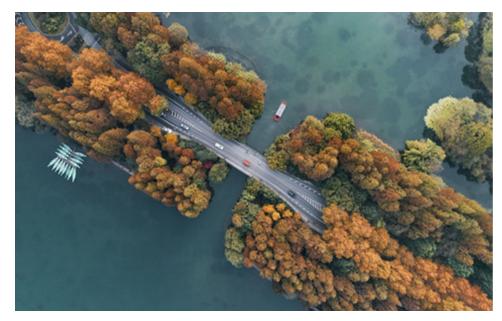
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Opportunities in Private Credit



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After the Great Financial Crisis, and more recently as a result of the pandemic, accommodative central bank policies were implemented to stabilize dislocated credit markets, driving yields to record lows. As the economy has healed, investors have been navigating a new paradigm that incorporates the reversal of emergency measures to counter rising inflationary pressures, and 2022 is already shaping up to be a potential rising yield environment, which is creating additional challenges for traditional fixed income investors.

Over the last decade, private credit strategies have become a more integral part of alternative investment allocations. Private credit strategies generally come in two categories: those that focus primarily on income generation and those that focus on capital appreciation. Strategies that emphasize income generation mainly invest in privately originated direct corporate loans, asset-based loans or specialty lending opportunities, all of which have typically been higher yielding in nature and have generated attractive current income. Strategies that invest in distressed and special situations credit tend to seek higher total returns through capital appreciation and are less concerned with current income. We believe investing in private credit may

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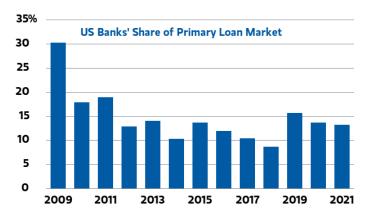
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enhance overall portfolio returns through either the illiquidity premium associated with nontraded originated investments or by taking advantage of credit market dislocations. In this report, we aim to break down the sub-strategies within private credit and discuss opportunities within the different segments of the market.

Evolution of the Credit Markets

Since the financial crisis, credit markets have undergone structural changes that have significantly altered the banking and investment landscape. Because of more stringent banking oversight and regulations, banks have largely exited the low margin business of lending to small and middle-market companies. Opportunistically, nontraditional lenders have stepped in to fill this void left by bank disintermediation (see Exhibit 1).

Exhibit 1: US Banks' Loan Market Share Down by Two-Thirds in Past Decade



Source: S&P LCD Leveraged Lending Review Q4 2021

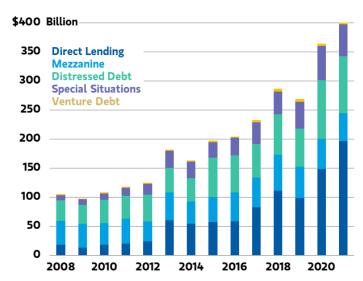
In addition to the increased regulations and bank deleveraging, historically low interest rates and associated central bank security purchase programs over the past 13 years have directed investors to search for more attractive yield as traditional investment options have become less attractive. As institutional investors search for substitutes. the floating-rate nature of certain private credit investments may provide protection against rising interest rates. In

addition to their diversification attributes, private credit strategies may enable investors to capture the illiquidity, or return, premium associated with less liquid debt.

Given diminishing returns in the credit markets, some institutional investors are reassessing their need for liquidity and repositioning a portion of their traditional fixed income allocation into private debt. The traditional 60%/40% equity/fixed income asset allocation is increasingly being reconsidered, with many institutional and high net worth investors adjusting their approach. Within the Global Investment Committee's broader asset allocation framework, private debt is categorized as a stand-alone allocation and is no longer grouped with private equity (PE) or liquid debt. This should allow investors to better identify where their allocation to private credit sits in a broader portfolio context.

As institutional acceptance of private credit rises, so do allocations to this asset class. The increased institutional acceptance of private credit can also be seen in the increase in dry powder and fund formation (Exhibit 2).

Exhibit 2: Private Credit Fund Dry Powder Has Risen



Source: Pregin as of December 2021

What Is Private Credit?

There are many dimensions in the private credit investment area and Global Investment Manager Analysis (GIMA) believes there are a number of strategies that present differing return, risk, income and liquidity profiles. There are significant distinctions among the various strategies that place each one at different points of the risk/return spectrum. The main strategies that fall into this private credit space include direct and specialty lending, structured credit, distressed investing, and special situations (see Exhibit 3). We will detail each of these strategies in the following sections while discussing their relative attractiveness in the current investment environment.

