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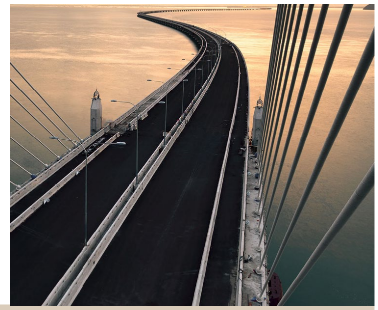

Weekly guidance from our Investment Strategy Committee **September 5, 2023**

Fixed Income Spotlight

Luis Alvarado
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Resilience of the high-yield bond market

The U.S. HY bond market has delivered positive year-to-date[1] (YTD) returns, with one of the highest YTD gains among fixed-income asset classes (+6.4%). The resilient U.S. economy coupled with still available financial liquidity have provided a late-cycle boost that is flowing through to credit markets and toward higher-risk corporate borrowers.

Fundamentals for the HY Taxable Fixed Income asset class still appear relatively stable, in our view. Earnings growth has remained flat or has declined slightly among HY corporate issuers in the last two quarters and, although this has reduced interest coverage, especially around BBB and BB issuers, metrics remain strong on a historical basis. Additionally, the distressed ratio has remained flat at roughly 7.4% year-over-year, see Table 1 below. (The distressed ratio equals the number of securities already in default, under bankruptcy protection, or in distress, divided by the total number of issues). Given these trends, we believe that near-term HY debt-market weakness is unlikely to be driven by fundamentals — but instead by larger macro forces and volatility stemming from a potential U.S. economic slowdown.

Also, net HY downgrades have eased in the past few months; however, U.S. defaults increased to 4.2% in July.[2] Moody's estimates that U.S. default rates could continue moving higher for the remainder of the year, reaching 5.3% in December and peaking in the first quarter of 2024 for this cycle. We expect a U.S. recovery to develop in the second half of 2024 along with improving corporate earnings, which we anticipate should lead to a decline in default rates by year-end 2024.

Table 1. Metrics of HY issuers

Credit rating	Spread	Yield	% Distressed	Median interest coverage
BB	261	7.13%	0.3%	3.97
B	404	8.59%	3.2%	2.44
CCC or lower	902	13.63%	39.4%	1.02
High Yield Index	390	8.47%	7.4%	2.99

Sources: Bloomberg, Federal Reserve Economic Data, Wells Fargo Investment Institute. High Yield Index = ICE BofA US High Yield Index. Data as of August 25, 2023. OAS= option-adjusted spread. Spread refers to a measure of additional yield over relevant Treasury. Yield = Effective Yield. Distressed reflects membership of bonds within the ICE BofA US Distressed High Yield Index trading at 1000 basis points (1 basis point = 1% (bps)) or more over relevant Treasury. Interest coverage refers to earnings before interest, taxes, depreciation, and amortization (EBITDA)EBITDA/interest payments and is one commonly used measure of a company's ability to pay its debt.

Not all is equal in the HY sector

The fundamental resilience of the HY index has been driven primarily by the strength of a growing concentration of double-B (BB) rated companies. BBs have had lower historic default rates than the rest of the HY category, as they

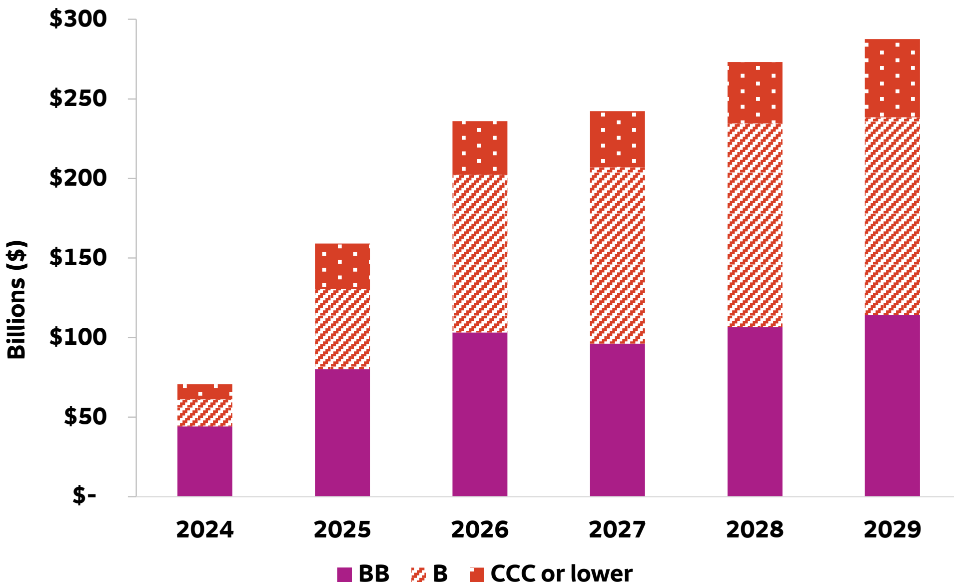
1. Bloomberg US High Yield Bond Index as of August 28, 2023.

