TIAA-CREF Asset Management

Investing in middle market senior secured loans

Financial Services

A new opportunity in the search for yield

While institutional investors are familiar with the markets for broadly syndicated large corporate loans and high-yield bonds, the opportunity to invest in U.S. middle market corporate loans is less well-known.

One of the characteristics of the loan market since the credit crisis in 2008 has been a dearth of senior loan capital available to middle market companies. Historically, these companies have not had the access to the broader debt capital markets afforded to larger, more liquid borrowers, and are generally too small to be financed by public loan mutual funds or institutional loan investors. At a moment when interest rates remain low and public equity and credit securities seem fully valued, the investment opportunities in middle market loans look very compelling.

Middle market companies are seeking more loans to finance growth as the economy expands. This means that it is possible for an established, experienced lender to construct a high-quality loan portfolio, producing a potentially attractive risk-adjusted return.

One of the components of this return is the so-called "illiquidity premium" associated with middle market loans, reflecting the recognition by institutional investors that smaller loans are less liquid than their more broadly syndicated counterparts. Middle-market loan originations are designed as buy-and-hold investments and require a high level of due diligence on the part of the investor. However, the senior secured position of these loans in the capital structure provides downside protection when compared to other loans or equity. The floating-rate nature of middle market loans mitigates interest-rate risk and provides increased returns in a rising interest rate environment.

At TIAA-CREF, we have developed a robust investment process, and a team that is experienced at structuring these loans and constructing middle-market loan portfolios. This puts us in a good position to take advantage of the demand for capital, particularly from private equity sponsored companies, a market segment where we have years of investing experience. In this primer, we will outline the case for this strategy, and its potential risks and rewards.

The case for U.S. middle market corporate loans

The challenge for all credit investors in this low interest-rate environment is to generate appropriate returns. One of the best ways is to seek out higher yielding securities. Yet this, by definition, increases risk. So are investors forced to take on more credit risk in order to gain a better yield?

By providing capital outside the public markets in privately negotiated deals, investors have the opportunity to circumvent these expectations. What senior secured, private loans to U.S. middle market corporate borrowers offer investors is a way to generate higher returns, without an offsetting move down in credit quality, with little to no interest-rate risk.

Middle market secured loans are currently estimated to generate yields of 6% to 7% and generally possess superior covenants and protections for investors resulting in extremely favorable risk-adjusted returns for this asset class.

Secured middle market loans can offer investors a "triple crown" of credit investing including:

1. A yield premium over broadly syndicated loans
2. Lower leverage and higher coverage ratios
3. More conservative deal terms and traditional covenant packages

It is worthwhile to consider the returns on middle market loans in contrast to other popular, publicly traded sub-asset classes. In the table of current asset yields available, middle market senior secured loans are estimated to provide yields in excess of those offered by high-yield bonds and broadly syndicated large corporate loans. TIAA-CREF estimates that a diversified portfolio of senior loans made to high-quality, non-investment grade middle market companies currently generate an asset level gross yield of roughly 6% to 7%.

Asset Class	Index	Yield
Middle Market Senior Secured Loans	S&P LCD Middle Market Estimated Average	7.03%
High-Yield Bonds	S&P LCD High Yield (Average New Issue)	6.56%
Broadly Syndicated Large Corporate Loans	S&P LCD Large Market (Most recent New Issue)	5.93%
Real Estate	NAREIT Global RE (YTD)	4.40%
Commodities	DJ UBS Commodity (1 Yr)	2.50%
Investment-Grade Bonds	Barclays Global Agg Corporate (YTW)	2.46%
Government Bonds	Barclays Global 7-10 Yr Treasury (YTW)	1.81%
Cash and Short Maturity Bonds	Barclays Global 1-3 Yr Treasury (YTW)	0.67%
Emerging Equity	MSCI EM (YTD)	0.60%
Developed Equity	MSCI World Net Return (YTD)	-1.79%

Note: Middle market loans represent first lien & second lien loans, institutional loans & pro rata loans. Data as of February 2015.

Source: S&P LCD for Middle Market, High Yield & Large Corporate; NAREIT, Barclays, MSCI and Dow Jones-UBS yield information.

The shortage of middle market capital supply

Middle market companies are often overlooked by traditional investors, yet it is a very large and growing asset class. If this sector was a stand-alone country, it would be the No. 4-ranked GDP in the world. Private U.S. middle market companies number about 350,000 and employ 32 million people. Typically, it is a sector of the U.S. economy that has been served by commercial banks and other traditional lenders. More recently, other capital providers such as specialty finance companies, structured-credit vehicles such as CLOs (collateralized loan obligations) and BDCs (business development companies), and private investment funds have begun to invest more actively in the middle market.

