Principal Asset Management℠

PRINCIPAL REAL ESTATE

Steady returns, strong foundations: The case for commercial real estate debt

In both our annual and our mid-year Inside Real Estate outlooks, we highlighted private debt real estate is one of the most attractive opportunities across the four quadrants. We argued that higher interest rates and elevated debt maturity schedules are creating a favorable environment for lenders. Current pricing remains attractive relative to other risk assets and lending standards are stable. In this report, we dig further into our thesis.

AUTHOR

Rich Hill
Global Head of
Research & Strategy

- **The U.S. commercial real estate (CRE) mortgage market is $4.8tn.** Debt funds have become an increasingly important source of debt capital with market share rising to 13% in 2024 compared to an average of 9% from 2015 to 2019. The nearly $2.5tn of loans maturing from 2025 to 2028 provides, of which 40% are held on bank balance sheets, provides an opportunity for alternative lenders to continue to grow share.[1]
- **Open-ended CRE debt funds returns are historically attractive**. These funds have generated annualized total returns of +7.4% since inception in 1Q14 driven by income returns. Every quarter has generated positive total returns with an average of +1.81% ranging from a minimum of +0.41% (4Q23) to a maximum of 3.51% (1Q16).[2]
- **The stability of open-ended CRE debt funds is underappreciated.** Open-ended debt funds historically offer higher returns than public corporate bonds and core real estate, similar returns to U.S. listed REITs and lower returns relative to the broader public equity markets as well as private corporate credit and private equity, However, open-ended debt funds have significantly lower volatility resulting in much better Sharpe ratios over the past 10-years. They, therefore, may play an important role in portfolio optimization for investors that are focused on reducing volatility and draw-down risk.
- **New originated loans offer attractive risk-adjusted returns.** Conservative loan-to-values on property prices that have already reset approximately 20% mitigate against further declines in unlevered property valuations. At the same time, yields are attractive given higher risk-free rates and widening credit spreads. It's important to remember the CRE mortgages are secured by income-producing real estate. The real estate itself is the collateral. In the event of foreclosure, the lender can take ownership of the property at an attractive basis that may allow for the redevelopment or releasing of the property at compelling returns.
- **Attractive vintage returns.** There's historical precedent for high returns in the aftermath of markets like we've observed over the past couple of years. While not directly comparable to open-ended CRE debt funds, closed-end debt funds generated median IRRs of +15.6%, +13.2% and +12.7% for the 2009, 2010 and 2011 vintages compared to median IRR that averaged +8.6% for the 2012 to 2022 vintages.[3]

(1) Source: Mortgage Bankers Association, 1Q 2025
(2) Source: NCREIF/CREFC - Open-end Debt Fund Aggregate, which is a fund-level aggregate comprising 17 open-end funds, 1Q 2025
(3) Source: Preqin, July 2025

The CRE debt market is a $4.8tn market

Total commercial / multifamily debt outstanding stood at $4.8 trillion at the end of 1Q25 according to the Mortgage Bankers Association. Commercial banks hold the largest share (~38%) at $1.8 trillion followed by Agency & GSE portfolios and MBS (22% share) at $1.07 trillion and life insurance companies (16% share) at $752 billion.

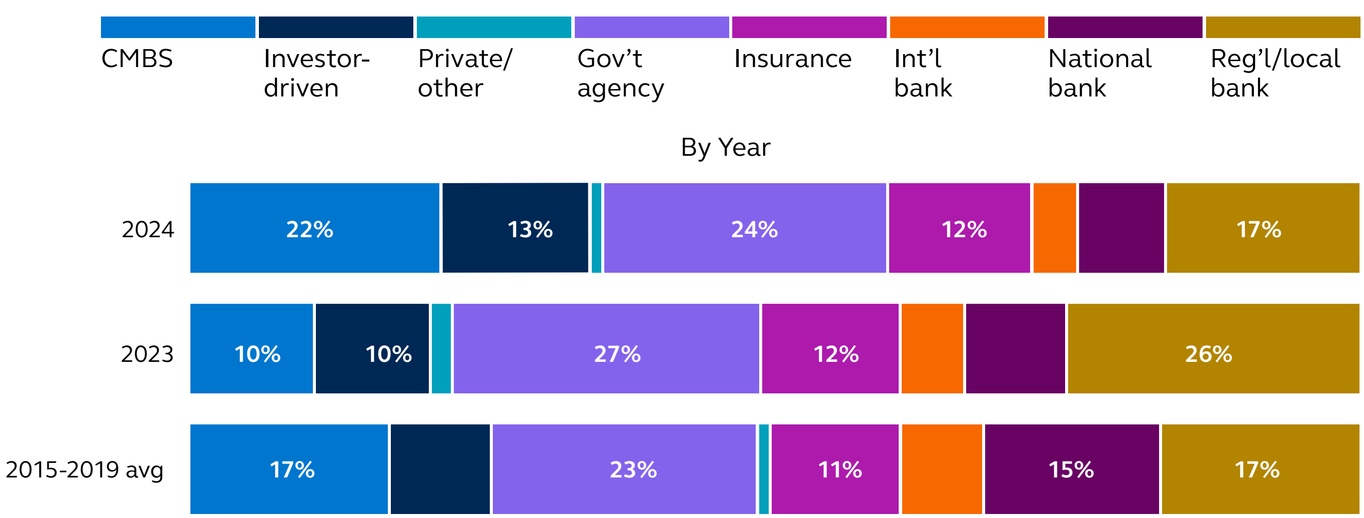
EXHIBIT 1: CRE Mortgage debt outstanding by lender type

