution that DB plans should consider.

CMLs and CPLs can offer a variety of benefits including diversification, relative value to investment grade corporate bonds and liability duration matching. A perceived disadvantage from an LDI perspective is that these are illiquid investments. However, limited price discovery also means CMLs and CPLs can help corporate pensions dampen the volatility of their funded status.

What are commercial mortgage loans?

Commercial mortgage loans are senior debt investments secured by income-producing commercial real estate collateral. Commercial real estate property types include multifamily, industrial, retail and office. The rental income from a property's tenants is used to service the debt ahead of other interest and prior to any return of capital to the property's owners. Because of its first payment priority, CMLs can provide cash flow and principal stability, as well as downside protection against property value declines. However, because they are less

liquid, they are best suited to investors who can hold them until maturity.

The CML market represents a sizeable \$5.4 trillion, or 8%, of the non-financial domestic fixed income investable universe.¹ Supply is driven by loan originations, which include both the refinancing of maturing debt and the financing of acquisitions.

The primary objective of core CMLs is to provide highly reliable cash flows with low credit risk. Core CMLs can help investors preserve capital due to their historically low probability of default and low severity of loss. However, investments may be impacted by macroeconomic or idiosyncratic factors, which can be mitigated through a diversified portfolio and disciplined underwriting. Aegon AM Core CMLs generally exhibit loan-to-value ratios of less than 70% and debt service coverage ratios (DSCR) greater than 1.2x. Loan amounts can range from about \$10 to \$75 million.

What are construction permanent loans?

CPLs are investments secured by to-be-built properties as compared to core CMLs, which are investments in stabilized, existing properties. CPLs are structured as a single fixed-rate loan that encompasses the construction, stabilization and permanent phases of a property's life cycle. The construction period typically includes 2 to 3 years of interest-only, during which time the loan is funded through monthly draws, followed by a permanent loan with 7 to 30 years of amortization. This offers a solution that can benefit both the borrower and the lender. The borrower locks in the interest rate at the time of closing, which remains the same through the construction and permanent phases. The interest-only portion allows the borrower to enjoy lower debt costs before cash flow begins and lowers the interest rate risk associated with their investment decision. On the other side of the transaction, the lender has the advantage of lending on a high-quality asset at a lower leverage point than would be available in the market if the property were built and stabilized.

The primary objective of CPLs is to provide access to high quality CML opportunities prior to construction, averting the more competitive market for the loan after completion. CPLs are generally geared more toward multifamily and industrial properties, with select opportunities in the office and retail sectors. Aegon AM CPLs generally exhibit LTVs less than 65% and DSCRs greater than 1.25x. Loan amounts can range from about \$20 to \$100 million.

An allocation to CPLs is funded over a longer time frame than traditional CMLs. The deployment of funds in a CPL allocation happens over the course of the construction phase. This means a loan closed today will deploy committed funds from 12 to 36 months after committing to the asset. To mitigate underwriting and ongoing risks, CPLs require experienced construction and draw management.

Unless otherwise defined, any CMLs references herein apply to both conventional CMLs and CPLs.

Stable and durable cash flows

CMLs can offer cash flow stability, which is driven primarily by the underlying collateral and equity cushion. CMLs are also supported by loan features that can help investors maintain consistent cash flows. For instance, CMLs are subject to lockouts or prepayment premiums that diminish the incentive to refinance when interest rates fall. Typical prepayment provisions in CMLs require the borrower to pay the lender an amount equal to the loss of return on that investment if the prepaid balance was reinvested in a like-term Treasury security. Prepayments are usually confined to property sales, but under certain circumstances, buyers may be able to assume the existing mortgages.

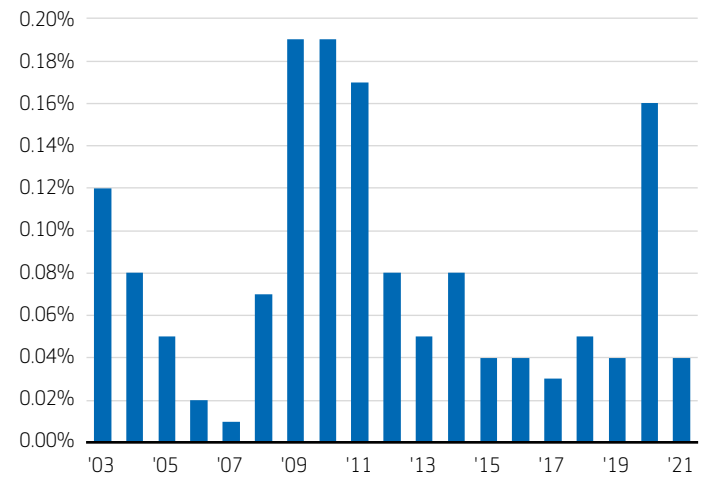
Contractual coupon payments support predictable monthly distributions. Because there are numerous incentives for borrowers to avoid paying early or late, CML investors can typically rely on the credibility of the duration metrics. CML durations typically range from about 4 to 12 years, where it is sometimes challenging to replicate liability cash flows within corporate credit. CML allocations can be customized based on investor yield and duration preferences so that the contractual principal and interest payments create a reliable income stream to match liabilities.