Exhibit 3: Wide Spectrum of Private Credit Strategies

Strategy	Direct Lending				Structured Credit	Distresssed Investing			
Sub- Strategy	Senior Secured	Unitranche	Junior / Mezzanine	Specialty Lending	Active / Non-Control	Active / Non-Control	Control	Restructuring / Turnaround	Special Situations
Strategy Overview	Privately negotiated loans	Combination of senior and junior debt	Junior debt in the capital structure	Privately negotiated loans often backed by hard	backed by loans (RMBS, CMBS,	Trading and non-influential positions in debt of	Purchasing debt of distressed companies	Investment in bankrupt or defunct companies or	Bespoke capital solution for stressed or transitioning
	Senior in the capital structure	Typically the only debt in the capital structure	Typically combined with equity warrants	assets		distressed companies	with intention of gaining ownership post reorganization	their assets at significant discounts	companies

Note: For illustrative purposes only. Past performance is not indicative of future results. Structured Credit encompasses securities with varying levels of risk/return (ex. RMBS, CMBS, CLO). Source: Morgan Stanley Wealth Management GIMA

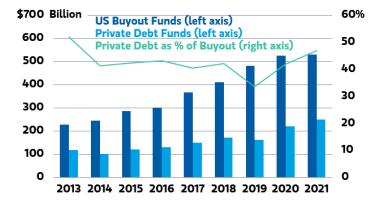
Direct Lending

As mentioned, the current supply/demand imbalance in middle-market lending may continue to provide an opportunity for investment. Since the Great Financial Crisis from 2008 to 2009, traditional lenders have been less willing to extend credit to small and midsized companies. Unlike large corporate loans, which can be easily syndicated (sold into the public markets as tradeable debt), middle-market loans are typically left on bank balance sheets, tying up regulatory capital. Similarly, the market for collateralized loan obligations (CLOs) remains mainly focused on large companies. In 2021, middle-market issuance volume recovered to a record high after taking a pause in early 2020 at the onset of the pandemic.

On the demand side, there is \$250 billion of dry powder in private debt funds, a year-over-year increase of \$30 billion. Direct lending has seen record capital inflows that are supportive of PE fund activity, with US buyout funds sitting on \$530 billion in dry powder at the end of 2021. This is important because a large portion of the middle-market

private lending space is backed by PE fund sponsors or managers. Since 2013, US buyout fund and direct lending fund dry powder have grown 2.3 times and 2.1 times, respectively, allowing PE fund managers to undertake more deal activity (see Exhibit 4).

Exhibit 4: Dry Powder: Private Lending Funds vs. **Buyout Funds**



Source: Pregin as of December 2021

In the following sections we compare and contrast the various direct lending strategies and their respective risk/return characteristics. Exhibit 5 depicts the typical capital structure of a company, illustrating the relative levels of debt utilized in the strategies outlined.

Exhibit 5: Typical Capital Structure With Various Investment Entry Points





Source: Morgan Stanley Wealth Management GIMA

Senior Lending

Senior private loans are generally defined as loans to small and midsized companies with EBITDAs (earnings before interest, taxes, depreciation and amortization) ranging from \$10 million to \$100 million. Directly originated private loans can offer benefits over more traditional investments and may provide an attractive option for investors who are able to bear the associated illiquidity and other risks. These loans are privately negotiated and may have tighter debt covenants and enhanced due diligence. Also, many loans are extended to companies that have PE sponsors. These "sponsor-backed" loans can potentially provide extra capital infusions in the event of a downturn. Furthermore, middle-market loans tend to entail less leverage than large corporate loans.

Middle-market senior loan returns comprise several components. First, they generally carry a floating-rate coupon with a LIBOR floor, which helps mitigate interest rate risk. These loans may also generate enhanced return from origination fees, as well as from prepayment penalties, which are generally absent in the syndicated market. Additionally, as a result of the seniority and built-in risk mitigation of this debt, managers often utilize moderate amounts of leverage in an attempt to boost overall returns.

Junior Debt/Mezzanine

Junior debt, which includes mezzanine, is a form of debt senior to equity but subordinate to senior secured loans, and provides credit to small and mid-cap borrowers unable to access the high yield public markets. Often this debt is utilized in private equity leveraged buyout transactions or in acquisitions. Middle-market borrowers benefit from mezzanine debt's flexible structure, which does not require

public filings or credit ratings. Similar to senior direct lending, mezzanine debt is privately negotiated with extensive due diligence and added maintenance covenants.

Mezzanine debt returns are composed of fixed-rate cash interest payments, "payment in kind" or PIK coupons, which are paid by capitalizing the deferred interest payment as additional debt, upfront fees, and call premiums. Call premiums require the issuer to pay a premium to par value in the event the bond is paid off early. Additionally, mezzanine debt often includes an equity warrant, allowing the investors to purchase equity in the company at a later date, providing further upside potential to the investor.

While the target returns on this more junior debt are typically higher than those of senior secured lending, this strategy comes with higher risk. With the debt position in the capital structure being the first loss piece above equity there is a higher chance of loss of capital.

Unitranche

In recent years, we have also seen a rise in unitranche financings, or more solutions-based single loan facilities for borrowers that combine senior and junior debt and serve as the only debt on a company's balance sheet. These financings are typically extended to companies that have limited alternatives for obtaining credit. Over the last few years the traditional unitranche borrowing base has expanded with larger companies now opting out of the syndicated loan markets and pivoting to private credit given the enhanced ability and willingness of direct lenders to allocate to larger deal sizes. Direct lending unitranche structures are an attractive one-stop financing tool for all-sized companies with the additional value-add proposition of certainty of execution, which is often valued by many borrowers. The target returns generally fall in between senior and junior debt.