	Mortgage Debt Outstanding						
	1Q25		4Q24		Change		Sector Share
Sector	$ (millions)	% of Total	$ (millions)	% of Total	$ (millions)	% of Total	of % Change
Bank and Thrift	1,813,689	37.7%	1,800,564	37.4%	13,125	0.7%	28.1%
Agency & GSE Portfolios and MBS	1,071,733	22.3%	1,064,242	22.1%	7,491	0.7%	16.0%
Life Insurance Companies	751,814	15.6%	745,707	15.5%	6,107	0.8%	13.1%
CMBS, CDO and other ABS Issuers	641,769	13.3%	625,523	13.0%	16,246	2.6%	34.7%
Nonfinancial Corporate Business	115,914	2.4%	115,861	2.4%	53	0.0%	0.1%
State and Local Government	112,802	2.3%	112,163	2.3%	639	0.6%	1.4%
Federal Government	101,685	2.1%	100,331	2.1%	1,354	1.3%	2.9%
REITs	85,988	1.8%	82,710	1.7%	3,278	4.0%	7.0%
Nonfarm Noncorporate Business	35,037	0.7%	34,820	0.7%	217	0.6%	0.5%
Finance Companies	33,992	0.7%	34,348	0.7%	-356	-1.0%	-0.8%
Other Insurance Companies	32,064	0.7%	32,440	0.7%	-376	-1.2%	-0.8%
Private Pension Funds	9,177	0.2%	10,268	0.2%	-1,091	-10.6%	-2.3%
State and Local Government Retirement Funds	3,492	0.1%	3,398	0.1%	94	2.8%	0.2%
Household Sector	1,531	0.0%	1,529	0.0%	2	0.1%	0.0%
Total	4,810,687		4,763,904		46,783	1.0%	

Source: Mortgage Bankers Association, Principal Real Estate, 1Q 2025

However, more recently, REITs and securitizations such as Commercial Mortgage-Backed Securities (CMBS), as well as Commercial Real Estate Collateralized Loan Obligations (CLOs) are driving the growth. As shown in the table above, the outstanding mortgage balance of these two sources of debt capital rose 4% and 2.6%, respectively, quarter-over-quarter in 1Q25. This underscores the growing importance of debt funds in commercial real estate lending markets. Indeed, investor driven lenders such as CRE debt funds have taken market share over the past couple of years according to Real Capital Analytics. Their share stood at 13% in 2024 compared to 10% in 2023 and an average of 9% from 2015 to 2019.

EXHIBIT 2: CRE lender market share

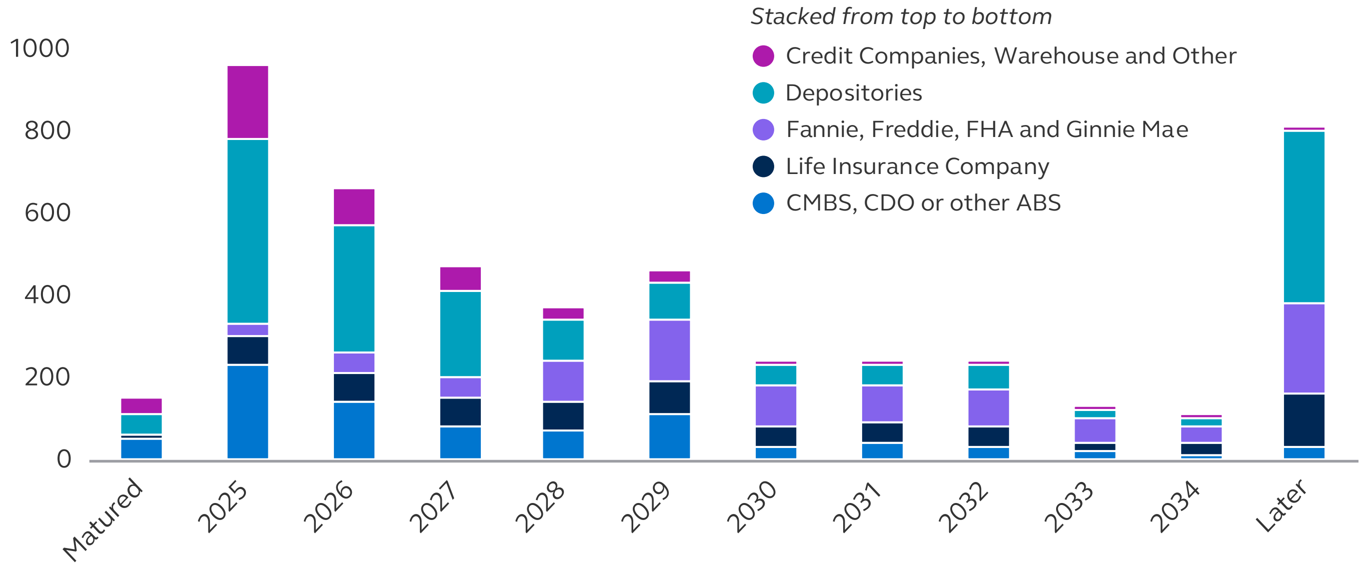


Source: Real Capital Analytics, Principal Real Estate, 4Q 2024. Based on independent reports of properties and portfolios $2.5 million and greater.

Source: Preqin, July 2025

We believe the volume of maturing loans over the next several years will present an opportunity for CRE debt funds and other alternative lenders to continue to gain share. There's nearly $2.5tn of loans scheduled to mature between 2025 and 2028 according to a prior analysis from the Mortgage Bankers Association. More than 40% of these loans are currently held on bank balance sheets compared to only 15% for credit companies, warehouses, and other lender types.

EXHIBIT 3: CRE loans maturing in 2025 and beyond



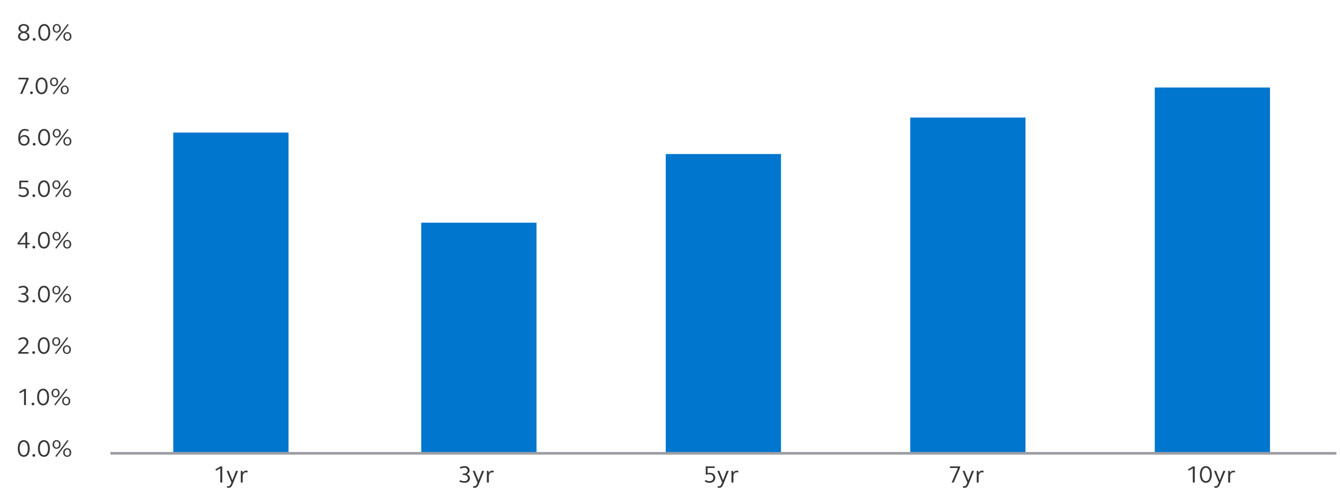
Source: Mortgage Bankers Association, Principal Real Estate, January 2025