Relative to corporate bonds or CMBS, CMLs also exhibit materially higher recovery rates following default. Data from the Mortgage Bankers Association (Exhibit 1) show that delinquency has been very low since the great financial crisis and the underlying collateral offers potential for capital preservation.²

While CPLs come with construction risk, they may include several structural protections to support the loans. For instance, CPLs have risk mitigants to the lender, including the borrower's upfront equity invested prior to the advance of lender funds. The borrower is not eligible for the disbursement until they have reached certain pre-agreed milestones in the

project's completion timeline. This structure can create a strong alignment of interest, as the loan recipient has their own equity on the line in a project and an incentive to complete it on time.

Exhibit 1: Life insurance companies commercial mortgage delinquency rates



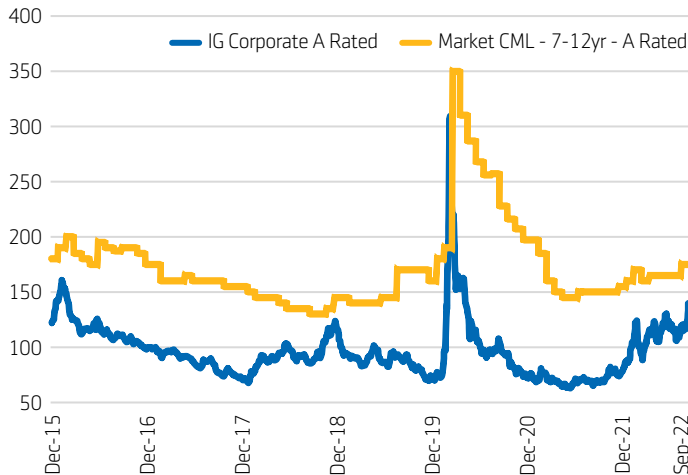
Source: Mortgage Bankers Association. As of June 30, 2022.

CPLs also include a completion guarantee and may include a payment guarantee during the construction phase. CPLs originated through the Aegon AM's Real Assets platform are typically non-recourse upon stabilization. Then the lender is relying primarily on the property, rather than the sponsor, for repayment. Guarantees on CPLs involve net worth and liquidity covenants during the period of the guaranteed obligations.

Commercial mortgages often offer higher yields

For investors who are concerned about giving up returns within a traditional LDI framework, CMLs can offer a meaningful spread advantage to support corporate pension returns. Exhibit 2 depicts the consistent CML yield premium over investment grade corporate bonds with comparable risk ratings. CMLs vary in credit quality but are not publicly rated. To facilitate a comparison with corporate bonds, Exhibit 2 utilizes a mark-to-market pricing matrix developed and used internally at Aegon AM. In our experience, core CMLs generally provide a spread advantage of 40+ basis points (bps) over comparable single-A corporate credits, and 150+ bps over comparable Treasuries. This premium is driven by both the absence of frequent trading of individual commercial mortgages and the relatively higher cost of origination. The latter requires expertise in underwriting, due diligence, environmental review, loan negotiations, special servicing and deal sourcing.

Exhibit 2: CML yield premium over investment grade corporate bonds



Source: Barclays Live. Aegon Real Assets US Commercial Mortgage Mark-to-Market Matrix. As of September 30, 2022.

In our experience, CPLs generally provide a 50 to 100 bps premium over core CMLs. This equates to a CPL spread advantage of about 125+ bps over comparable single-A

corporate credits and 200+ bps over comparable Treasurys.

An allocation to CMLs and CPLs is deployed over an extended period, which provides further diversification by taking advantage of changing market conditions to build up to an investor’s committed amount. Because yields change with evolving markets, we tend to focus mainly on the spread premium relative to traditional public credit, rather than the absolute yield levels.

CML risk is diversified by the broad investible universe across property sectors, geographies and tenant compositions. Additional elements that impact CML performance include lower spread volatility and positive credit migration, which occurs over the life of the loan due to amortization, as well as rent growth and/or property price appreciation. According to the Gilberto-Levy Commercial Mortgage Performance Index in Exhibit 3, CMLs show a negative correlation with the S&P 500 at -0.02 and a relatively low correlation to US investment grade corporate bonds at 0.56.^{3,4,5} These low correlations to other traditional asset classes present investors with a compelling opportunity to de-risk.

Commercial mortgage loans: Diversifiers to equity and corporate bond investments

Exhibit 3: Correlation matrix (1Q2000 to 2Q2022)

	Gilberto-Levy Commercial Mortgage Performance Index	NCREIF Property Index	Investment Grade CMBS	Investment Grade Corporate Bond	S&P 500
Gilberto-Levy Commercial Mortgage Performance Index	1				
NCREIF Property Index	0.01	1			
Investment Grade CMBS	0.75	0.02	1		
Investment Grade Corporate Bond	0.56	-0.24	0.67	1	
S&P 500	-0.02	0.12	0.3	0.29	1

Source: Barclays Live. Moody’s Analytics. John B. Levy & Company. National Council of Real Estate Investment Fiduciaries. As of June 30, 2022.

Key takeaways

Carefully underwritten commercial mortgage lending strategies can serve as an attractive addition to LDI portfolios. We believe CMLs and CPLs can give corporate pensions the ability to enhance yield and match duration, while diversifying their public credit exposures. Several large corporate pensions are utilizing CMLs within their LDI frameworks today and we anticipate this trend will extend to mid-sized plans as well. We believe these strategies represent a strong solution for corporate pensions to consider as they look for ways to dampen the volatility of their funded status.

References

¹Board of Governors of the Federal Reserve System. October 3, 2022.

²Mortgage Bankers Association. September 10, 2022.

³Barclays Live. June 30, 2022.

⁴Moody's Analytics. June 30, 2022.

⁵John B. Levy & Company. June 30, 2022.

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