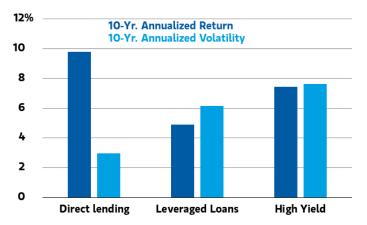
Performance

So how have these strategies performed? A study by Cliffwater Research demonstrates that for the 10 years through the third quarter of 2021, direct lending strategies, which included both senior and mezzanine/junior debt, outperformed both leveraged loans and high yield, with lower volatility (see Exhibit 6). Moreover, this outperformance was not associated with higher credit losses, as direct lending loss rates have been in line with the leveraged loan and high yield credit markets over the same time period. The appealing risk/return attributes further underscore the opportunity direct lending strategies may offer investors.

The higher annualized returns over the past decade associated with direct lending strategies may be partly explained by the illiquidity premium. Investors typically lend to these companies through illiquid investment vehicles, either in a fund structure or private business development company (BDC). These investment vehicles allow managers

to invest without having to sell at unfavorable prices to meet redemption requests. Manager selection is critical to obtaining attractive risk/return characteristics, and we favor managers with deep expertise in loan structuring and analysis with disciplined credit underwriting. Also, managers should have a wide-reaching network of PE sponsors for sourcing capabilities.

Exhibit 6: Direct Lending Has Generated Higher Returns and Lower Volatility



Note: The returns illustrated are gross of all fees, and actual investor returns would be lower if these fees were deducted. Past performance is not indicative of future returns. Source: Cliffwater Research, S&P/LSTA Leveraged Loan Index, Bloomberg US Corporate High Yield Index as of September 2021

Potential Risks

While the opportunity set appears rich for direct lending, there are various potential risks associated with a privately negotiated market. Credit quality and illiquidity are key risks factors of the asset class. The typical borrowers in the privately originated loan market are smaller, have more narrow product mixes and may have lower EBITDAs that could limit their ability to navigate economic or industry/sector downturns. In addition, this debt is illiquid, with no established secondary market. Funds originating this type of debt may not be able to sell the positions to another counterparty, which may result in extended holding periods.

Manager skill is paramount, and the ability of managers to source, underwrite and manage the risks noted above is critical given the buy-and-hold nature of the asset class. Debt seniority and negotiated maintenance covenants are built-in risk mitigants of this type of debt, and fund managers may utilize leverage in an attempt to boost overall returns. Adverse macroeconomic conditions may also negatively impact the ability of the fund to achieve its objectives. Recently, we have seen deterioration in the number of loans with covenant protection, and we are also witnessing more loans being made with adjustments to financial forecasts or EBITDA.

Middle-market loans usually have floating-rate coupons that help mitigate interest rate risk and may include floors that limit how low the rate-setting function can drop. Historically, these loans have used LIBOR as their reference rate. In conjunction with an agreed upon credit spread at issuance, it determines the coupon level on a quarterly basis.

As of December 31, 2021, LIBOR is no longer being quoted in the markets, and no new market transactions will be able to use LIBOR as the reference rate. For existing deals issued prior to year-end 2021, LIBOR will continue to be provided by panel banks until June 30, 2023, by which time any deal still outstanding will be expected to have converted documentation to a replacement reference rate. LIBOR was previously accepted as the *de facto* benchmark across the corporate credit spectrum. Any new deals originated after January 1, 2022, have optionality as to which new rate they choose, with the Secured Overnight Financing Rate (SOFR) and credit-sensitive rates (CSRs) showing early adoption.

Implementation

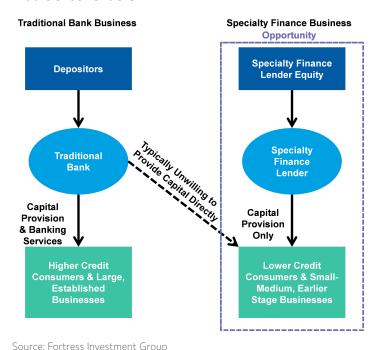
As the size and appeal of direct lending evolved, 2021 saw the introduction of more product innovation, and the investor base has broadened as direct lending has become a core allocation for both institutional and private wealth clients. Managers are building out their direct lending platforms that appeal to these different pools of capital and solve for specific cash flow needs. The variety of structures now available offer a number of different liquidity options, from public BDCs with daily liquidity, to perpetual BDCs that offer flexible deployment of capital into fully ramped portfolios and can return capital through quarterly tenders if desired, to private-to-public BDCs that may seek a liquidity option in the public markets after the capital is fully deployed. In addition, we continue to see private BDCs or drawdown funds that invest over a period of years and then harvest within stated terms of the fund until the portfolio is wound down in full.

