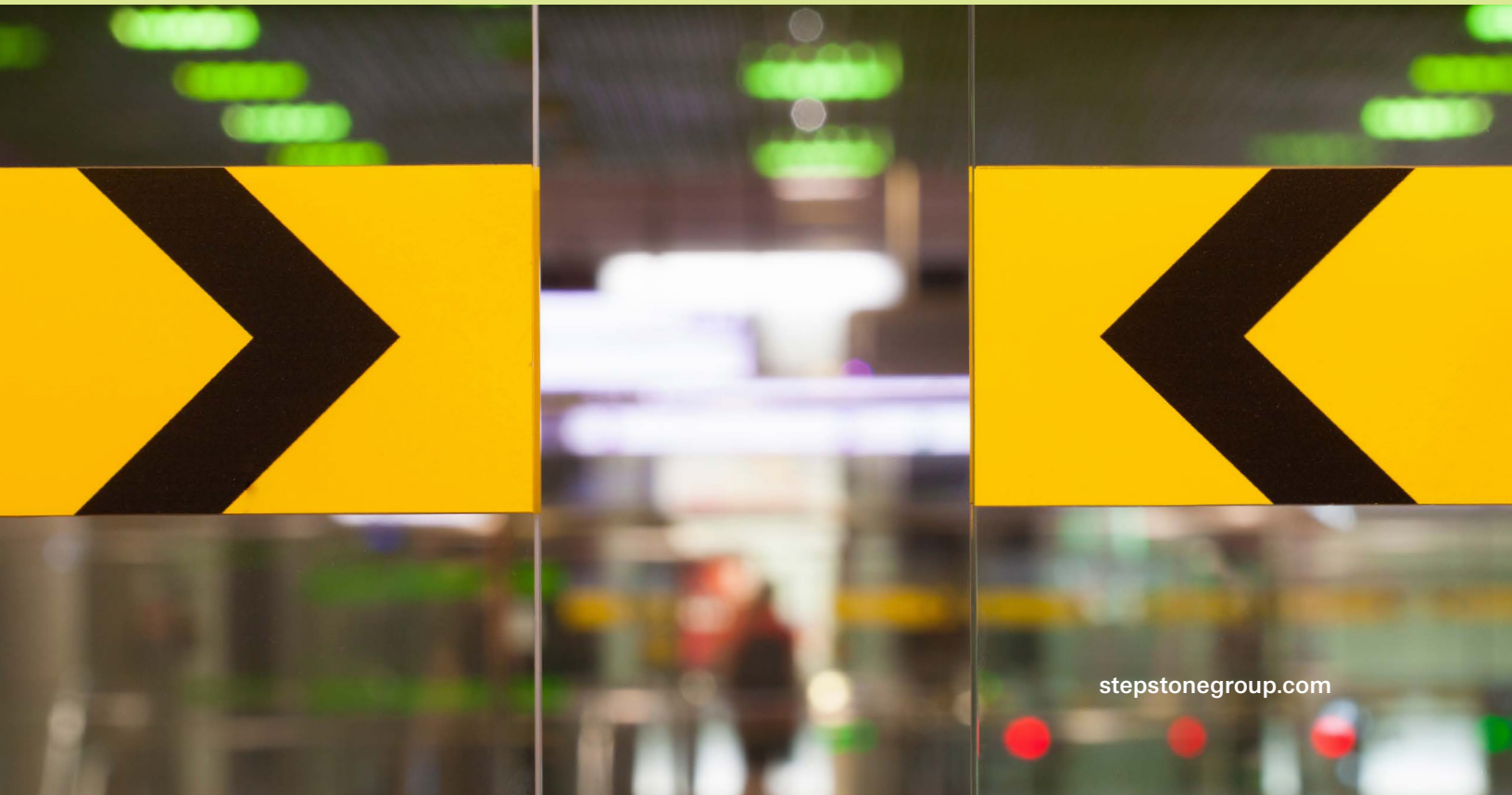




Corporate private debt primer

APRIL 2024



Executive summary

What is private debt?

- Private debt is a form of debt financing offered by non-bank lenders that is not issued or traded within the traditional public markets. Although private debt includes real estate and infrastructure debt, this paper focuses primarily on corporate private debt.

Why did it emerge?

- The role of banks as the principal provider of debt has been declining for a long period of time and has accelerated since the Global Financial Crisis (GFC). The banks' inherent asset-liability mismatch and changes in the regulatory environment are the key reasons for this development.

What are the main strategies?

- Direct lending, mezzanine, opportunistic/distressed credit and specialty finance, with direct lending being the main strategy within private debt, accounting for roughly 45% of the market.

How big is the PD market?

- According to Preqin, the estimated assets under management (AUM) globally in 2023 reached nearly \$1.7 trillion.

What are the main return drivers in direct lending?

- Direct lending's returns are primarily driven by cash coupons—contractual cash flows based on a floating reference rate and a spread providing stable income and robust returns.

What is the main risk in direct lending?

- Direct lending's main risk is the credit risk.

What are other special topics that investors should pay attention to?

- Investors should pay special attention to how the investment strategy is implemented: Deployment speed, deployment level, diversification and transparency are among the factors that investors should account for when considering a private debt allocation.

Private debt defined

Private debt is a form of debt financing offered by non-bank lenders—including, for instance, large GPs already active in the private equity market—that is not issued or traded by traditional public markets. Small and midsize companies often turn to private lenders because they either cannot or choose not to use public markets for debt financing and choose not to obtain financing from banks. Depending on the sub-strategy within private debt, the debt will sit at a different position in the company's capital structure but will remain above common equity.