2. Moody's Default Trends report as of August 14, 2023.

have generally been stable and profitable businesses that are either operating with slightly higher debt leverage than triple-B (BBB) rated issuers or within a more cyclical industry. There are now numerous BB rated issuers that have elected to operate as HY credits for decades without default. In comparison to the 40-year history of the ICE BofA US High Yield index, BBs now constitute a higher proportion and are also operating at stronger credit metrics than their historic average. Given the lower coupons of existing BB bonds, most are still trading at a discount to par (face value) and, in our view, are unlikely to experience a further decline in trading values compared to past HY selloffs.

In contrast to the strength of BBs, the growing bifurcation within the high-yield market becomes apparent when considering the situation issuers rated single-B (B) and lower find themselves in with the approach of the looming HY debt maturity wall. B rated companies, generally, are still operating at a profit but with near-term liquidity challenges that has often been managed with further debt issuance or refinancing with less than advantageous terms. Triple-C (CCC) and below rated companies, generally, are at a solvency risk of no longer being viable enterprises under their current capital structure. Given the substantial increase of debt for these companies maturing in the middle and latter half of the decade (see Chart 1), rising funding costs, and deteriorating interest coverage ratios, we expect continued pressure on this lower half of the HY index.

Chart 1. Maturity wall of high-yield bonds



Sources: Bloomberg, Wells Fargo Investment Institute as of August 25, 2023. Bonds rated by Moody's maturing in each year.

Investor implications

Despite the potential for positive single-digit HY returns by year-end, we see potential for better opportunities in other asset classes, as the HY risk/return profile remains asymmetric, in our view — with little upside potential (while downside risk remains). In our view, BB yields are reasonable for long-term investors at these levels; however, the additional yield for B and lower bonds simply does not compensate investors for the material risk of credit deterioration. We are monitoring HY spreads, which have been trading below 400 basis points (100 basis points equals 1%) since late June while yields have remained fairly stable.

Differences are beginning to surface among HY sectors and credit ratings, so selectivity remains paramount. For individual securities, our Global Securities Research team maintains a Credit Opportunities List with its best ideas within the BB space. For broader HY exposure, we favor professional, active management, as we believe that investors will require more due diligence to uncover HY value and yield potential.

Equities

Amit Chanda
Lead Retail Investment Research Analyst

A brief overview of artificial intelligence

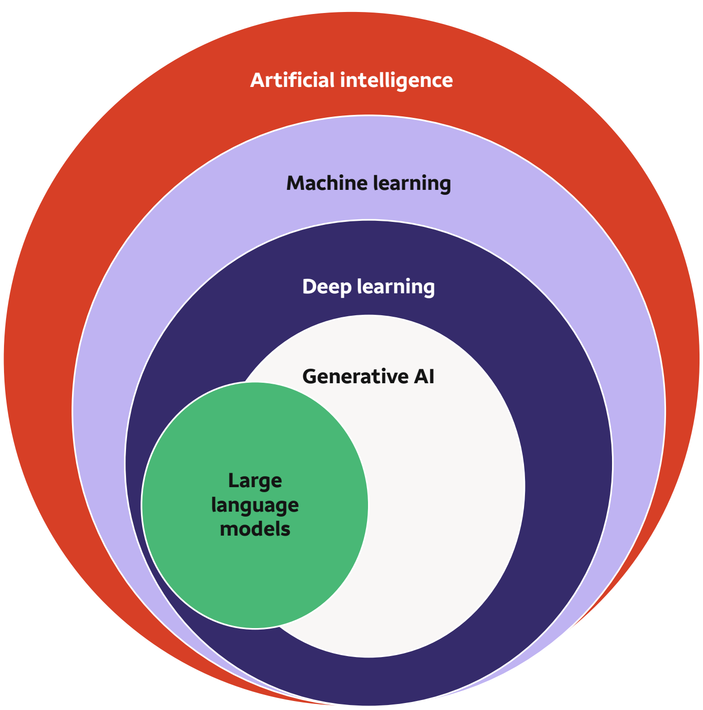
AI, more broadly, involves software capable of making decisions independently based on a given data set. AI has been around since the 1950s and has experienced several fits and starts. Over the past two decades, the convergence of big data, advances in high performance computing power, advances in machine learning algorithms, and the adoption of cloud computing have all been instrumental in driving advancements in AI.