Since the credit crisis, increased capital requirements and regulatory burdens have led to improved competitive dynamics for non-traditional lenders. Large banks are constrained by regulatory reforms such Basel III and the Dodd-Frank Act. Many have also focused on more broadly syndicated, more liquid deals, while also providing fee-based services that require less capital. Finally, some large banks are still wrestling with legacy portfolios that create a drag on profitability and uncertainty, which has the effect of leading them toward larger, more liquid issues. Smaller regional banks are refocusing their efforts on loans within their geographic footprint. GE's announcement on April 9, 2015 of its intention to sell the majority of its GE Capital businesses – including its middle market lending business, one of the leading providers of senior loans to middle market companies – may further reduce the available supply of middle market senior debt capital.

However, while the middle market presents opportunities for non-traditional lenders, the ability for institutions to access senior loans to this attractive segment of the loan market has been more limited. While overall CLO issuance for broadly syndicated loans has rebounded over the past several years, few new vehicles have focused on middle market opportunities and the reinvestment periods for existing vehicles servicing this market are expiring. Public BDCs continue to be focused on loans that are more junior in the capital structure. Specialty finance companies are hampered by a mismatch between their assets and liabilities from providing middle market finance. Finally, most credit opportunity funds generally lack deep sourcing capabilities and tend to seek rescue financings or junior capital investments in special situations they believe will drive higher asset-level returns, rather than lending to higher quality companies.

The following regulatory reforms favor alternative capital providers to the middle market:

Basel III

- Updated risk-based capital weightings may require large banks to reserve more equity capital against leveraged loans

Dodd-Frank and CLO Risk Retention

- Risk retention (via Dodd-Frank) requires that a sponsor hold 5% of the face value of a securitization on its balance sheet
- Already in place in Europe (a factor in the zero CLO new issuance in Europe during 2012); U.S. to implement in 2016
- Favors middle market alternative lenders and larger securitized asset managers such as TIAA-CREF

Volcker Rule

- Prevents banks from owning or sponsoring alternative investment firms
- May impact large banks' ability to make markets in CLO paper and provide warehouse facilities to CLOs

New FDIC, OCC, and Fed guidelines on bank leveraged lending

- Expands definition of "leveraged" loans[1] – could lead to higher loan servicing costs and interest costs for borrowers, making banks less competitive
- Expands definition of "criticized" loans[2] – these loans will have higher capital requirements

Source: Wells Fargo

[1] To those with M&A related purpose and Debt/EBITDA >4.0x or Senior Debt >3.0x

[2] To include loans to borrowers that cannot show the ability to amortize all senior debt or 50% of total debt in 5-7 years and loans to companies with total Debt/EBITDA > 6.0x

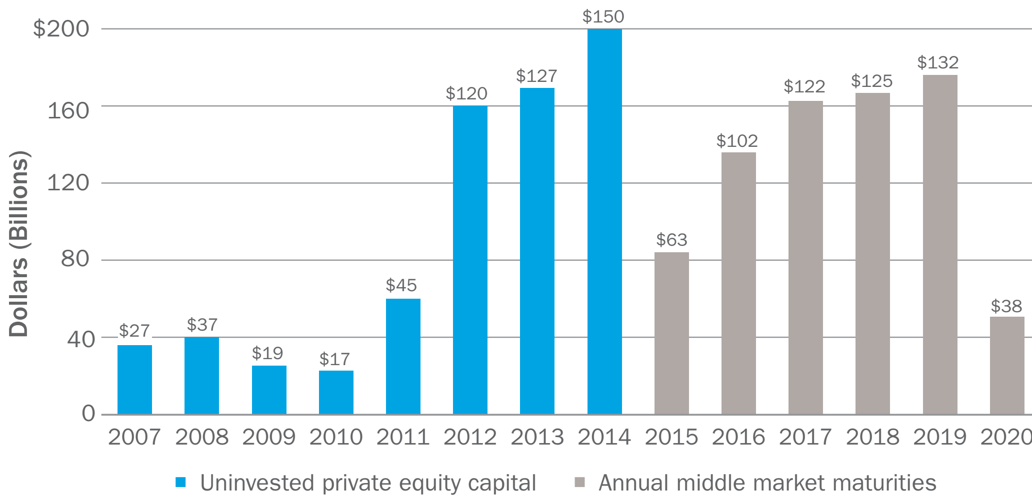
The growing demand for capital

On the demand side, things are similarly stacked in favor of capital providers. Dislocation in capital markets and the changes to the supply side, as previously outlined, have generally reduced the credit available to middle market companies. Importantly, as of the end of 2014, private equity firms have $535 billion in uninvested private equity capital available for investment. They will be highly motivated to deploy these funds before the end of their investment periods. At a typical capitalization of 40% equity, this translates into over $800 billion in new loan demand over the next several years.