Private debt first emerged in the '90s, mainly in the form of mezzanine debt as an alternative to high-yield bonds, and since the early 2000s as an alternative to conventional bank loans and public market offerings. The increase in banking regulations and reduction of available capital for lending following the GFC accelerated banking disintermediation. This, together with the strong growth in private equity markets, provided strong foundations for the growth of the private debt markets.

Most private debt managers lend to middle-market companies with EBITDA between \$5 million and \$75 million. This market can be further separated into three parts:

- Lower middle-market: companies with EBITDA below \$15 million.
- Core (mid-) middle-market: companies with EBITDA in the range of \$15 million to \$40 million.
- Upper middle-market: companies with EBITDA above \$40 million.

The main characteristics that set private debt apart from public debt and make it attractive are:

- For borrowers, it provides flexible terms and customized financial solutions as well as higher certainty of execution, typically in a tighter time frame if needed. Moreover, thanks to the private nature of the asset class, firms do not have to disclose their books to the public/competitors.

- Lenders are attracted to the potential for higher risk-adjusted returns at lower volatility than those typically available from standard fixed-income investments. Furthermore, lenders typically have greater control over the lending terms and can more efficiently negotiate with the borrower if there is underperformance, which can lead to higher recovery rates in case of a payment default.

Because private debt investments are illiquid credit investments, investors should understand two types of risks when allocating capital to the asset class: liquidity and credit risks.

From an investor's perspective, private debt provides higher risk-adjusted returns at lower volatility compared with public debt. Over the past few years, the private debt landscape has broadened to offer various sub-strategies and implementation options, each with different risk and return profiles. As a result, the investor base in private debt is diverse, including institutions like pension funds and insurance companies, as well as private individuals and investment funds.

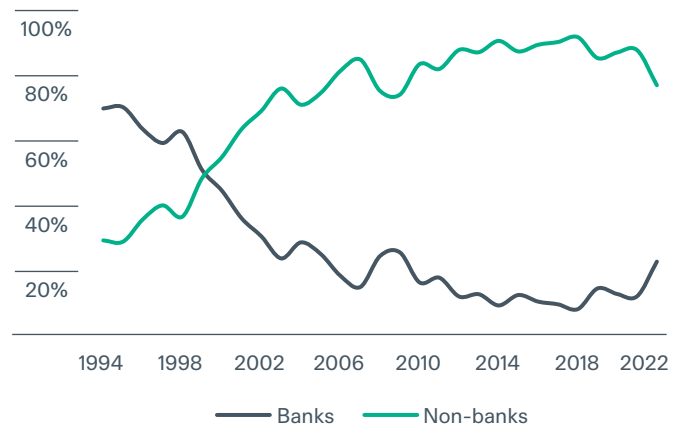
Origins

The rise of the private debt market can be traced back to significant changes in the financial sector. This shift was primarily due to banks reducing their lending activities while the demand for financing from businesses remained robust.

This shift is particularly noticeable in the leveraged loan market, where banks' market share has fallen from approximately 70% in the '90s to just above 20% in 2022 (**Figure 1**). The initial shift away from banks was mainly driven by the issuance of collateralized loan obligations (CLOs), which were raised by specialized loan managers.

Historically, commercial banks were the main lenders to US companies. However, the GFC was a turning point for the industry. New regulatory measures and higher capital requirements imposed on banks led to a reduction in their corporate lending activities. This created a gap in the

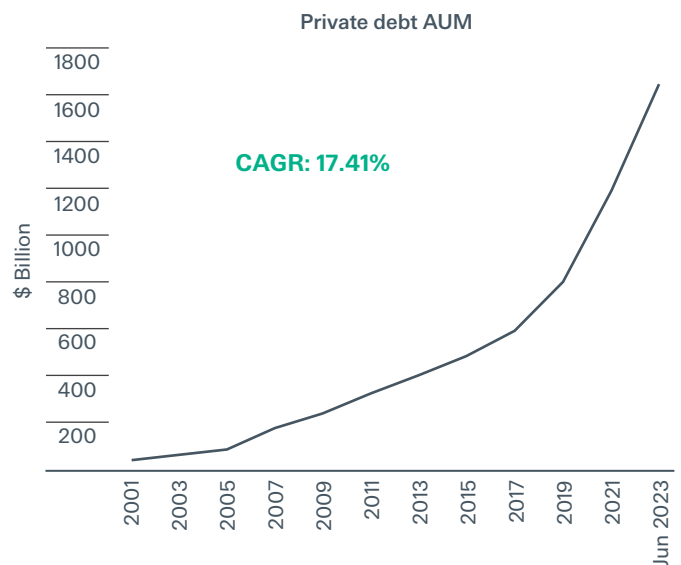
FIGURE 1: SHARE OF GLOBAL LEVERAGED LOAN MARKET



Source: LCD, as of December 2023.

market, which private debt lenders started to fill by offering the necessary debt financing to corporate borrowers. This change of the market dynamics enabled strong growth of the private debt market where assets under management (AUM) increased between 2008 and 2023 from \$225 billion to \$1.66 trillion as shown in **Figure 2**. The growth in direct lending has

FIGURE 2: PRIVATE LENDER GROWTH



Source: Preqin, as of January 2024.

also been supported by the demand for acquisition financing from private equity sponsors and their leveraged buyouts.

Private debt lenders have become popular owing to their flexibility, speed and reliability. These qualities particularly cater to the needs of middle-market firms, which banks are increasingly unable to serve fully. Private equity sponsors (who also appreciate these qualities) played a major role in this shift as well, given that approximately 85% of borrowers in the private debt market are owned by private equity sponsors.