The most recent advancement, generative AI, is a subset of deep learning that uses large language models to generate new original content (for example, images, conversations) based on user text prompts. ChatGPT represents a major technological breakthrough in the rapidly growing field of generative AI, and we believe generative AI represents a significant inflection point for the long-term adoption of AI.

Deep learning — a subset of machine learning — uses statistical techniques to glean meaningful patterns from unstructured datasets. Examples of deep learning applications include facial recognition and autonomous vehicles. Machine learning, a subset of AI, uses software applications and algorithms to analyze structured datasets to learn and perform predictive analytics faster and more accurately than humans. Examples of machine learning applications include targeted ads for online advertising and online product recommendations.

In our view, a select group of high-quality semiconductor and software companies within the Information Technology sector are well positioned to benefit from secular AI growth over the next decade. While we are neutral on the Information Technology sector overall, we are favorable on software and neutral on semiconductors.

Subsets of artificial intelligence



Source: Google Cloud, Wells Fargo Investment Institute. Introduction to Generative AI. May 8, 2023.

Fixed Income

Eric M. Jasso, CFA
Senior Retail Fixed Income Analyst

The price may be right for long-term corporate bonds

Since March 1, 2022, long-term investment-grade (IG) corporate bonds have seen the steepest selloff among fixed income. This has been a function of these bonds having higher "duration" — the measure of a security's sensitivity to a change in interest rates — due to their longer time to maturity.

As short-term IG bonds saw price declines of 6 – 8% over an 18-month period, the longest-dated bonds sold off nearly 30% and resulted in many bonds with prices almost 25% below par value.[3] In our view, these price declines may have left investors with an attractive opportunity with the potential for near-term price appreciation.

As yields are nearly identical across the maturity spectrum, we think investors who wish to implement our favorable guidance toward duration and our most favorable guidance toward U.S. Long-Term Taxable Fixed Income should gravitate to longer-term investment grade bonds with lower prices. We believe U.S. Long-Term Taxable Fixed Income should provide gradual price appreciation to par value as they approach maturity, with the potential for near-term price increases if longer-term rates experience a material pullback.

Investors should be aware that long-dated maturities will have greater exposure to the underlying issuer's business and financial strength through economic cycles. When taking credit risk over a long-term horizon, we believe investors should favor market leaders that have a track record of prudent financial policies within industries that are expected to be less susceptible to substantial disruption. Please see our Global Securities Research Recommended Corporate List for our best ideas to gain exposure to long-dated IG corporate bonds.

Market data for investment-grade corporate bonds — by maturity

Maturity	Avg. yield	Avg. price	Price change since 03/01/2022
1 to 2 years	5.91%	$96.27	-6.32%
2 to 3 years	5.78%	$94.83	-8.17%
3 to 5 years	5.70%	$93.16	-11.13%
5 to 7 years	5.75%	$89.82	-14.57%
7 to 10 years	5.83%	$87.11	-16.82%
10 to 20 years	6.02%	$90.53	-25.89%
20 to 30 years	5.95%	$77.17	-28.90%
30+ years	6.08%	$76.51	-30.21%

Source: Bloomberg U.S. Investment Grade Corporate Index. Pricing as of August 22, 2023. Yields represent past performance and fluctuate with market conditions. An index is not managed and not available for direct investment. **Past performance is not a guarantee of future results.**

3. Bloomberg U.S. Investment Grade Corporate Index. As of August 22, 2023.

Real Assets

Ian Mikkelsen, CFA
Equity Sector Analyst, Energy

Energy — Three takeaways from Q2 earnings season

Second-quarter (Q2) earnings for the S&P 500 Energy sector came in 52% lower year over year, as commodity prices moderated relative to the elevated price levels of Q2 2022. Despite the sharp decline, we believe earnings remain healthy on an absolute basis and sector fundamentals remain solid. Below we share three quick takeaways from our analysis of Q2 earnings.