In addition, there is a significant need for refinancing of existing loans made to middle market companies. The $583 billion of middle market loans coming due between 2015 and 2020 will provide a steady flow of attractive opportunities for well-positioned lenders with deep and longstanding sponsor and market relationships. All of this adds up to a very favorable environment for lenders with a steady source of capital, and an experienced investment team that can correctly assess the opportunity set.

The market for leveraged loans to support the activities of middle market private equity firms is likely to remain vibrant for many years with over $1.3 trillion in projected new loan demand - all at a time when the number of providers of loans to middle market companies is contracting.

Uninvested private equity capital by vintage & middle market loan maturities



- **2007 – 2014 private equity capital to deploy:** $535 billion, driving $800+ billion of financing need
- **2015 – 2020 middle market maturities:** $583 billion
- **Projected new financing need in excess of $1.3 trillion**

Source: Uninvested PE Capital from Pitchbook, as of Q2 2014; Total Middle Market Maturities (sponsored and non-sponsored) from Thompson Reuters LPC, as of Q4 2014

In addition to "new money" middle market buyouts, starting in 2016 over $100 billion in current middle market loans per annum will become due thus providing an attractive opportunity to deploy capital in support of refinancing transactions.

Key investment considerations

The supply and demand arguments and current yields for middle market loans are compelling. Yet no investment is without risk. Some of these risks are the same as for any loan; others are specific to this sub-asset class. Below we identify five critical areas of risk for middle market loans, and strategies to mitigate those risks:

Credit

Risk: Default by borrower

Mitigation: Robust investment process and experienced team

Structuring

Risk: Poor execution of loan documentation and structure

Mitigation: Robust investment process, tighter covenant packages and experienced team

Spread Volatility

Risk: Reduction in price of the loan

Mitigation: Less of a factor given that middle market loans are generally not actively traded. Middle market loans that do trade have exhibited lower volatility than their broadly syndicated counterparts

Illiquidity

Risk: Inability to sell the loan

Mitigation: Assuming that the investor can assume this risk, and that assets and liabilities are matched, this risk is addressed and investors should be compensated for it

Interest Rates

Risk: Reduction in price due to increase in interest rates

Mitigation: Middle market loans are generally floating rate securities, thus mitigating rate risk

Our senior investment team has deep experience in evaluating key risks of middle market loans with a primary focus on credit risk and preservation of capital.

The "buy-and-hold" origination model

For many reasons, including the risks that have been detailed above, middle market loans are often more conservatively structured than broadly syndicated loans, with stronger covenant packages, lower leverage and better interest coverage. So how do they compare in terms of performance?

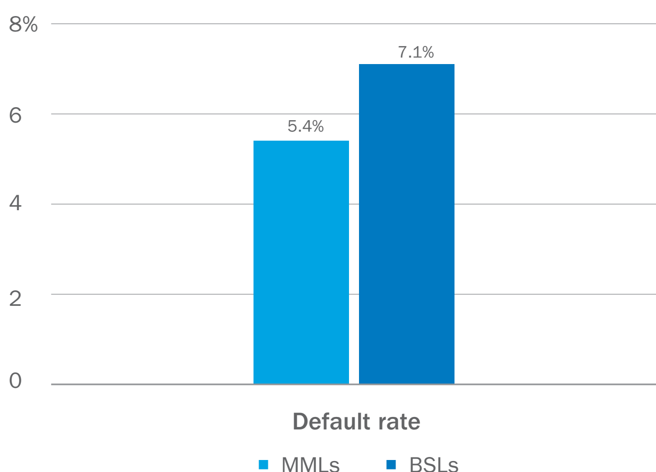
Interestingly, historical performance data suggests that middle market loans (MMLs) exhibit less risk, as measured by default and loss rates, than the closest comparable investment option, which is non-investment-grade, broadly syndicated loans (BSLs). Historical default and loss rates through the market downturn for each loan type are outlined in the chart below.