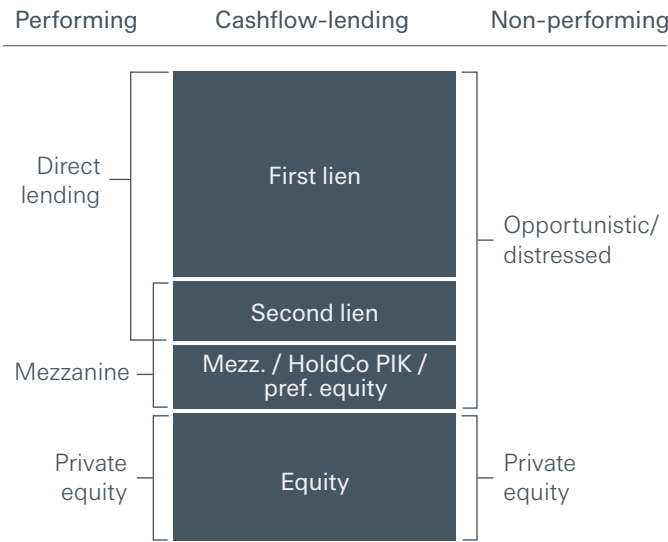
Strategies within private debt

There are various strategies within private debt, each catering to various risk-return profiles. Some investors focus on generating high cash income, while others aim for capital gains. The main sub-strategies of private debt include direct lending, mezzanine, opportunistic/distressed debt and specialty finance. Each sub-strategy has its own features but three in particular stand out:

1. Whether the strategy invests in performing loans (e.g., direct lending) or in non-performing ones (e.g., opportunistic/distressed debt).
2. The seniority within the capital structure that a given sub-strategy focuses on, whether senior (e.g., direct lending) or junior (e.g., mezzanine).
3. The type of lending under consideration, which can be EBITDA-lending or asset-backed lending.

The first three features listed above cover traditional corporate cashflow lending while specialty finance encompasses a broader set of lending activities that are mostly asset-backed, e.g., mortgages, student loans or credit card receivables.

FIGURE 3: CORPORATE PRIVATE DEBT STRATEGIES



Source: StepStone Group. For illustrative purposes only.

DIRECT LENDING

Direct lending is the major strategy within the private debt market and represents a type of debt financing in which lenders, typically non-bank financial institutions, directly provide loans to businesses without the use of an intermediary. Direct lenders tend to drive the underwriting and structuring of the loan and usually hold a significant portion of it in their fund.

Part of its appeal lies in the prevalence of first-lien debt, which sits at the top of the capital structure, meaning that these lenders are the first to be repaid if the borrower defaults. Historically, borrowers used to combine first-lien with second-lien debt for their financing needs, often requiring different lenders. While second-lien loans are subordinated

to first-lien debt, they are more senior in the capital structure than equity. As the asset class evolved, borrowers in the direct lending space typically moved to a unitranche debt structure especially prevalent in Europe. Unitranche loans essentially combine the senior and junior debt in a single loan, allowing the borrower to stretch the senior leverage and avoid the necessity of dealing with different groups of lenders. Direct lending loans are secured loans, meaning that the loans are backed by collateral that consists of the borrower's assets. This provides further protection for the lenders, as they would have the right to seize and liquidate assets or tap into the borrower's cash flows to recover their capital in case of default.

Another key feature of direct lending is the use of floating rates, which allows lenders to earn interest tied to a benchmark rate plus a credit spread. This setup can protect against inflation and limits duration risk. The proceeds of direct lending loans are typically used in leveraged buyouts and refinancing. Finally, direct lenders lend only to performing borrowers, most of whom are sponsored (i.e., owned by a private equity firm).

Direct lending challenges the conventional banking model in which banks used to lend capital sourced from depositors' funds, whereas direct lenders raise investor capital that matches the maturity profile of the underlying loans. This is because most private debt funds are closed-ended, which makes it easier for fund managers to avoid any asset-liability mismatch. While some view direct lending as a novel or "disruptive" approach, it is a long-standing business practice. The significant change lies in the rising prominence of nontraditional lenders that are increasingly taking on roles traditionally played by banks. In addition, direct lending loans benefit from a better alignment of interests between investors and lenders, as those loans remain in the lender's fund instead of being sold to a syndicate of investors and transferred out of the bank's balance sheet as would be the case in the syndicated loan market.

MEZZANINE DEBT

Mezzanine debt is subordinated debt, positioned between senior debt and equity. It often comes with embedded equity components like warrants. It carries higher risk but offers higher expected returns.

Mezzanine loans may have longer interest rate durations than direct loans and may include fixed-rate or floating coupons and payment-in-kind (PIK) terms.

Mezzanine or non-first lien loans can come in many different forms or shapes: for example, HoldCo PIK or preferred equity in debt format, among others. For ease of use we refer to all these as "mezzanine."

The size of mezzanine debt used to represent a higher percentage of private debt, but as first-lien-only capital structures and unitranche loans became more common, the amounts of mezzanine tranches decreased over time.