Asset-Based Lending

A more niche subclass of private lending that has been on the rise is asset-based lending. It can allow investors to achieve similar investment outcomes as corporate direct lending while also gaining exposure to different kinds of underlying credits and risks. The niche strategies of asset-based lending have evolved from the same retrenchment in bank lending. Asset-based lending sits at the intersection of both private credit and real assets strategies and can provide high levels of current income that is uncorrelated to broader credit markets. Asset-based lending can also be attractive as a counter-cyclical strategy, serving as a liquidity provider for asset-rich companies during periods of declining demand and inventory buildup. Asset-based lending strategies are differentiated in that they invest in assets that are not entirely tied to a company's business or balance sheet.

Asset-based lending spans a broad range of asset types that can serve as collateral. The loans can encompass smallbalance commercial real estate mortgages, mortgage transitions, infrastructure debt, shipping and aircraft, litigation finance, intellectual property, health care royalties, regulatory capital relief, small-ticket equipment and auto loans. Collateralized loan obligations, asset-backed securities (ABS) and mortgage-backed securities are other specialty lending strategies that provide exposure to financial assets. Asset-based lending strategy attributes include high levels of current income, floating-rate coupons and shorter maturities that may make them attractive as defensive allocations at this stage of the investment cycle (see Exhibit 7).

Exhibit 7: Specialty Finance Lenders Fill Gaps of Traditional Lenders



The asset-based lending asset class is rather broadly defined; however, it is typically identified with loans that are secured by hard assets or with pools of consumer, corporate and commercial loans, and receivables, which typically fall outside of the scope of corporate direct lending. Given that assetbased lending is less standardized, investors can still obtain a premium return as compensation for the complexity without giving up covenants and structural enhancements. From a competitive standpoint, there is a more limited universe of large-market participants in this niche asset class, versus hundreds of middle-market direct lending funds.

The typical asset-based lending strategy may have originated with a firm that invested primarily in the public markets. Many of these fund managers and strategies have partnered

with origination and servicer platforms to source and create portfolios of asset-based loans, in addition to managing them throughout the investment life cycle. In certain instances, fund managers will provide equity capital, revolving warehouse facilities, or term debt facilities secured by assets that may eventually be securitized. Most asset-based lending investments are structured with conservative advance rates and overcollateralization to ensure borrowers have first loss equity and strong alignment of interests with their lenders (see Exhibit 8).

Exhibit 8: Typical Attributes of Privately Negotiated Asset-Based Loans

Cash Flows	Durable cash flows can shorten investment duration, enhance price stability and reduce severities			
Structure	Investments are designed to feature stable performance, especially during times of stress			
Control/Seniority	For credit investors, seniority and other forms of control can lead to greater probability of outcomes			
Asset Security	Investments secured by assets, when combined with proper structure, can mitigate downside risk			
Covenants	Covenants are designed to secure a lender's rights and priority over the assets and cash flows that support the investment			

Source: Ares Management

Potential Risks

Asset-based loans are similar to direct lending in that there is no active secondary market to provide for liquidity; however, unlike direct lending, asset-based loans typically have characteristics such as amortization, which drives principal recapture over shorter time horizons and helps mitigate the illiquidity risk.

Complexity is another risk prevalent in asset-based lending, with loans requiring strong documentation to provide protection against tax, accounting and legal issues and complications that can arise with both the underlying collateral and borrower. Manager experience and expertise is critical to constraining complexity risk, particularly in operationally intensive deals.

Managers that employ asset-based lending strategies generally do not employ leverage at the fund level; however, underlying investments may have high structural leverage such as loans collateralized against financial assets or real estate, or deals that provide advanced funding against secured assets. While structural leverage can work well when debt is applied to assets with stable cash flows, it can also potentially lead to larger downside risk during periods of economic stress.

And lastly, while we view the current environment as late cycle and potentially optimal for the strategy, the opportunity set could be limited should the cycle be short-lived.

Structured Credit

The next area of private credit we highlight is structured credit, an asset class that encompasses a wide range of products. Structured products may be backed by various loans, from residential, commercial, and bank loans to auto and student loans. These securities are broken down into different tranches that have varying risk and return profiles, with the senior-most tranche the first to receive contractual interest payments from the underlying loans but with generally lowest relative return, and the junior-most tranche receiving interest payments last but generally compensated with higher potential return.

Many of these securities experienced a major sell off during the market dislocation in early 2020. With the subsequent economic recovery, market pricing within the various sectors recovered, driven by fundamentals. Primary markets also rebounded, with US CLO issuance of \$187 billion in 2021 breaking previous calendar-year volume records as investors sought to gain exposure to the leveraged loan market with limited idiosyncratic risk. Origination in the commercial mortgage-backed securities (CMBS), residential mortgagebacked securities (RMBS) and ABS markets was also strong as demand was driven by investors seeking yield and specialty lending funds filled the void from the banks withdrawing from these markets.

Given the complexity of structured credit, investors should focus on managers that have the appropriate credit expertise to evaluate these securities and who have the capabilities to invest up and down the capital structure. For managers, the investment decision may not be simply whether one prefers RMBS over CMBS but rather which tranche within RMBS provides the most potential value. Many structured credit funds also provide a current yield as part of their overall return, an attractive component for many investors. As with the strategies discussed previously, we believe that illiquid fund structures are best aligned to take advantage of dislocations in these markets.