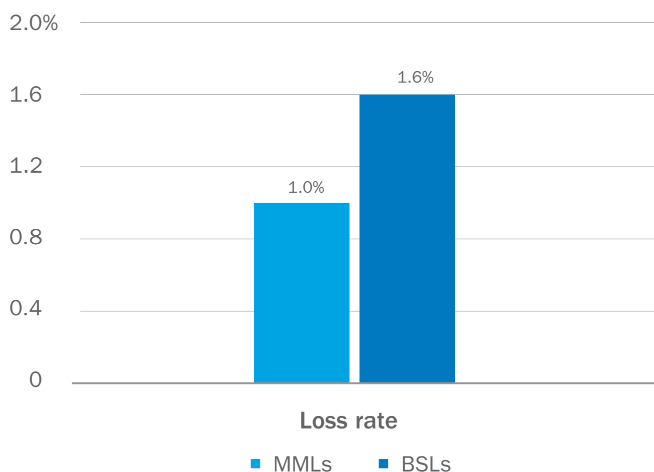
Given the perception that smaller generally means riskier, is there a reason that middle market loans perform better in the downside case than their large-cap brethren? The answer is fairly straightforward. The typical investor in a broadly syndicated loan can (during normal market environments) trade out of the loan if their view of the credit changes. Thus, the mentality of such a buyer will tend to be that of a trader with the instinct to move paper quickly, not a buy-and-hold investor. In contrast to this "moving business" model, middle market lenders are in the "storage business." They hold the risk on their balance sheets. This dynamic creates a strong incentive for middle market lenders to conduct deep due diligence before making a loan and to be very thoughtful about the terms of the loans they make.

Because of the long-term nature of the holding, middle market lenders prefer a strong senior secured position in the capital structure, which provides a significant element of downside protection. Because size of the facility or loan is smaller, the lender group operates like a "club" and is thus more effective should restructuring be necessary. A club can negotiate tighter covenants, allow less leverage and insist on a lower loan-to-value ratio than larger, more broadly syndicated loans. Middle market lenders generally require shorter maturities and higher amortization, and avoid riskier large deal debt characteristics such as PIK (payments-in-kind) or covenant-lite structures. In addition they demand a higher proportion of sponsor equity (40% and up) and expect more equity support should the company become troubled. It is this conservative loan structuring that contributes to the better overall performance of middle market private lending.

> The case for middle market loans: why has this asset class exhibited better performance in a downside scenario?

Middle market and broadly syndicated loan performance through the downturn, 1995 – 2011





Source: S&P LCD; MMLs include total facility sizes of less than $200MM and BSLs denote total facility sizes of greater than or equal to $200MM. Overall loss rates are calculated as follows: (Default Rate * (1 – Recovery Rate)). Default Rate reflects the number of defaulted deals divided by the total loans made during the period.

Beyond senior debt

Many investors in search of yield also consider instruments that sit farther down in the capital structure of middle market companies, such as public high-yield and private mezzanine debt. These credit instruments offer higher returns as a result of additional risk and can provide a bump in yield. Yet investors need to understand that default rates on high-yield and mezzanine debt are higher than on senior debt. Several other risk factors need to be considered. Credit risk rises farther down the capital structure. Sometimes, depending on the macroeconomic and credit picture at the time of issuance, a capital structure may be either more aggressive or more conservative. Investors need to be even more aware of the risk-return characteristics of the paper they are buying. And finally, unlike senior debt, junior debt is often fixed-rate, making it more susceptible to the risk of interest rate increases.

A sweet spot in middle market lending

At TIAA-CREF, we believe that the risks associated with senior secured lending to middle market companies are further mitigated by focusing on loans made to companies backed by private equity sponsors. The logic behind why private equity backed deals are safer than non-sponsored and "rescue finance" type loans is illustrated in the table below. Some of the key reasons are that private equity sponsors provide additional transparency around financials, offer professional guidance to the company, and, in a downside scenario, good private equity firms stand ready to inject their companies with additional capital.

Lenders to companies that are controlled by top-tier middle market private equity firms benefit from strong corporate governance and transparency, as well as potential economic support should a portfolio company need additional capital.