OPPORTUNISTIC / DISTRESSED CREDIT

Opportunistic credit strategies have been evolving as the private debt market has grown, with debt funds seeking to provide innovative financing solutions to companies that cannot access the more traditional financing markets. Owing to the difficulty in accessing traditional financing capital, the lenders have stronger negotiating power, leading to a debt structure with higher pricing and stronger and tighter documentation as well as convexity through equity upside (warrants, co-invest) or non-call protection / make-whole provisions. The opportunistic credit funds typically undertake a hybrid strategy, playing to the strengths of their wider platform, and the underlying sub-strategies can be broken down on the basis below:

- **Opportunistic credit / capital solutions:** In this strategy the manager provides an innovative and

customized financing solution to address a complex situation. Typically the company represents a performing credit, and if no financing is achieved, then they would not enter a restructuring or bankruptcy. Such situations could include financing a “buy and build” acquisition pipeline, refinancing, bridge loan and growth capital.

- **Distressed credit:** In this situation the company is usually under more stress, and if the new money solution is not provided, the outcome could be a default, restructuring or bankruptcy. In these investments, private debt lenders are either providing a new money solution or negotiating a debt-to-equity swap. There could be variations of situations through which the debt fund can generate returns, which can consist of contractual yield, capital appreciation, equity upside and restructuring fees.

In both strategies the debt funds will have strong expertise in restructurings given the higher likelihood that the investments will involve such situations either through underperformance or part of the original investment thesis.

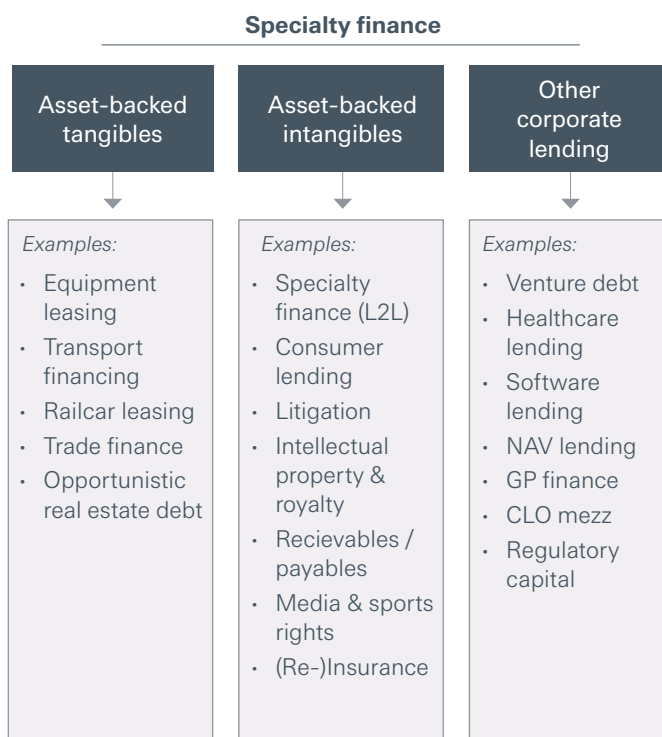
Ultimately growth in opportunistic credit has been observed as there is demand from borrowers for financing solutions at a higher cost of capital than direct lending but lower than the cost of equity (as well as being non-dilutive to existing shareholders), driven by the increasing sophistication of CFOs and management teams. As private debt allocations grow, the supply from investors into opportunistic credit is matching the growing borrower demand.

SPECIALTY FINANCING

Specialty finance, alternatively known as asset-based or asset-backed finance (ABF), represents a broad spectrum

of credit market segments that diverge from the traditional EBITDA-based corporate lending found in more conventional private debt loans. However, it would be incorrect to assume that the asset class consists solely of exotic and niche strategies. In fact, specialty finance encompasses assets that are integral to our daily lives, including consumer loans, credit card receivables, auto loans, student loans and mortgages, among others. The scope of specialty finance can be a subject of debate, largely because of the diversity of assets included within its market universe. Nevertheless, some estimates place its size at nearly \$20 trillion. As illustrated in **Figure 4**, the specialty finance sector includes a variety of segments.

FIGURE 4: SPECIALTY FINANCE UNIVERSE



Source: StepStone Group.

A common thread among these segments is that financing is typically secured by either a tangible or an intangible asset, which generates cash flows over the life span of the investment to facilitate repayment. Unlike traditional lending, which evaluates creditworthiness based on a corporation's profit and cash flow generation, lenders in specialty finance base their decisions on the cash flows associated with a specific asset.

In the specialty finance universe, we distinguish among three primary segments:

1. **Asset-backed tangible**—Here the financing is secured with a tangible asset. Examples include equipment, real estate, or transportation vehicles such as aircraft and ships.
2. **Asset-backed intangible**—This segment involves credit that is secured by a broad, diversified portfolio of intangible assets. These can encompass consumer loans, mortgage loans, small business loans and receivables, among others.
3. **Other corporate lending**—This category includes corporate loans that do not fall within the direct lending, mezzanine or opportunistic lending scope. Strategies within this segment would be venture debt, software lending, healthcare lending, etc.

Specialty finance, though a nascent asset class, is anticipated to experience rapid growth moving forward. Regulatory changes have constrained banks' ability to finance these segments, leading to a funding gap and the need for alternative lending mechanisms and asset financing. This gap is increasingly being filled by specialty finance. The growth dynamics of this sector are characterized by early entrants becoming more established, an increase in the number and size of transactions, and strong volume growth

accompanied by a rising number of private debt general partners (GPs) diversifying their offerings with dedicated specialty finance products.

Several characteristics make specialty finance an appealing asset class for investors. First, the presence of highly diversified underlying collateral pools, coupled with the inclusion of assets distinct from typical corporate private credit loans, offers a significant diversification benefit in an investor's portfolio. In addition, the required expertise and specialized staff needed to underwrite such loans result in lower competition and potentially more favorable pricing due to the increased complexity of the deals. Lastly, asset-based loans typically feature front-loaded cash flows because of amortization provisions leading to shorter average investment life and lower tail risk.