- **Refining margins have remained resilient.** One of the biggest surprises this year has been how well demand and pricing have held up for gasoline, diesel, and jet fuel. There are a number of factors at play, but a few key drivers include: delayed global refining capacity additions, below-average U.S. product inventories, and increased demand for U.S. exports amid sanctions on Russian product.
- **Exploration and production (E&P) cost inflation has likely peaked.** We believe that Q2 results and forward guidance from E&P companies broadly reflect an outlook that operating costs have peaked, and companies could benefit from modest cost deflation in 2024. This has primarily been driven by lower raw material costs, such as steel and sand, while oilfield labor remains relatively tight.
- **Oilfield services companies can grow earnings despite a declining U.S. rig count.** Year-to-date, the U.S. active rig count has declined from 788 to 632 (as of August 25, 2023). This has driven investor concerns that industry pricing power could deteriorate as it has during past cycles of rig count declines. We believe that this time could be different, as there is less capacity in the industry and management teams have signaled a willingness to idle spare equipment to preserve pricing power. Additionally, we note that the industry (as measured by the S&P 500 Oil Services and Equipment sub-industry) now generates the majority of its revenues from international operations, where we believe there is better visibility toward continued growth from large-scale project announcements.

Alternatives

Mark Steffen, CFA, CAIA
Global Alternative Investment Strategist

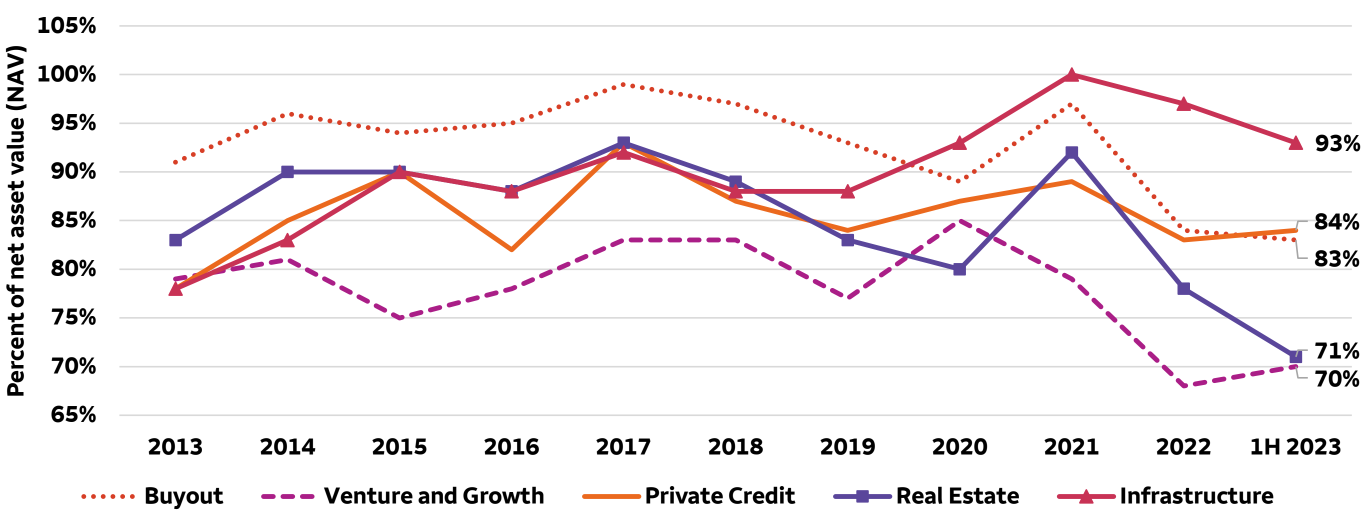
Secondary markets continue to offer attractive entry points

While secondary market valuations have stabilized in private equity and credit markets through the first half of 2023, discounts in real estate and infrastructure secondary markets has continued to grow. Despite the recent sideways trends, pricing across all categories remains well off the 2021 highs and continues to represent a potentially attractive entry point relative to recent historical levels, in our view.

As public equity and fixed income markets declined in 2022, many institutional investors became overallocated to private capital strategies. The need to rebalance their portfolios created additional selling pressure in secondary markets and led to growing discounts for patient buyers. While the rebound in public equity markets in 2023 reduced the number of forced sellers, pricing in other areas has continued to decline. Real estate secondaries remain under pressure as evolving workplace trends and higher interest rates impact valuations. In addition, infrastructure secondaries have also declined as more institutional investors use this asset class as a source of cash to rebalance their portfolios.