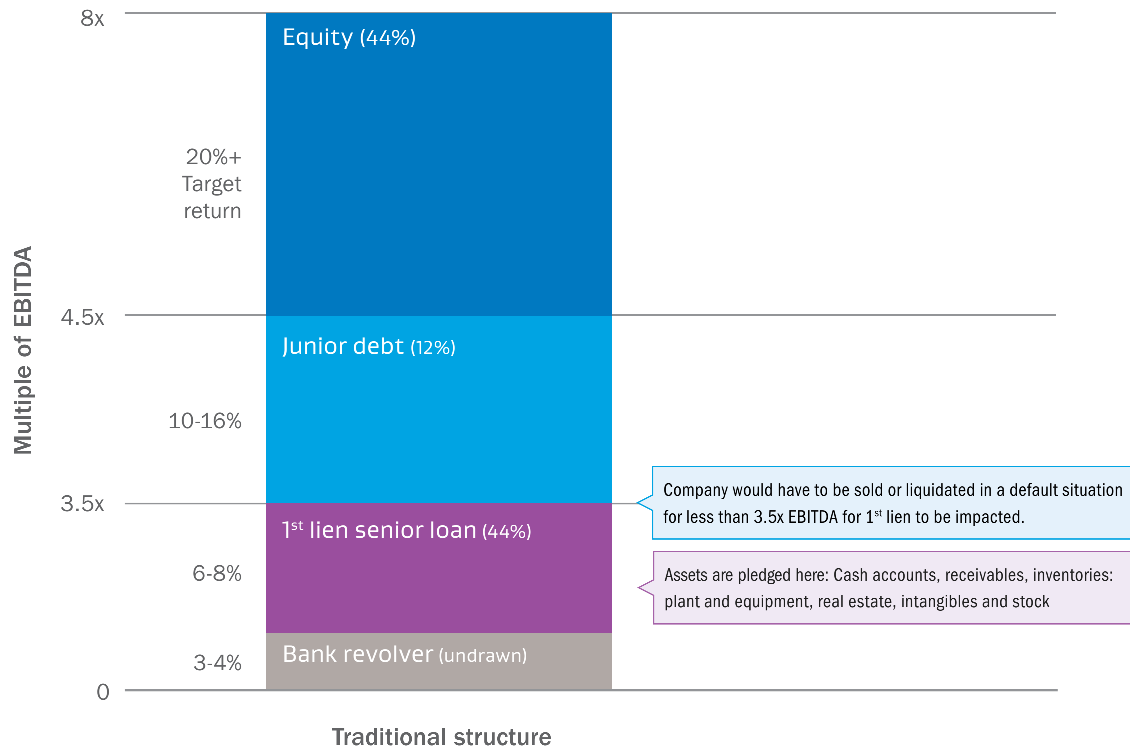
Sponsor-driven middle-market	Non sponsor-driven middle-market	Middle-market rescue lending
▪ Hundreds of transactions per year, driven by M&A and refinancings ▪ Sponsor-backed companies have accounted for 65% of middle-market issuance since 1997 and nearly 80% since 2010. Performance of these deals has been tested over multiple credit cycles	▪ Fraction of the number of sponsor-driven transactions per year ▪ Sole focus on this segment results in sporadic deal flow and lumpy position sizes ▪ Performance of these deals has not been tested over a full credit cycle	▪ Deal flow driven by the default cycle ▪ Deals extremely far between and extremely lumpy ▪ Performance of these deals has not been tested over a full credit cycle
▪ Conservative structures: average senior leverage of 3.0x to 3.5x	▪ First lien loans are "stretch senior" and are deeper in the capital structure (estimated -4.5x to 5x)	▪ Portfolio comprised of first lien loans that are very deep in the capital structure or second lien loans
▪ Typically defensive industries with strong cash flow generation	▪ Can include cyclical industries (automotive, retail, restaurants) avoided by most middle-market sponsors	▪ Borrowers have few/no alternatives for capital
▪ Strong equity sponsors ensure access to additional equity capital, there to support business, and provide active board oversight	▪ No financial sponsor	▪ Typically no financial sponsor or a sponsor that is unwilling to commit further capital due to capital impairment
▪ Typically lower LTV	▪ Typically higher LTV	▪ Typically highest LTV
▪ Exposure to economic cycles tends to be limited	▪ Tends to have increased exposure to economic cycles	▪ Tends to be very exposed economic cycles

Source: S&P LCD Q4 2014 High-End Middle Market Lending Review. Defined as issuers with <$50MM of EBITDA.

Middle market case study

Below is an example of the capital structure of a typical private equity backed middle market company. The diagram illustrates some of the positive attributes of lending to this type of borrower. The senior secured tranche is backed by a range of corporate assets and would not be impaired short of default. The equity investment by the private equity sponsor consists of $175 million and comprises 44% of the capital structure.