Sourcing channels across strategies

PRIMARY CHANNEL

What is the primary channel? This is the main sourcing channel for private debt and accounts for a major part of deployment capabilities in most portfolios. Similarly as in the public markets, the primary market consists of the newly originated loans allocated to the investors for the first time (unlike the secondary market consisting of buying or selling already existing loans). A single loan can be originated either by a single direct lender or by a club of lenders.

How do GPs use the primary channel? For the GPs, this is the main channel through which they build their asset base. It is the main source of deals that they allocate to their funds. It is suitable for both their flagship funds and the SMAs that

larger investors have with them. In addition, given the larger amount of deals available through the primary channel, it allows the GPs to construct diversified portfolios as they can access the various industries and market segment available in the middle-market.

Why do LPs use the primary channel? It is the main way through which investors build their exposure to the asset class through funds and SMAs. Similarly to GPs, the vast number of deals available in this channel allow LPs to increase diversification in their portfolios. Moreover, this channel is suitable for both small and larger investors. Co-investments and secondaries tend to be targeted more toward investors with larger financial resources, while the primary channel allows smaller investors to still participate in the asset class.

CO-INVESTMENT CHANNEL

What are private debt co-investments? Co-investments refer to loans that the originating GP offers to its LPs or other market participants to invest in where the GP is not charging any fees to the co-investor on the originated deal. The rationale is usually that the given GP might have a higher probability of winning the lending opportunity if they can provide a larger debt quantum. If the GP does not have the capacity to provide the full debt amount of the facility, the GP can approach another investor or LP/potential LP and offer the co-investment.

Why do GPs utilize co-investments? When fundraising is rather slow, GPs' ability to commit larger bite sizes to individual investments might be challenged owing to the need to maintain a diversified borrower base within their fund. Moreover, GPs offering LPs co-investments, rather than partnering with other GPs that are usually their competitors, can be relationship driven as GPs value the opportunity to strengthen ties with LPs. These LPs may also make commitments to the GPs' flagship fund with the expectation of participating in co-investment opportunities. With GPs in private debt underwriting larger and larger transactions, the opportunities to participate in co-investment deals increase as well.

Why do LPs want co-investments? The benefit of this approach for the co-investor is that the investor is not being charged any fees by the GP, be it a management or performance fee. In addition, it allows LPs to increase diversification in their portfolios by being exposed to a higher number of investment opportunities. Finally, co-investments are another channel through which LPs can deploy capital, enabling them to reach their deployment target faster and maximizing the capital at work.

SECONDARY CHANNEL

What are private debt secondaries? Private debt secondaries represent the sale of a seasoned private debt fund or portfolio to a third party. There are two types of private debt secondaries: LP-led and GP-led secondaries. The former refers to an LP in a commingled fund selling its interests in the fund. The LP's interest comprises its capital contributions, unrealized performance, and undrawn commitments to the fund. In return, the seller receives cash, calculated as a percentage of the purchase date NAV. GP-led secondaries can take various forms and are tailored to solve specific issues. For instance, GP-led secondaries could happen when the GP is looking to free up capital to execute on new investment opportunities as well as when the GP is seeking to increase diversification by reducing its exposure to single borrowers.

Why do sellers utilize private debt secondaries? Private debt is an illiquid asset class, meaning there is no ability to redeem an investment. When an investor needs liquidity, a secondary is one of the few options available. There are various reasons investors require liquidity. The most prominent are asset-liability misalignment, shifts in strategic allocation, and regulatory changes. Because of the complexity and limited buyer market, sellers typically have to incur a discount when selling in the secondary market.

Why do buyers utilize private debt secondaries? Investors in private debt secondaries are most often investors that

are familiar with the asset class and looking to augment their private debt exposure. Secondaries provide the benefit of instant deployment, return enhancement owing to the discount at which the portfolio is being acquired, and avoidance of blind pool risk (i.e., the buyer knows which loans are being purchased).

Recent developments: Private debt secondaries have thrived in the past few years. The trigger point was the market dislocation during Covid, which increased deal flow as LP investors required liquidity and had to sell private debt exposure. Investment managers responded to this increased deal flow by raising dedicated secondary funds and partnering with strategic investors. Sellers, buyers and advisers are now much more active in this market, which means increased deal flow, better price efficiency and more certainty of deal execution. Private debt secondaries still represent a nascent market; however, the private equity secondaries market, with annual deal flow of +\$100 billion, indicates the direction of travel for the growth of private debt secondaries.

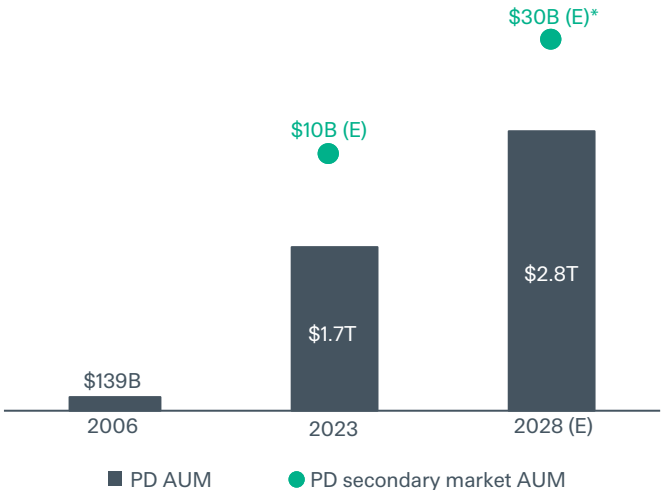
Size of private debt market

Private debt represents a material portion of the \$15 trillion private markets, with nearly \$1.7 trillion in AUM (Figure 6). According to Preqin, around 63% of private debt AUM is in North America, followed by 26% in Europe. Direct lending is the largest category, representing 48% of total private debt AUM. Future AUM projections by Preqin indicate that the global private debt market is expected to grow to \$2.8 trillion by 2028, with the North American and European markets growing by 11% and 14% annually, respectively.