Potential Risks

Similar to the strategies we outlined previously, a manager's ability to underwrite and manage risk is critical since these structures tend to be highly complex and require deep due diligence to understand the underlying collateral and differentiate among the various tranches. Managers of structured credit products may also utilize leverage as they seek to enhance potential return. In addition, the funds investing in these structures may not provide liquidity to the limited partners. Furthermore, a macroeconomic downturn may negatively impact performance. Lastly, as we have noted,

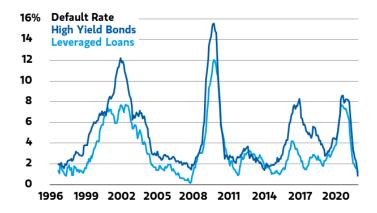
the structured credit market is not actively traded, and given the bespoke nature of each capital structure, buyer and seller need to analyze each capital structure and the underlying pool of assets to assign a value to a particular tranche of debt. During periods of severe market volatility the more levered, or more junior, tranche within a capital structure may experience extreme price volatility and become illiquid due to forced selling.

Distressed Investing

The last area of private credit we dive into is distressed investing. While direct lending and asset-based lending focuses on providing credit to private companies and discrete pools of assets, distressed investing generally focuses on acquiring stakes in stressed companies at a significant discount to par, with the intention of generating profit post company turnaround.

In past years, we have highlighted a number of concerns emerging in the leveraged credit market, including greater amounts of leverage, more "covenant lite" loans, an increase in distressed levels (as measured by price) and an increase in the number of downgrades versus upgrades. We saw the culmination of these factors in the aftershock of the pandemic, which resulted in the quickest repricing of risk to the downside since the Great Financial Crisis. In a short window of time, almost all public and private credit markets became dislocated, with significant volatility. Ratings agencies quickly took action with downgrades. They were accompanied by a significant spike in defaults, resulting in one of the largest and, in retrospect, briefest distressed debt investment opportunities we have ever witnessed. Ultimately, default activity topped out well below worst-case expectations, as unfettered access to liquidity helped lower-rated and stressed companies secure financing (see Exhibit 9).

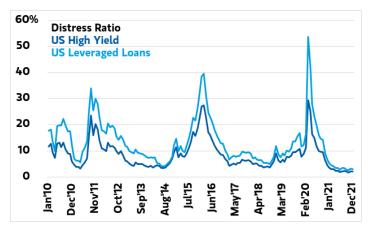
Exhibit 9: Credit Default Rates Retraced in 2021 to Pre-**Pandemic Levels**



Source: Moody's, Morgan Stanley & Co. Research as of Dec. 31, 2021

As the broader credit markets have stabilized over the past year and as the distress ratio remains relatively low (see Exhibit 10), distressed investing in 2022 will be predicated on identifying more idiosyncratic opportunities. Large-scale opportunities for distressed investing can be cyclical, with the best opportunities often coming during periods of market turmoil or recession. We believe the best-positioned distressed managers will adapt to the evolving opportunity set by expanding their traditional playbook to include opportunistic and situational investing. Companies targeted will most likely have business models severely impacted by pandemic-related disruptions, while facing headwinds from limited working capital and experiencing reduced revenue streams, higher fixed expenses and limited balance sheet flexibility.

Exhibit 10: Corporate Distress Ratios Remain Low



Source: Bloomberg, S&P LCD, Morgan Stanley & Co. Research as of Dec. 31,

Non-control, Control and Restructurings/Turnarounds

Investors may attempt to take advantage of these market dislocations by investing in stressed and distressed companies. Fund investment strategies typically are in one or all of the following: control, non-control, restructuring/turnaround, and special situations investments. Managers pursuing distressed for control investing build debt positions in a distressed company by identifying the fulcrum security, which is defined as the tier of debt that would receive only a partial payout in the event of a bankruptcy proceeding. This tier of claims will typically receive the equity of the newly reorganized company and gain control over its operations, with the goal of steering the company toward growth and profitability and selling the equity at a later time. Other managers may also pursue minority, influential positions, with the goal of active participation in a restructuring process. The typical hold period for this type of investing tends to range from 1-4 years².

Managers may also pursue restructuring/turnaround

investment strategies to acquire assets at significant discounts, but which often produce current income. These strategies also focus on repositioning lossmaking businesses and tend to be complex as the companies are typically in the midst of bankruptcy proceedings³. Given the added risks, restructurings/turnarounds generally target slightly higher returns than those of control distressed debt.

Non-control distressed investing is typically utilized by hedge fund managers seeking to take advantage of temporary dislocations in the credit markets and to utilize trading strategies to derive attractive returns. Managers employing this strategy do not pursue control of the company, nor do they attempt to exert influence over company operations. The holding period for this strategy tends to be in the 6month to 2-year range³ and target returns are generally slightly lower than those of distressed for control investing. Additionally, these managers often employ leverage in an attempt to enhance returns.