Returns are historically attractive

We start by analyzing historical returns for the NCREIF/CREFC Open-end Debt Fund Aggregate, which is a fund-level aggregate comprising 17 open-end funds that provide credit and financing to borrowers who own commercial real estate. Most of the funds are core-plus and core strategies, although there are some value-add vehicles as well. Nearly 90% of the loans are first mortgages and almost 82% are floating rate. The returns are equal-weighted across the funds since the aggregate contains a few large funds that would dominate the results if it were value-weighted. We think this is the best representation of the types of loans that debt funds are originating.

These funds, as of 1Q 2025, have generated annualized total returns of +7.4% since inception in 1Q14 driven by income returns. Every quarter has generated positive total returns with an average of +1.81% ranging from a minimum of +0.41% (4Q23) to a maximum of 3.51% (1Q16).

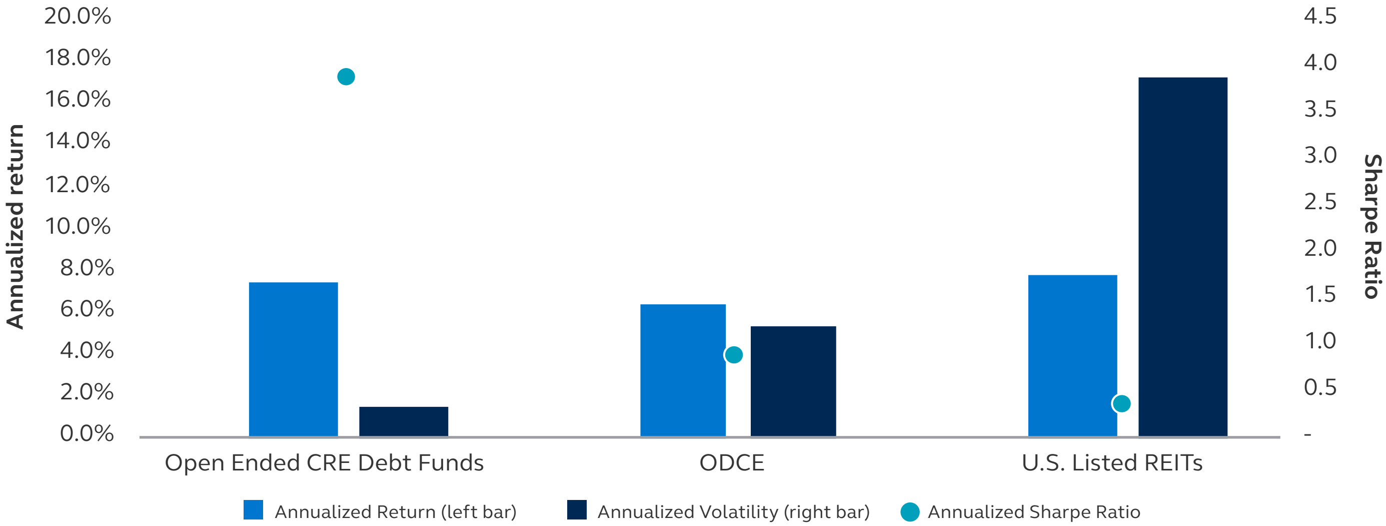
EXHIBIT 4: Annualized total returns of NCREIF/CREFC Open-end Debt Fund Aggregate, 2014-1Q25



Source: NCREIF/CREFC, Principal Real Estate, 1Q 2025. The years shown in this chart are look back periods.

These returns compare favorably to other CRE alternatives on both an absolute and volatility-adjusted basis. For instance, the ODCE index that tracks 25 open-ended funds that own core commercial real estate has generated +6.4% total returns since 1Q14 and U.S. listed REITs have generated +7.8% total returns over the same period as of 1Q 2025. However, the volatility of open-ended debt fund total returns is much lower than ODCE and U.S. listed REITs. As a result, the since inception annualized Sharpe ratios for open-ended debt funds at 3.85 are significantly higher than ODCE at 1.20 and U.S. listed REITs at 0.35.