Sample capital structure

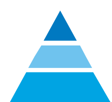


Borrower profile:	Transaction metrics:
Enterprise value: $400 million	Total debt: $225 million
Revenue value: $250 million	1st lien senior loan: $175 million
EBITDA: $50 million	Junior debt: $50 million
Rating: B2 Moody's	Senior leverage: 3.5x (LTV 44%)
Industry: Industrial	Total leverage: 4.5x (LTV 56%)
	Equity: $175 million (44%)

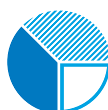
Source: S&P LCD; MMLs include total facility sizes of less than $200MM and BSLs denote total facility sizes of greater than or equal to $200MM. Default Rate reflects the number of defaulted deals divided by the total loans made during the period.

Constructing a top-tier middle market loan portfolio

To construct a portfolio of high-quality assets in this sub-asset class, experienced investors are guided by certain fundamental principles. For a successful middle market lending strategy, TIAA-CREF has identified the following attributes:



Seniority
Invest in a core of **senior secured first-lien and unitranche loans**



Diversification
Maintain a **highly diversified portfolio** of loans to minimize single-deal risk

Quality
Focus on the **traditional U.S. middle market**. Invest alongside top private equity sponsors with significant "skin in the game". Avoid cyclical industries/ companies, those with start-up risk, customer concentration and certain other company risk factors

Prudent leverage
Seek to apply a **modest level of fund-level leverage** on these higher quality loans via a **well-crafted financing vehicle**, rather than lending to riskier companies or lending deeper in the capital structure

Key middle market loan characteristics

The criteria and metrics used by TIAA-CREF in portfolio construction are summarized below. Important points to note are the number of lenders, typically two to 15, far fewer than a typical syndicate; the effective duration of the loans, often under four years; and the relatively small size of the loans, $25 million to $350 million.

Use of funds	Leveraged buyouts, acquisition financing, refinancing or recapitalization, organic growth initiatives
Maturity	5 to 7 years
Facility size	$25 to $350 million
EBITDA *(Earnings before interest, taxes, depreciation, and amortization)*	$10 to $100 million
Lenders per facility	2 to 15
Senior leverage multiples	Up to 4.5x
Unitanche leverage multiples	Up to 5.5x
Total leverage multiples	Up to 6.0x
Spread over libor	400 to 600 bps
LIBOR floors	1.0% to 1.5%
Upfront fees	0.5% to 2.0%

Conclusion

TIAA-CREF believes that an experienced investment team can potentially generate strong risk-adjusted returns by lending to middle market companies in the current market environment. A diversified portfolio of senior loans made to high-quality middle market companies currently has the potential to generate a 6% to 7% asset-level yield, representing a significant premium to public-market alternatives. Using modest amount leverage through a well-crafted credit facility, the return for this strategy has the potential to generate 10% to 12% net yield to investors.

As noted in detail above, the strategy:

- Compares favorably to public market credit and broadly syndicated debt strategies
- Has strong return potential relative to the risks, many of which can be mitigated
- Offers significant downside protection due to capital structure seniority, private equity sponsor backing, deep loan diligence
- Has a favorable supply/demand dynamic with structural imbalances that favor lenders and are unlikely to be corrected any time soon

About TIAA-CREF and Churchill Asset Management

Drawing on over 40 years of investment experience in private markets, TIAA-CREF has developed a robust platform with proprietary sourcing capabilities and cycle-tested investment teams focused on a wide range of private market asset classes that include private placements, senior secured loans, mezzanine finance, private equity funds and co-investments.

An active middle market investor, TIAA-CREF manages a large, well-established and diversified portfolio comprising private equity fund commitments, direct equity co-investments, mezzanine and senior loans. TIAA-CREF's senior middle market debt investing is conducted through majority-owned affiliate Churchill Asset Management. Together, TIAA-CREF and Churchill Asset Management provide investors with a focused strategy for capitalizing on opportunities in the middle market, extensive market knowledge and a differentiated platform that can offer institutional investors access to opportunities not easily replicated by traditional asset classes and that may serve as a tool for portfolio diversification.

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TIAA-CREF products may be subject to market and other risk factors. See the applicable product literature, or visit tiaa-cref.org for details.

Please note investments in middle market loans are subject to various risk factors, including credit risk, liquidity risk and interest rate risk.

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161 or log on to tiaa-cref.org for product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

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