Special Situations funds can encompass a variety of strategies, but mainly refer to bespoke, complex capital solutions in situations that have an element of distress or are in transition and fall out of the scope of traditional direct lending as a result of their complexity. The kinds of distress these companies are undergoing may include overlevered balance sheets and poor management; however, these enterprises have a reason for existing. The tailored capital solutions could take the form of structured equity, debt with warrants or preferred equity often requiring expertise in both credit and equity, and can provide returns in the form of both income and capital gains. Given the nimble nature of the special situations investment approach, funds can identify opportunities in all market environments and toggle between the investment methods depending on the prevailing market environment as well as the nature of the particular situation. Investors should consider special situations investing an allweather approach.

While the opportunity set in distressed debt investing is generally greater in times of higher corporate defaults, there are episodic micro cycles in the credit markets, and special situation opportunities can be exploited by managers during benign environments by seeking idiosyncratic stressed opportunities. Therefore, it is crucial to partner with fund managers who possess the required expertise in bankruptcy law and restructuring, as well as investing experience through previous default cycles. As with direct lending, given the longer investment horizon, distressed investing is more aligned with fund structures that are illiquid and that allow managers to execute on these strategies appropriately without having to meet investor redemptions. Often, managers who pursue a hybrid of the above distressed and special situation strategies have funds with nimble and opportunistic mandates to be best-positioned for this opportunity set.

Potential Risks

Similar to direct lending, there are various risks associated with distressed investing. Manager ability to underwrite and manage risk is critical since the issuers tend to be in stress or distress and may be in bankruptcy. Distressed debt is typically less liquid, limiting the fund manager's ability to obtain liquidity in the secondary markets at a favorable price. In addition, funds pursuing these strategies generally do not provide liquidity to the limited partners. Significant improvement in the macroeconomic environment could potentially limit the investment opportunity set for distressed credit managers.

Illiquidity Premium

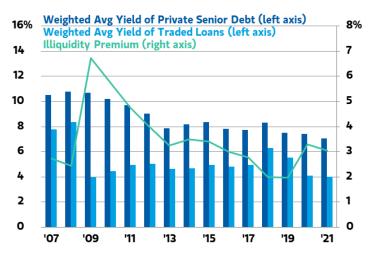
We consider the illiquidity premium to be a potential benefit to investors in private credit. It is defined as the extra return or yield investors earn for giving up control over liquidating their capital for a set period of time. As explained by PIMCO, when analyzing an asset and its appropriate illiquidity premium, one should analyze comparable investments with different liquidity profiles while adjusting for the prospective credit losses of the two investments.⁴ To value the illiquidity premium for private credit, the yield of actively traded, broadly syndicated loans serves as the relative benchmark when comparing against the yield of first-lien senior secured middle-market loans that have limited or no liquidity in secondary markets. This yield differential is the market's valuation of what the illiquidity premium is worth at a point in time and will vary depending on the economic environment (see Exhibit 11). Determining the path to liquidity or realization is a crucial step in realizing the illiquidity premium. Ultimately, the proximity to the investment and the level of manager engagement largely determine the path to exit and the realization of the illiquidity premium.

The illiquidity premium is a motivating factor and potential benefit to investors choosing to allocate capital to private credit. Quantifying the illiquidity premium is difficult given the idiosyncratic nature of private investments, individually or in a portfolio. While many factors contribute to a fund's return, all funds have some degree of market risk that influences returns and liquidity. Market factors that are either strategy-specific or broad can impact longer-dated funds just as they do more conventional liquid funds, resulting in an illiquidity premium that is not always constant. As illustrated in Exhibit 11, the post-crisis spread of privately originated senior term debt over leveraged loans has been attractive, demonstrating how the illiquidity premium offered by these less liquid loans can favor the patient investor for whom that level of illiquidity may be appropriate.

The illiquid nature of private credit may potentially benefit investors, especially in an environment in which traditional investments do not always provide expected liquidity. As we

witnessed during the Great Financial Crisis, and more recently in the dislocation in March and April 2020, investors in products such as leveraged loans and high yield bonds were faced with unexpected illiquidity. As such, we believe that fund structures with delineated investment and harvesting periods may benefit from management's ability to take advantage of market downturns and attractive valuations during times when liquid funds are struggling to meet redemptions. As we observed during the market dislocation of 2020, distressed debt managers that provided ongoing liquidity to investors (i.e., hedge funds) were largely unable to deploy capital into distressed opportunities, given the lack of dry powder and fear of potential investor redemptions.

Exhibit 11: Privately Originated Senior Debt Has Provided an Illiquidity Premium



Note: For illustrative purposes only. Source: Ares Management, Credit Suisse Leveraged Loan Index as of September 2021

Potential Risks

Illiquidity may also pose certain risks to investors, such as the inability to liquidate a portfolio at a time when the individual investor may need the liquidity as secondary markets often do not exist for these investments. If a secondary market does exist, the investor may only be able to sell the investments at a significant discount.

Current Opportunities in Private Credit

As we have outlined in this paper, the private credit market is broad and offers wide-ranging investment sub-strategy opportunities within the broader credit markets. Also as we noted, not all opportunities will be rich at any given point in time, which is why we continue to emphasize the importance of timing and manager selection. While we believe the strategies discussed may offer potential performance and

diversification benefits, certain strategies may offer a more attractive profile than others at this point in the credit cycle.