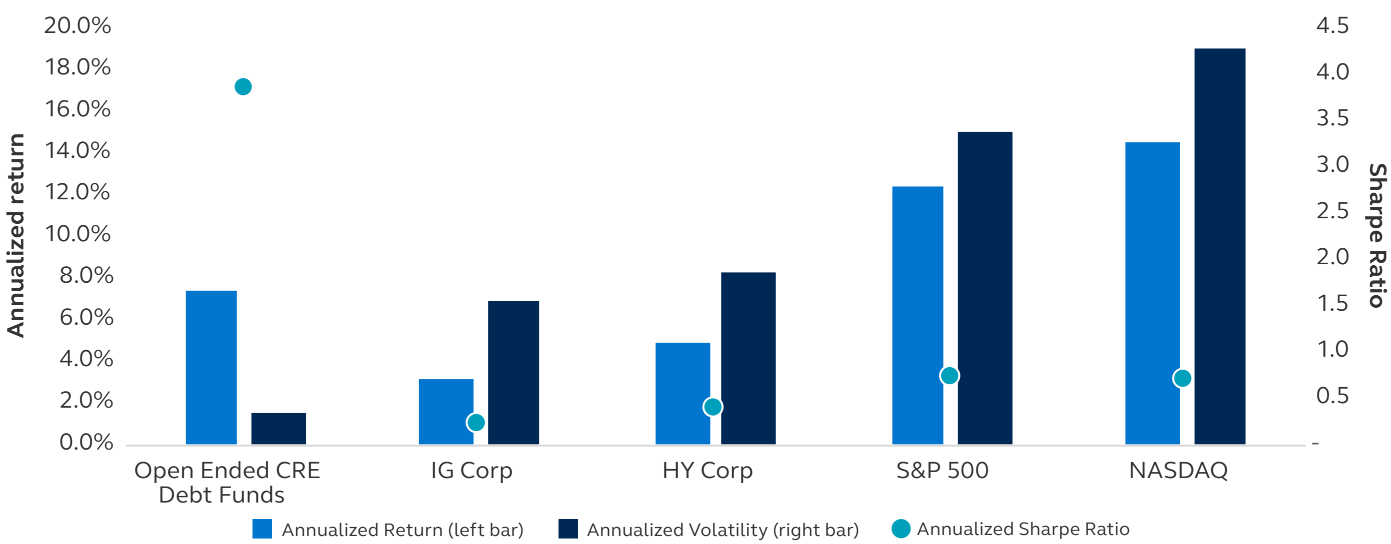
EXHIBIT 5: Comparison of annualized total return, volatility and Sharpe ratio for open-ended CRE debt funds, ODCE funds and U.S. listed REITs, 2014-1Q25



Source: NCREIF/CREFC, Bloomberg, Principal Real Estate, 1Q 2025

Similarly, open-ended debt funds compare favorably to corporate credit and equities. They've generated higher returns than investment grade and high yields corporate bonds with less volatility thereby producing superior Sharpe ratios. While since inception total returns are lower than both the S&P 500 and the NASDAQ, the volatility is also significantly lower resulting in much higher Sharpe ratios.

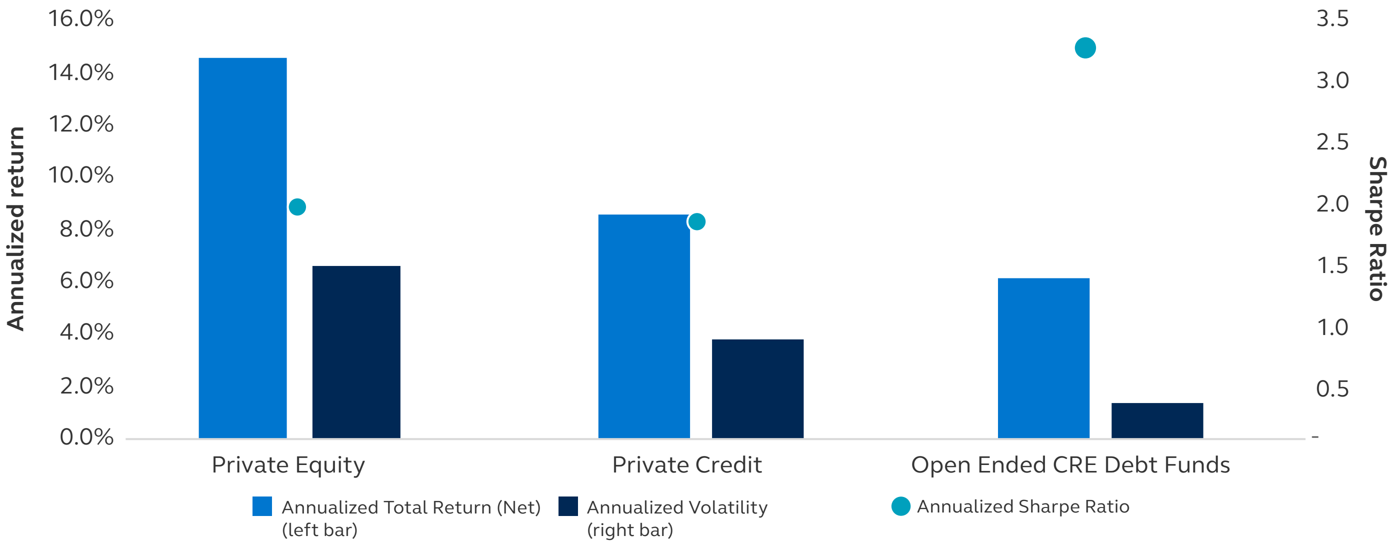
EXHIBIT 6: Comparison of annualized total return, volatility and Sharpe ratio for open-ended CRE debt funds and public corporate credit and public equities, 2014-1Q25



Source: NCREIF/CREFC, Principal Real Estate, 1Q 2025

That said, the greatest competition likely comes from private corporate credit and private equity. The alternative strategies have become increasingly attractive to many investors over the last decade given their compelling return profiles. Indeed, our analysis of pooled total returns (net of any carry/performance fees earned by the GP) via Preqin shows that North American private equity vehicles (ex-VC) have generated +14.6% annualized total returns since 1Q14 and North American private credit vehicles have generated+8.7% annualized total returns over the same period. By comparison, open-ended debt funds have generated +6.2% annualized total returns (net of fees and promotes). However, the volatility of open-ended CRE debt funds is significantly lower than both private equity and private credit vehicles and, as a result, the Sharpe ratios of open-ended CRE debt funds is meaningfully higher.

EXHIBIT 7: Comparison of annualized total return, volatility and sharpe ratio for open-ended CRE debt funds and private corporate credit and equity, 2014-1Q25



Source: NCREIF/CREFC, Principal Real Estate, 1Q 2025

For completeness, we've also provided analysis of annualized total returns, volatility, and Sharpe ratios from 2014 to 2019. The annualized returns of open-ended CRE debt funds (both gross and net) are lower than equity alternatives including open-ended core CRE equity, public equity markets and private equity, but it's notably higher than public fixed income and similar to private credit on a net basis. We think there are two things to consider: 1) ODCE funds and listed REITs have suffered from negative CAGRs since 2022 as commercial real estate valuations reset lower against a backdrop of higher interest rates and 2) Returns for fixed income alternatives were pressured by historically low interest rates from 2010 to 2020. However, our key point remains that open-ended CRE debt funds have lower annualized volatility of returns and higher Sharpe ratios even in an environment that wasn't ideal.