We believe infrastructure secondaries may represent an attractive opportunity for qualified investors to buy quality assets at a discount to their NAV (net asset value) that have the potential to generate stable income, protect against inflation, and offer attractive risk-adjusted returns. As the chart shows, while pricing in many secondary markets has leveled in recent periods, infrastructure secondaries have declined from their peak in 2021 and in our view, may offer qualified investors a more compelling entry point for an asset class with attractive attributes.

Historical pricing of secondary market transactions across private capital categories



Sources: Greenhill Private Capital Advisory transactions and Wells Fargo Investment Institute. Secondary market transactions measured across Greenhill Private Capital Advisory transactions. Data as of June 30, 2023. For definitions of sub-strategies, see Definitions at end of report. Secondary market trades will vary by vintage year. Vintage year=year at which the portfolio investment held its first closing. **Past performance is not a guarantee of future results.**

Secondary investments are interests in existing private equity funds that are acquired in privately negotiated transactions after the end of the private equity fund's fundraising period. Typically these funds have portfolios of existing investments as well as capital available for new investments. Alternative investments, such as hedge funds, private equity, private debt and private real estate funds are not appropriate for all investors and are only open to "accredited" or "qualified" investors within the meaning of U.S. securities laws.

Current tactical guidance

Cash Alternatives and Fixed Income

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
	U.S. Intermediate Term Taxable Fixed Income High Yield Taxable Fixed Income	Cash Alternatives Developed Market Ex-U.S. Fixed Income Emerging Market Fixed Income	U.S. Taxable Investment Grade Fixed Income	U.S. Long Term Taxable Fixed Income U.S. Short Term Taxable Fixed Income

Equities

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
U.S. Small Cap Equities	Emerging Market Equities	U.S. Mid Cap Equities Developed Market Ex-U.S. Equities	U.S. Large Cap Equities	

Real Assets

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Private Real Estate	Commodities	

Alternative Investments*

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Hedge Funds—Event Driven Hedge Funds—Equity Hedge Private Equity Private Debt	Hedge Funds—Relative Value Hedge Funds—Macro	

Source: Wells Fargo Investment Institute, September 5, 2023.

*Alternative investments are not appropriate for all investors. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Please see end of report for important definitions and disclosures.

Risk considerations

Forecasts are not guaranteed and based on certain assumptions and on views of market and economic conditions which are subject to change.

Each asset class has its own risk and return characteristics. The level of risk associated with a particular investment or asset class generally correlates with the level of return the investment or asset class might achieve. **Stock markets**, especially foreign markets, are volatile. Stock values may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. **Foreign investing** has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards.. **Bonds** are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. **High yield (junk) bonds** have lower credit ratings and are subject to greater risk of default and greater principal risk. The **commodities** markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in a volatile and uncertain commodities market may cause a portfolio to rapidly increase or decrease in value which may result in greater share price volatility. **Real estate** has special risks including the possible illiquidity of underlying properties, credit risk, interest rate fluctuations and the impact of varied economic conditions.

Secondary investments – the purchase of existing partnership interests in private fund vehicles. At the most fundamental level, secondary transactions involve the sale and transfer of an existing limited partnership interest in a private equity fund, or a portfolio of funds, from one investor to another. As a result, sellers receive liquidity for their stake in the investment and are released from any unfunded portion of their capital commitment. The buyer agrees to pay a predetermined price for the interest, often at a discount to Net Asset Value (NAV). By so doing, the buyer agrees to take on future funding obligations in exchange for future distributions from the investment. The most basic – and common – type of secondary transaction involves the sale of a limited partnership interest in a single private equity fund. However, transaction characteristics can take on more complex structures involving portfolios of funds, general partnership interests, direct investments and structured or deferred payment arrangements.

Alternative investments, such as hedge funds, private equity/private debt and private real estate funds, are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. They entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds. Hedge fund, private equity, private debt and private real estate fund investing involves other material risks including capital loss and the loss of the entire amount invested. A fund's offering documents should be carefully reviewed prior to investing.