As we touched on earlier, we believe that privately negotiated loans offer an attractive opportunity set and return profile given the low interest rate environment. The higher returns relative to traditional fixed income, along with lower volatility and credit losses, may provide investors with a relatively attractive supplement to their fixed income allocation. 2021 saw record issuance in direct lending powered by heightened mergers and acquisition activity supported by strong fundamentals, access to low-cost fund leverage and the significant amount of dry powder that private credit managers were able to deploy. Managers continue to look for creative and new ways to structure deals with strong downside protection while targeting new, non-traditional borrowers that may not have previously viewed direct lending as a preferred option.

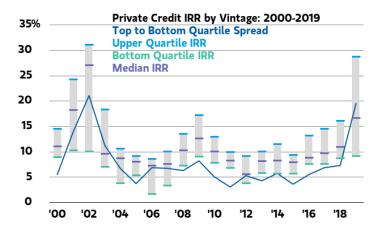
We believe that at this point in the credit cycle, strategies with flexible solutions-oriented mandates focusing on attractive risk-adjusted returns, whether via first-lien, secondlien, or unitranche loans, will have more freedom to negotiate higher spreads, more covenants and better call protection than is available in the broadly syndicated loan market. As direct lending has matured as an asset class, it has become a standardized allocation across many client portfolios, with the potential to provide additional diversification benefits through both opportunistic strategies and products concentrated in single sectors such as technology, health care and life sciences. The preferred liquidity profile for an individual investor is unique, and innovative structures like perpetually offered nontraded BDCs are becoming more popular given their ability to deliver stable income while offering more flexible options for the deployment and return of capital.

Second, as we have noted, asset-based lending strategies tend to be less crowded than traditional middle-market lending and may provide yields with better structural enhancements. Asset-based lending tends to be resilient in rising-rate environments, given deal structures that are amortizing in nature, which may reduce extension risk. Lending facilities used in asset-based finance are often structured with covenants that shorten the tenor during periods of stress, making the procyclical strategy complementary to traditional and alternative investments. More specifically, we believe that the opportunities across asset-based lending strategies have become increasingly attractive as alternative income solutions, given that their returns can be idiosyncratic and noncorrelated to more broadly held risk assets. As a result, we believe asset-based lending may be an option to supplement fixed income portfolios for investors who can bear the extra illiquidity.

Third, the winding down of stimulus programs and tightening of monetary policy could potentially increase market volatility, creating attractive new entry points for distressed investing. We believe that investors should be prepared to allocate assets to distressed debt managers (on both a control and non-control basis) who are patient with capital deployment and will be ready to invest if the credit markets experience further dislocations. At this point in the cycle, we favor managers who have the skill to invest across both publicly traded and privately originated credit and possess the experience to pivot between both opportunity sets based on where the best relative value lies.

Lastly, given the wide dispersion in private credit manager returns, we are strong believers in the importance of manager selection. With the average difference between top and bottom quartile returns at 7.9% from 2000 to 2019, comprehensive manager due diligence can provide a meaningful difference in investor returns (Exhibit 12). Therefore, we prefer managers who are experienced navigating various market cycles and who have demonstrated histories of taking advantage of market dislocations at opportune times.

Exhibit 12: Private Credit Returns Have Exhibited Significant Dispersion



Note: Internal rate of return (IRR) is the interest rate at which the net present value of all the cash flows (both positive and negative) from a project or investment equal zero. Internal rate of return is used to evaluate the attractiveness of a project or investment. Source: Hamilton Lane Data via Cobalt, Bloomberg as of June 2021

Endnotes

¹Hamilton Lane "Credit Overview" June 2016.

²Grosvenor, "Credit Discussion", June 2016.

³Hamilton Lane, "Credit Overview", June 2016.

⁴PIMCO: "Earning an Illiquidity Premium in Private Credit," July 2015.

Disclosure Section

Glossary of Terms

LIBOR London Interbank Offered Rate (LIBOR) is an interest rate at which banks can borrow funds, in marketable size, from other banks in the London interbank market. The LIBOR is fixed on a daily basis by the British Bankers' Association and is calculated from filtered average of the world's most creditworthy banks' interbank deposit rates for larger loans with maturities between overnight and one full year.

Index Definitions

Bloomberg Capital U.S. Corporate High Yield Bond Index is an unmanaged index of prices of U.S. dollar-denominated non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or

S&P/LSTA (Loan Syndications and Trading Association) Leveraged Loan Index covers more than 1,100 loan facilities and reflects the marketvalue-weighted performance of U.S. dollar denominated institutional leveraged loans.

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The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be appropriate for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to:

- Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices;
 Lack of liquidity in that there may be no secondary market for a fund;
- Volatility of returns:
- Restrictions on transferring interests in a fund;
- Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;
- Absence of information regarding valuations and pricing;
- Complex tax structures and delays in tax reporting;
- Less regulation and higher fees than mutual funds; and
- Risks associated with the operations, personnel, and processes of the manager.