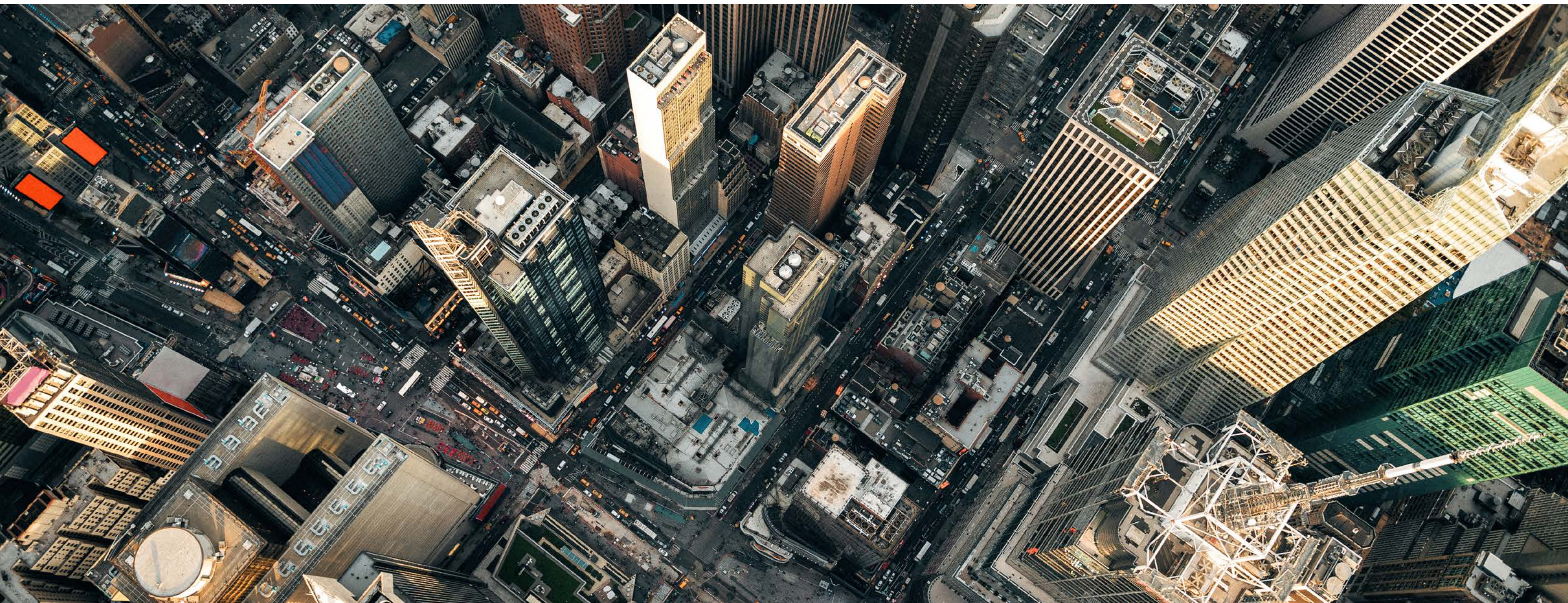
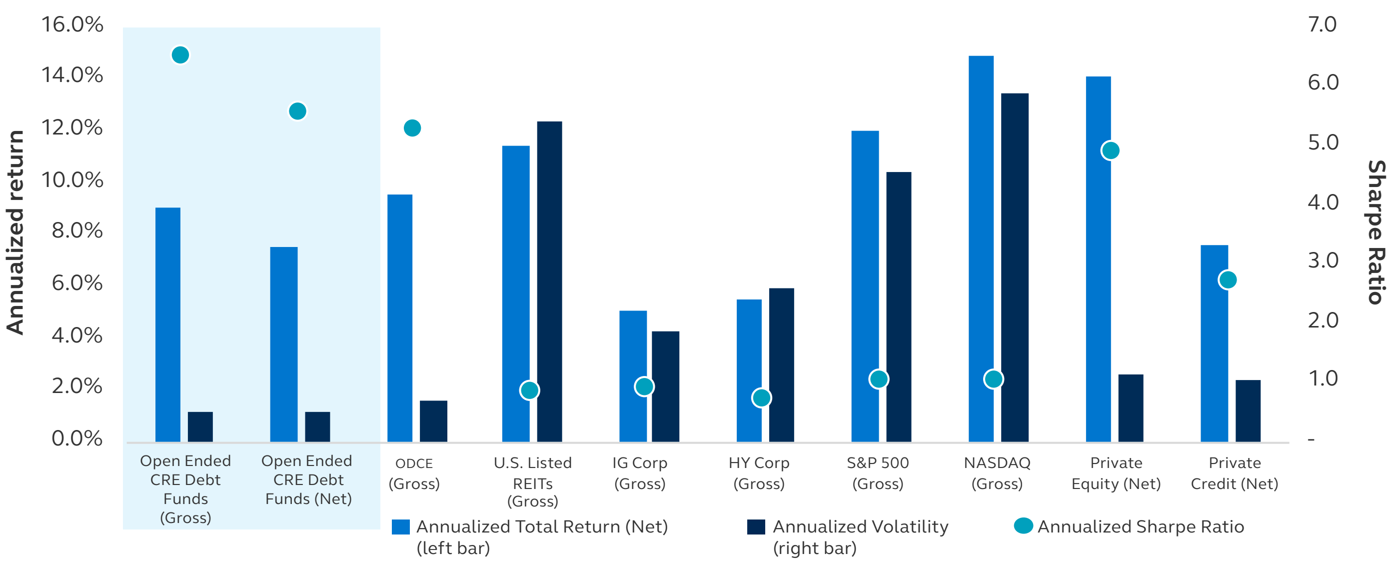


EXHIBIT 8: Comparison of annualized return, volatility and sharpe ratio, 2014-2019



Source: NCREIF/CREFC, Bloomberg, Preqin, Principal Real Estate, 1Q 2025

We think the lower volatility of open-ended CRE debt funds is underappreciated by investors, but an important part of portfolio optimization. In Exhibit 9, we show the modern portfolio statistics (MPTs) at various allocation bands based on a back test of returns since 1Q14. In every instance, Sharpe ratios are improved and a drawdown risk is mitigated by adding an allocation of open-ended CRE debt funds to a portfolio of private equity or private credit. While investors do give up some returns, we think it's outweighed by the benefits.