Hedge fund strategies, such as Equity Hedge, Event Driven, Macro and Relative Value, may expose investors to the risks associated with the use of short selling, leverage, derivatives and arbitrage methodologies. Short sales involve leverage and theoretically unlimited loss potential since the market price of securities sold short may continuously increase. The use of leverage in a portfolio varies by strategy. Leverage can significantly increase return potential but create greater risk of loss. Derivatives generally have implied leverage which can magnify volatility and may entail other risks such as market, interest rate, credit, counterparty and management risks. Arbitrage strategies expose a fund to the risk that the anticipated arbitrage opportunities will not develop as anticipated, resulting in potentially reduced returns or losses to the fund.

Definitions

WFII guidance definitions

Most favorable: WFII's highest conviction guidance that indicates a strong desire to overweight an asset class (or sector) within a portfolio. It also communicates that, over a tactical time frame, WFII views the asset class (or sector) as offering investors a very attractive risk/reward opportunity.

Favorable: Guidance that indicates a desire to overweight an asset class within a portfolio. It also communicates that, over a tactical time frame, WFII views the asset class (or sector) as providing investors with an attractive risk/ reward opportunity.

Neutral: Guidance that indicates a desire to maintain an asset class near the long-term (strategic) allocation guidance within a portfolio. It also communicates that, over a tactical time frame, WFII views the asset class (or sector) as providing investors with an acceptable risk/reward opportunity.

Unfavorable: This WFII guidance level indicates a desire to underweight an asset class (or sector) within a portfolio. It also communicates that, over a tactical time frame, WFII does not view the asset class (or sector) as providing investors with an attractive risk/reward opportunity.

Most unfavorable: WFII's highest conviction guidance indicating a strong belief in underweighting an asset class within a portfolio. This also communicates that, over a tactical time frame, WFII views the asset class (or sector) as offering investors a very unattractive risk/reward opportunity.

Rating definitions from S&P Global Ratings/Moody's Credit Ratings

AAA/Aaa rating: The highest quality debt, with minimal credit risk.

AA/Aa3 rating: High quality and subject to very low credit risk.

A/A2 rating: Upper-medium grade and subject to low credit risk.

BBB/Baa3 rating: Obligations are subject to moderate credit risk; considered medium-grade, and as such may possess certain speculative characteristics.

BB/Ba2 rating: Judged to have speculative elements; subject to substantial credit risk.

Note: Moody's appends numerical modifiers 1,2 and 3 to each generic rating classification from Aa to Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of the generic rating category.

Chart on page 7 sub-strategy definitions:

Buyout: This strategy is comprised of equity funds that focus on purchasing at least a controlling percentage of a company's stock to take over its assets and operations.
Infrastructure: This strategy is comprised of funds that invest in infrastructure assets, including roads, canals, airports, hospitals, etc. These income producing assets generally offer more stable cash flows and possess high barriers to entry given the large scale transaction sizes.
Private Debt: This strategy is comprised of funds that provide exposure to various types of debt investments, including direct loans to middle market private companies, distressed/stressed credit strategies that invest in the debt of companies entering a debt-for-equity restructuring, mezzanine strategies that provide subordinated debt financing or private equity transactions, as well as a number of other debt focused strategies.
Real Estate: This strategy is comprised of real estate investment across the four major sectors, including Industrial, Office, Residential, and Retail. Real Estate investments may include lower risk core strategies that possess low vacancy rates and stabilized properties to higher risk, ground up development of new real estate properties.
Venture and Growth: This strategy is comprised of equity funds that invest in both new companies with high growth rates, including both control and non-control (minority) stakes.

Bloomberg U.S. Investment Grade Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

Bloomberg Aggregate High Yield Index is a sub-index of the Bloomberg US Aggregate Index that measures the USD-denominated, high yield, fixed-rate corporate bond market containing securities that are classified by a credit rating from Moody's, Fitch and S&P of Ba1/BB/BB+ or lower.

ICE BofA U.S. Distressed High Yield Index is a subset of the BofA US High Yield Index including all securities with an option-adjusted spread more than 1,000 basis points.

ICE BofA U.S. High Yield Index tracks the performance of U.S. dollar denominated, below investment-grade rated corporate debt publicly issued in the U.S. domestic market.

S&P 500 Energy Index comprises those companies included in the S&P 500 that are classified as members of the GICS® energy sector.

S&P 500 Index is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the US stock market.

S&P Oil & Gas Equipment & Services Select Industry Index represents the oil and gas equipment and services sub-industry portion of the S&P Total Markets Index.

S&P Total Market Index is designed to track the broad equity market, including large-, mid-, small-, and micro-cap stocks.

An index is unmanaged and not available for direct investment.

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