Private debt fundraising

Fundraising within private debt has grown markedly since the GFC. However, despite robust fundraising in dollar terms, there has been a noticeable decrease in the number of

FIGURE 5: PRIVATE DEBT SECONDARY

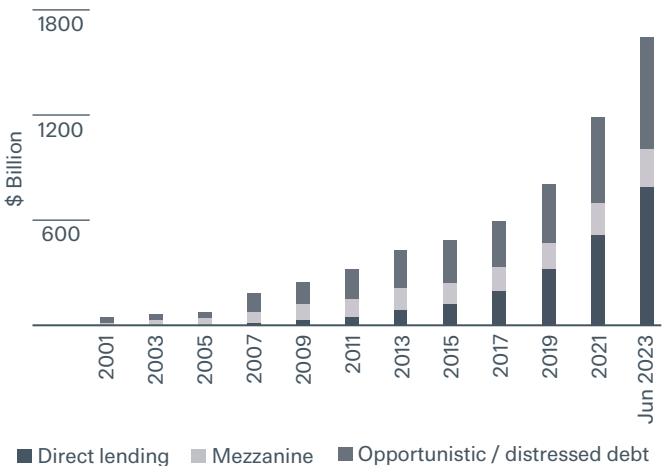


For illustrative purposes only.

Sources: Preqin Global Report: Private Debt, 2024 and PJT Park Hill Secondary Market Insight, 1H 2023.

*\$30B represents a 2030 estimate for the PD secondary market AUM.

FIGURE 6: GLOBAL PRIVATE DEBT AUM

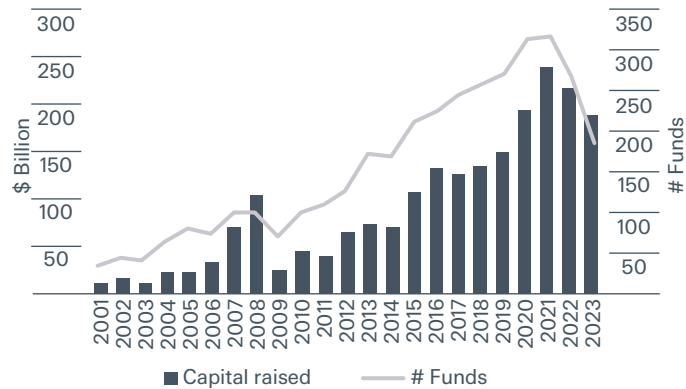


Source: Preqin, as of January 2024. Preqin strategy definitions may differ slightly from StepStone definitions.

fund closings. This trend, if confirmed in the coming years, could indicate a shift in investors’ preference toward larger allocations to fewer funds as well as consolidation in the market, as suggested by **Figure 7**.

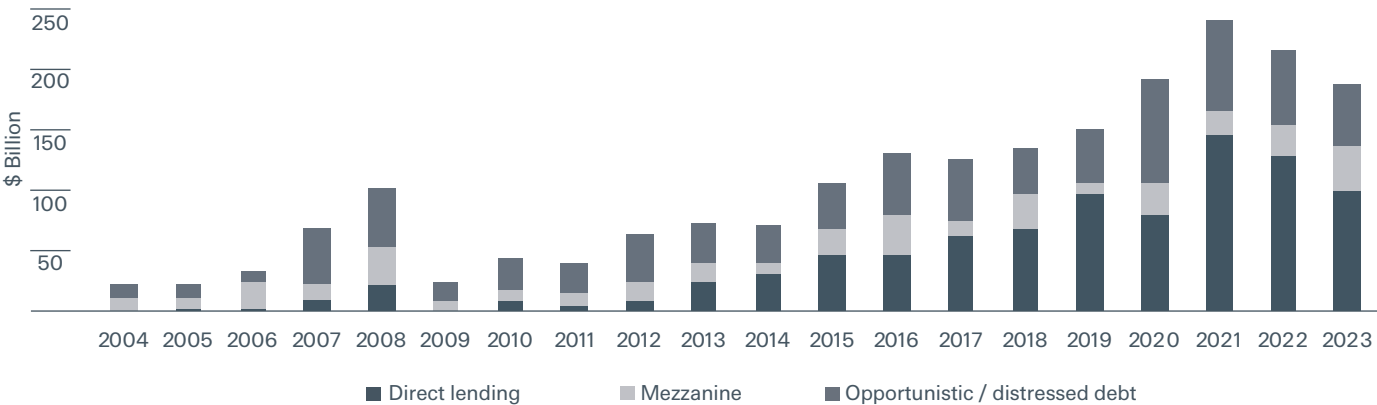
Looking more closely at the different fundraising by sub-strategies in **Figure 8**, direct lending remains the largest recipient of new funds entering the private debt market. An interesting observation with respect to the fundraising during financial downturns (e.g., the GFC, the 2016 energy crisis or Covid): In line with expectations, fundraising for opportunistic/distressed increased materially as investors sought to profit from the existing market environment.