EXHIBIT 9: Analysis of impacts of various allocations of open-ended CRE debt funds to a portfolio of private equity and private credit (2014 – 1Q25 back test)

		Allocation Sensitivity Analysis										
Open ended CRE Debt		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Private Equity		100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
Return	125.2	364	328	295	264	235	208	183	159	137	116	97
Ann Return	7.5	14.6	13.8	13.0	12.2	11.3	10.5	9.7	8.8	8.0	7.1	6.2
StDev	1.1	3.32	3.02	2.73	2.43	2.13	1.84	1.55	1.27	1.02	0.81	0.69
Ann StDev	2.1	6.6	6.0	5.5	4.9	4.3	3.7	3.1	2.5	2.0	1.6	1.4
Ann Sharpe	2.2	1.79	1.83	1.88	1.94	2.01	2.11	2.23	2.38	2.56	2.69	2.51
MDD	-2.5	(5.3)	(4.7)	(4.1)	(3.5)	(2.9)	(2.3)	(1.8)	(1.2)	(0.6)	0.0	0.0

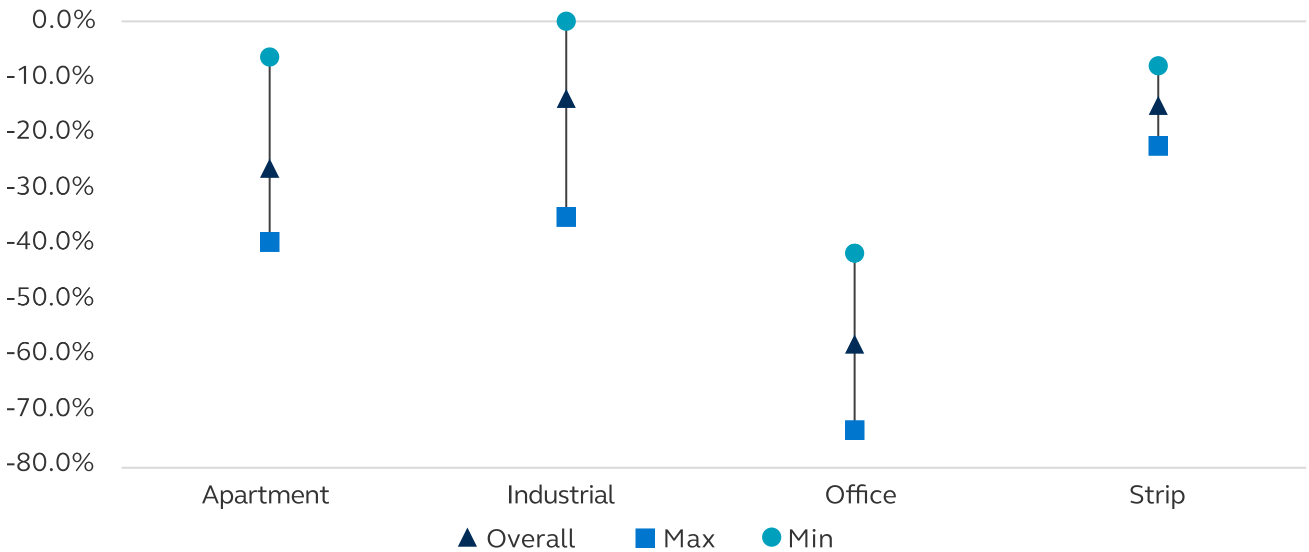
		Allocation Sensitivity Analysis										
Open ended CRE Debt		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Private Credit		100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
Return	125.2	155	149	143	137	131	125	119	114	108	103	97
Ann Return	7.5	8.7	8.4	8.2	8.0	7.7	7.5	7.2	7.0	6.7	6.5	6.2
StDev	1.1	1.93	1.75	1.57	1.40	1.23	1.07	0.93	0.81	0.72	0.68	0.69
Ann StDev	2.1	3.9	3.5	3.1	2.8	2.5	2.1	1.9	1.6	1.4	1.4	1.4
Ann Sharpe	2.2	1.54	1.63	1.74	1.87	2.02	2.20	2.41	2.62	2.76	2.74	2.51
MDD	-2.5	(5.6)	(5.0)	(4.4)	(3.8)	(3.1)	(2.5)	(1.9)	(1.3)	(0.7)	(0.0)	0.0

Source: NCREIF/CREFC, Preqin, Principal Real Estate, 1Q 2025. MDD = max drawdown

The dawn of a new cycle

It's important to recognize that unlevered CRE capital returns have declined significantly over the past several years by nearly -20%. This magnitude of decline has only occurred two times previously – in the early 1990s post the Savings & Loan (S&L) crisis and the post-the Great Financial Crisis (GFC). Declines vary across property types with office falling nearly -60% according to Green Street compared to -26.5% for apartments, -14.9% for shopping centers and -14.5% for industrial. The differences are even more pronounced across the top 50 markets—some office markets are down more than -70% and some apartment markets are down -40%.

EXHIBIT 10: Range of CRE price declines by property type across top 50 markets, 2005 - 2025



Source: Green Street, Principal Real Estate, 2Q 2025

This significantly de-risks newly originated loans. This is because property valuations would need to even further before the loan realizes a loss given its loan-to-value (LTV). In Exhibit 11, we provide a sensitivity analysis of the loss as a percentage of the original loan balance relative to various LTVs and further declines in property valuations. For instance, a 75% LTV loan would not realize a loss unless the property declined another -26% in value from here and required declines are even greater at lower LTVs.