In addition, the primary risks of investing in private credit include:

- Illiquidity risk investments in private lending are typically highly illiquid and may require capital to be committed for an extended period of time, i.e. several years;
- Credit / default risk non-payment of interest and/or or principal payments;
- Interest rate risk changes in market interest rates are reflected as a change in the spread which loans in a portfolio pay over the base rate (U.S. Treasuries), which in turn impacts the perceived value of the loans in the portfolio and thus the value of the portfolio itself;
- Prepayment risk loans which are originated with relatively high interest rates may be paid off early if more attractive financing rates can be found; and
- Credit rating analysis risk many borrowers have not issued other debt which has been rated by a recognized rating organization (e.g. Moody's, S&P, Fitch), as such the determination of the credit worthiness of such borrowers is dependent on the analysis performed by a portfolios' managers or advisors.

Asset Class and Other Risks

Investing in stocks, mutual funds and exchange-traded funds ("ETFs") entails the risks of market volatility. The value of all types of investments may increase or decrease over varying time periods. Besides the general risk of holding securities that may decline in value, closed-end funds may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, which may involve currency risk.

Value and *growth investing* also carry risks. Value investing involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

International securities may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in emerging markets and frontier markets.

Small- and mid- capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which allows the issuer to retain the right to redeem the debt, fully or partially, before the scheduled maturity date. Proceeds from sales prior to maturity may be more or less than originally invested due to changes in market conditions or changes in the credit quality of the issuer.

High yield bonds are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the

The current yield of preferred securities is calculated by multiplying the coupon by par value divided by the market price. The majority of \$25 and \$1000 par preferred securities are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. The initial rate on a floating rate or index-linked preferred security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating/linked index. However, there can be no assurance that these increases will occur.

Mortgage-backed securities ("MBS"), which include collateralized mortgage obligations ("CMOs"), also referred to as real estate mortgage investment conduits ("REMICs"), may not be appropriate for all investors. There is the possibility of early return of principal due to mortgage prepayments, which can reduce expected yield and result in reinvestment risk. Conversely, return of principal may be slower than initial. prepayment speed assumptions, extending the average life of the security up to its listed maturity date (also referred to as extension risk). Additionally, the underlying collateral supporting MBS may default on principal and interest payments. Investments in subordinated MBS involve greater credit risk of default than the senior classes of the same issue. MBS are also sensitive to interest rate changes which can negatively impact the market value of the security. During times of heightened volatility, MBS can experience greater levels of illiquidity and larger price movements.

Asset-backed securities generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Bank loans are generally rated below investment-grade by rating agencies, and entail greater credit risk than higher quality, investment-grade securities such as U.S. Treasuries. In the event a borrower stops paying interest or principal on a loan, the collateral used to secure the loan may not be entirely sufficient to satisfy the borrower's obligations and, in some cases, may be difficult to liquidate on a timely basis. While bank loans offer higher interest income when interest rates rise, they also will generate less income when interest rates decline.

Senior loans are generally rated below investment-grade by rating agencies, and entail greater credit risk than higher quality, investment-grade securities such as U.S. Treasuries. In the event a borrower stops paying interest or principal on a loan, the collateral used to secure the loan may not be entirely sufficient to satisfy the borrower's obligations and, in some cases, may be difficult to liquidate on a timely basis. While senior loans offer higher interest income when interest rates rise, they also will generate less income when interest rates decline. The initial interest rate on a *floating-rate security* may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk. Many floating rate securities specify rate minimums (floors) and maximums (caps). Floaters are not protected against interest rate risk. In a declining interest rate environment, floaters will not appreciate as much as fixed rate bonds. A decline in the applicable benchmark rate will result in a lower interest payment, negatively affecting the regular income stream from the floater.

The returns on a portfolio consisting primarily of *environmental, social, and governance-aware investments (ESG)* may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no guarantee that a client's account will be managed as described herein.

Derivatives and Leverage. Derivatives are financial contracts whose value depends on the value of underlying assets, reference rates or indices. The use of derivatives involves risks that are in addition to, and potentially greater than, the risks associated with investing directly in securities and other more traditional assets. These include imperfect correlation between the value of the derivative and the underlying asset, risks of default by the counterparty to certain transactions, magnification of losses incurred due to changes in the market value of the underlying asset, and risks that the transactions may not be liquid. Certain derivative transactions may give rise to a form of leverage, which can magnify the potential for gain and/or the risk of loss and could thus have a disproportionate impact on the performance of the fund. Leverage associated with derivative transactions may cause a fund to liquidate portfolio positions to satisfy its obligations when it may not be advantageous to do so, or may cause a fund to be more volatile than if it had not been leveraged. Commonly used derivative instruments and techniques include:

Structured Investments. A structured investment is designed to offer a return linked to a particular underlying security, currency, commodity or market. Structured investments may come in various forms including notes, warrants and options to purchase securities. Holders of structured investments bear risks of the underlying investment as well as market risk, and are subject to issuer or counterparty risk because the fund is relying on the creditworthiness of such issuer or counterparty and has no rights with respect to the issuer of the underlying investment. Certain structured investments may be thinly traded or have a limited trading market and may have the effect of increasing a fund's illiquidity to the extent that the fund, at a particular point in time, may be unable to find qualified buyers for these investments.

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