FIGURE 7: PRIVATE DEBT FUNDRAISING



Source: Preqin, as of January 2024.

FIGURE 8: PRIVATE DEBT FUNDRAISING



Source: Preqin, as of January 2024. Preqin strategy definitions may differ slightly from StepStone definitions.

Direct lending in focus

Direct lending or the practice of providing non-bank loans directly to companies **is the largest strategy within private debt**. The shift from traditional banking institutions to alternative lenders represents a significant change. Despite having more limited, but dedicated, capital sources than traditional banks, **direct lenders offer greater flexibility and customization in structuring credit facilities**. This flexibility has so far proved to be an attractive characteristic for borrowers.

In direct lending, loans are issued for various purposes—leveraged buyouts, refinancing existing debt and facilitating dividend recaps, among others. **These loans are typically floating rate**, meaning that the cash coupon changes over time as the reference rate (e.g., SOFR, Euribor, SONIA, etc.) moves.

Direct lending loans are often structured as senior secured first-lien loans, which account for approximately 75%–80% of the market. First-lien loans mean that the given loan is on the top of the capital structure providing the lenders priority of payments if a borrower defaults, while the secured nature of the debt ensures that the loan is backed by collateral, namely the borrower's assets that the lender can seize and liquidate to recoup its capital. Additionally, lenders that have the capabilities can, in case of a payment default, also take control of the business and manage it themselves if they deem that they can bring back the business on a sustainable financial path.

Direct lending loans usually include financial maintenance covenants. A financial maintenance covenant is a clause in the loan agreement that requires the borrower to meet certain predefined financial metrics or conditions throughout the term of the loan. These covenants are included in credit agreements to reduce information asymmetries between the lender and the borrower as well as to provide an instrument

of monitoring for lenders. Typical covenants include limits on leverage, interest coverage and fixed charge coverage ratios or minimum EBITDA levels, among others. These covenants are then usually tested on a quarterly basis. In comparison, financial maintenance covenants are absent from the high yield market, while the syndicated loan market has shifted to cov-lite loans (i.e., without covenants) since 2010. Recent market developments have showed that lenders provided cov-lite loans to large borrowers in the upper-middle market.

Direct lending loans usually have a legal maturity of five to seven years but tend to repay earlier, bringing the historical average loan life of direct lending loans closer to three years. This fact helps to alleviate some of the liquidity issues stemming from direct lending loans being illiquid as once a portfolio is put into runoff, it can repay a material portion of capital already in the first year of the harvesting period.

Direct lenders typically lend to sponsor-backed companies in the middle market whose EBITDA ranges from \$5 million to \$75 million. Being sponsor-backed means that the equity holder of the borrower is a private equity firm. Otherwise, the loan is considered to be non-sponsored.

The benefit of sponsored deals is that the sponsors vet their companies through extensive due diligence, will support them in times of financial stress with the ability to provide additional capital, and provide oversight and governance throughout the investment.

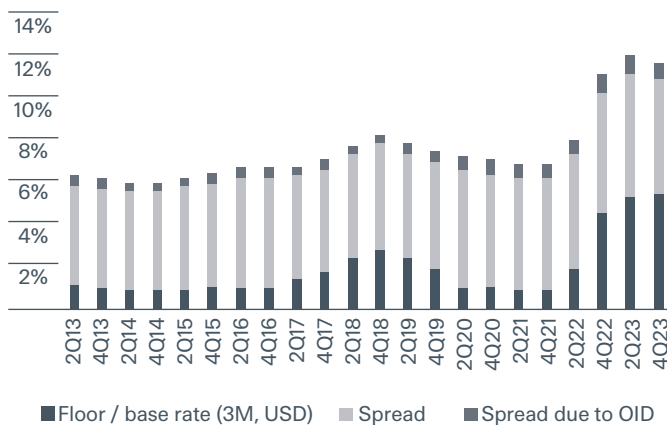
The benefit of non-sponsored deals is that they tend to come with a yield pickup offering some additional return to the investors. The enhanced returns for non-sponsored deals stem from their being harder to source and thus a differentiation point for a GP. They usually require more due diligence and behave less predictably in a restructuring. As a result, a return premium is required.

RETURN DRIVERS

Three components determine the yield of a direct loan: the base (i.e., reference) rate, the spread and the original issue discount (OID). The base rate and spread together represent the cash coupon, which is the main driver of the return.

Figure 9 shows how these three components have stacked up historically to give direct lending's gross asset yield.

FIGURE 9: US DIRECT LENDING GROSS ASSET YIELD



Source: Refinitiv, as of September 2023.

Base rate: The base rate serves as the reference interest rate for direct lending transactions, giving the loans their floating-rate nature. This rate typically adjusts on a quarterly basis. The specific base rate used can vary depending on the jurisdiction of the transaction. SOFR is most common in the US, SONIA in the UK, and Euribor in the eurozone.

Spread: The spread is a crucial part of the income component. It tends to represent the main compensation for the risks that the lender is taking. The spread mainly compensates the investors for the credit and liquidity risks. Because direct lending loans are not traded, they bear a premium over traded loans with similar risk profiles. With respect to credit risk, many factors play a role. Some of the more significant ones are company size, where the loan sits in the capital structure (read: seniority), loan-to-value ratio (i.e., debt divided by enterprise value), leverage (i.e., debt divided by EBITDA), and whether the borrower is backed by a sponsor.

Original issue discount: OID is a non-cash component of the yield. It is essentially a discount on the loan's face value. For example, if a loan has a face value of \$100 million with a 2.5% OID, the lender provides \$97.5 million to the borrower but receives \$100 million at maturity.