EXHIBIT 11: Sensitivity analysis of hypothetical loan impairment across LTV ranges and CRE price declines

Price Decline \ LTV	75%	70%	65%	60%	55%	50%	45%	40%	35%	30%
-2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-12%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-14%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-16%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-18%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-22%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-24%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-26%	-1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-28%	-4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-30%	-6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-32%	-9.3%	-2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-34%	-12.0%	-5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-36%	-14.7%	-8.6%	-1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-38%	-17.3%	-11.4%	-4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-40%	-20.0%	-14.3%	-7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-42%	-22.7%	-17.1%	-10.8%	-3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-44%	-25.3%	-20.0%	-13.8%	-6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
-46%	-28.0%	-22.9%	-16.9%	-10.0%	-1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
-48%	-30.7%	-25.7%	-20.0%	-13.3%	-5.5%	0.0%	0.0%	0.0%	0.0%	0.0%
-50%	-33.3%	-28.6%	-23.1%	-16.7%	-9.1%	0%	0.0%	0.0%	0.0%	0.0%

Source: Principal Real Estate, as of July 2025

To put this magnitude of decline in perspective, it would mean that property valuations declined this cycle by more than 45%. This would be far more severe than the 30% to 35% declines observed during the early 1990s post the S&L crisis and post the GFC.

And keep in mind that we believe the CRE market is on stronger footing today than at any point in the past three years and pricing in the private equity market has likely reached its trough. Indeed, unlevered total returns have now risen by four consecutive quarters – 3Q24 to 2Q25. Our base case calls for unlevered CRE valuations to rise +/- 5% in 2025 and we think it's reasonable that annualized returns will be in the 8-9% range over the next 10-years.

Bottom line, it would take a significant (and unprecedented) shock before newly originated loans realize losses given the price declines that have already occurred.

This brings us to our next point—lending standards are conservative by historical measures. According to Real Capital Analytics, LTVs for core commercial real estate are approximately 52% as of 2Q25 compared to a historical average of 63% and 59% for multifamily compared to a historical average of 67%. This is corroborated by the Fed's Senior Loan Office Opinion Survey that shows banks are still tightening standards on net and CBREs snapshot of underwriting standards.

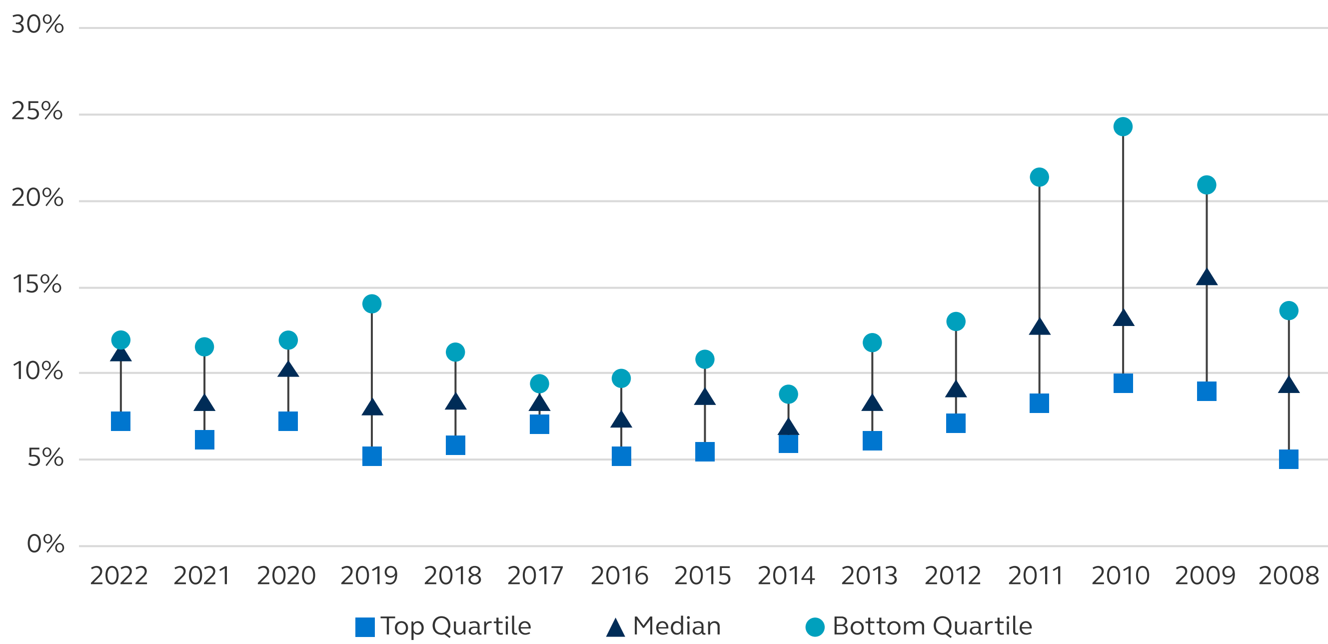
While delinquency rates and debt distress is likely to rise over the next 12 to 24 months, that's associated with legacy origination and may present an opportunity to fill potential gaps in new originations

Meanwhile the spreads remain attractive. According to Newmark's June 23, 2025 'CRE Debt Market Update', debt funds / mortgage REITs are pricing moderate leverage (60-65%) loans at SOFR + 2.50% to 2.85% and higher leverage (70-75%) loans at SOFR + 2.75% to 4.50%. With SOFR currently standing at 4.28%, a loan originated at a spread of +250bp would generate an "all-in" cost of financing in the high 6% range and a loan originated at a spread of +450bp would generate an "all-in" cost of financing in in the high 8% range. It's worth noting that many, if not most floating rate loans are structured with SOFR floors to protect against potential for falling rates in the future. Newmark notes that SOFR floors have dropped from 4.50% to 5% in the middle of last year to the very low-to-mid-3% levels for most recent quotes.

Finally, it's important to remember that CRE loans are secured income-producing real estate. The real estate itself is the collateral. In the event of default, one of the means of protecting the lenders interest is foreclosure – a legal process where a lender takes ownership of a property. In such an event, the property owned by the lender at an attractive basis, which may allow for the redevelopment or releasing of the property at compelling returns. However, it's important that a lender is vertically integrated with the experience and capabilities to not only foreclose on a property but also own and manage it if necessary.

All of this means that we think attractive vintage returns are likely to be achieved today. While not directly comparable to open-ended CRE debt funds, we can look at the IRRs achieved by closed-end debt funds in the aftermath of the GFC as historical precedent.

EXHIBIT 12: Range of IRRs by vintage for closed end CRE debt funds



Source: Preqin, Principal Real Estate, July 2025

CONCLUSION

The U.S. CRE debt market presents a compelling opportunity for investors, particularly through open-ended debt funds. With a $4.8 trillion market and nearly $2.5 trillion in maturities coming due between 2025 and 2028—40% of which are held by banks—alternative lenders are well-positioned to gain market share. Open-ended CRE debt funds have delivered consistent and attractive total returns, averaging +7.4% annually since inception, with positive performance in every quarter. These funds offer strong risk-adjusted returns, outperforming public bonds and core real estate on a Sharpe ratio basis due to their low volatility. Today's lending environment—characterized by conservative loan-to-values, reset property prices, and elevated yields—further enhances the risk-return profile. Historical data also suggests that market dislocations can lead to exceptional vintage returns, as seen in the post-2008 cycle. Altogether, CRE debt represents a stable and underappreciated opportunity for investors seeking income, capital preservation, and diversification.

Risk Considerations

Investing involves risk, including possible loss of Principal. Past Performance does not guarantee future return. All financial investments involve an element of risk. Therefore, the value of the investment and the income from it will vary and the initial investment amount cannot be guaranteed. Potential investors should be aware of the risks inherent to owning and investing in real estate, including value fluctuations, capital market pricing volatility, liquidity risks, leverage, credit risk, occupancy risk and legal risk. All these risks can lead to a decline in the value of the real estate, a decline in the income produced by the real estate and declines in the value or total loss in value of securities derived from investments in real estate.
Commercial real estate (CRE) investing carries several inherent risks, including those related to the economy, interest rates, market fluctuations, high upfront costs, and tenant-related issues like defaults or high turnover. Economic downturns can lead to decreased property values and increased vacancy rates, while financing costs, insurance expenses, and potential environmental or structural problems can also pose significant challenges. All these factors and risks can impact rental income and overall investment returns. Fixed-income investment options are subject to interest rate risk, and their value will decline as interest rates rise.

Important information

This material covers general information only and does not take account of any investor's investment objectives or financial situation and should not be construed as specific investment advice, a recommendation, or be relied on in any way as a guarantee, promise, forecast or prediction of future events regarding an investment or the markets in general. The opinions and predictions expressed are subject to change without prior notice. The information presented has been derived from sources believed to be accurate; however, we do not independently verify or guarantee its accuracy or validity. Any reference to a specific investment or security does not constitute a recommendation to buy, sell, or hold such investment or security, nor an indication that the investment manager or its affiliates has recommended a specific security for any client account.

Subject to any contrary provisions of applicable law, the investment manager and its affiliates, and their officers, directors, employees, agents, disclaim any express or implied warranty of reliability or accuracy and any responsibility arising in any way (including by reason of negligence) for errors or omissions in the information or data provided. All figures shown in this document are in U.S. dollars unless otherwise noted.

This material may contain 'forward looking' information that is not purely historical in nature. Such information may include, among other things, projections and forecasts. There is no guarantee that any forecasts made will come to pass. Reliance upon information in this material is at the sole discretion of the reader.

This material is not intended for distribution to or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

This document is issued in:

- The United States by Principal Global Investors, LLC, which is regulated by the U.S. Securities and Exchange Commission.
- Europe by Principal Global Investors (Ireland) Limited, 70 Sir John Rogerson's Quay, Dublin 2, D02 R296, Ireland. Principal Global Investors (Ireland) Limited is regulated by the Central Bank of Ireland. Clients that do not directly contract with Principal Global Investors (Europe) Limited ("PGIE") or Principal Global Investors (Ireland) Limited ("PGII") will not benefit from the protections offered by the rules and regulations of the Financial
- Conduct Authority or the Central Bank of Ireland, including those enacted under MiFID II. Further, where clients do contract with PGIE or PGII, PGIE or PGII may delegate management authority to affiliates that are not authorised and regulated within Europe and in any such case, the client may not benefit from all protections offered by the rules and regulations of the Financial Conduct Authority, or the Central Bank of Ireland. In Europe, this document is directed exclusively at Professional Clients and Eligible Counterparties and should not be relied upon by Retail Clients (all as defined by the MiFID).
- United Kingdom by Principal Global Investors (Europe) Limited, Level 1, 1 Wood Street, London, EC2V 7 JB, registered in England, No. 03819986, which is authorized and regulated by the Financial Conduct Authority ("FCA").
- This document is marketing material and is issued in Switzerland by Principal Global Investors (Switzerland) GmbH.
- United Arab Emirates by Principal Investor Management (DIFC) Limited, an entity registered in the Dubai International Financial Centre and authorized by the Dubai Financial Services Authority as an Authorised Firm, in its capacity as distributor / promoter of the products and services of Principal Asset Management. This document is delivered on an individual basis to the recipient and should not be passed on or otherwise distributed by the recipient to any other person or organisation.
- Singapore by Principal Global Investors (Singapore) Limited (ACRA Reg. No. 199603735H), which is regulated by the Monetary Authority of Singapore and is directed exclusively at institutional investors as defined by the Securities and Futures Act 2001. This advertisement or publication has not been reviewed by the Monetary Authority of Singapore.
- Australia by Principal Global Investors (Australia) Limited (ABN 45 102 488 068, AFS Licence No. 225385), which is regulated by the Australian Securities and Investments Commission and is only directed at wholesale clients as defined under Corporations Act 2001.
- Hong Kong SAR by Principal Asset Management Company (Asia) Limited, which is regulated by the Securities and Futures Commission. This document has not been reviewed by the Securities and Futures Commission. This document may only be distributed, circulated or issued to persons who are Professional Investors under the Securities and Futures Ordinance and any rules made under that Ordinance or as otherwise permitted by that Ordinance.
- Other APAC Countries/Jurisdictions, this material is issued for institutional investors only (or professional/sophisticated/qualified investors, as such term may apply in local jurisdictions) and is delivered on an individual basis to the recipient and should not be passed on, used by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

Principal Global Investors, LLC (PGI) is registered with the U.S. Commodity Futures Trading Commission (CFTC) as a commodity trading advisor (CTA), a commodity pool operator (CPO) and is a member of the National Futures Association (NFA). PGI advises qualified eligible persons (QEPs) under CFTC Regulation 4.7.

Principal Funds are distributed by Principal Funds Distributor, Inc.

MM14615 | 08/2025 | 4689448-082026