MAIN RISKS IN DIRECT LENDING

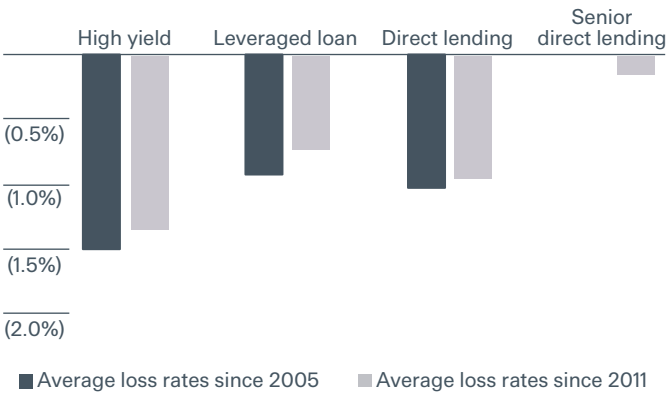
Direct lending is primarily associated with two types of risks: credit risk and liquidity risk. Additionally, even though the duration risk is minimal owing to the floating rate nature of the loans, comments related to this risk are also provided.

Credit risk: This is the risk of loss due to a borrower's failure to make contractual payments and is usually the main risk when investing in the direct lending market. To assess the credit risk associated with lending to a borrower, a lender will evaluate the borrower's financial health and stability. This involves a detailed analysis of key credit metrics, including leverage ratios, loan-to-value (LTV) ratios, cash flow generation

capabilities, and the ability to meet debt obligations through metrics such as the fixed charge coverage ratio. Beyond these credit metrics, the lender also examines various aspects of the borrower’s business. This includes an evaluation of revenue stability, margin levels, market share, and competitive advantages such as barriers to entry in the borrower’s industry. Additionally, the lender will review capital expenditure (capex) patterns, customer concentration, and favorable working capital, among other characteristics.

Details on historical loss rates are provided in **Figure 10**, indicating relatively low loss rates for first-lien direct lending loans. When it comes to the factors mitigating the loss rates, the first and most important one is that direct lending loans tend to be first-lien, meaning that lenders have priority in claiming the borrower’s assets in case of payment default.

FIGURE 10: US HISTORICAL CREDIT LOSS RATES



Sources: Cliffwater, Morningstar LSTA LL Index, Bloomberg US High Yield Index and JPMorgan Markets as of September 2023. The broad Cliffwater Direct Lending Index used to be mainly composed of junior loans until a shift to a majority of senior debt in 2011. Currently, the broad index incorporates 80% of senior debt and 20% of subordinated debt and equity. Period: 2005–2022; Senior direct lending period: 2011–2022.

The underlying borrowers tend to be sponsor backed, which means there tends to be a more sizable pool of capital that can support the borrower. In addition, the GPs originating the loans typically hold sizable portions of loans within their flagship funds, thus ensuring alignment of interest—the credit risk is not syndicated out to external investors but is borne by the lenders.

Liquidity risk: This refers to the ease with which an asset can be sold without significantly affecting its price. Direct-lending investments are typically less liquid than traded debt instruments. This illiquidity often results in an additional spread (i.e., premium) that direct-lending loans carry relative to the traded debt instruments of comparable credit quality. Even though direct-lending loans tend to be illiquid, the average time after which they are typically repaid is three years. This means that in a mature portfolio, roughly one-third of the portfolio repays within a single year, generating meaningful liquidity for the investors.

Additionally, the secondary market for direct-lending loans is expanding fast. This allows investors to sell their portfolios when needed, even though the sale usually happens at a discount.

Interest rate / duration risk: This risk represents the potential change in the valuations due to changes in prevailing interest rates. In direct lending, due to the floating-rate nature of the loans, the duration is typically low since interest rates normally reset every quarter. As a result, when interest rates go up, direct lending tends to profit as higher cash coupons are generated. When the interest rates are low, the loans mostly have an interest rate floor ensuring that some minimum base rate is applied. For example, when USD LIBOR was close to 0%, the typical interest rate floors for US loans were 1.0%, offering an extra return.

Direct lending vs. public markets

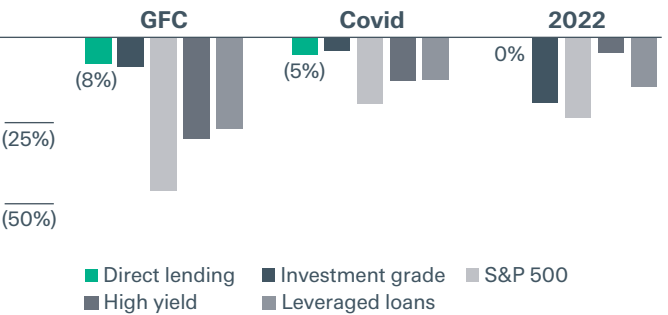
DIRECT LENDING VS. SYNDICATED LOANS AND HIGH-YIELD BONDS

One of the main differences between direct lending and the syndicated loan and high-yield bond markets is liquidity. Direct lending is illiquid and will normally require a discount to be sold on the secondary market, while the majority of leveraged loans and high-yield bonds can be more easily traded through a network of brokers and banks that attempt to match buyers and sellers through their trading desks.

In terms of credit risk, first-lien direct loans, proxied by the Cliffwater Senior Direct Lending Index, have experienced significantly lower losses than other asset classes, with the loss rate averaging approximately 0.15% between 2011 and 2022. The broad direct-lending index, which contains historically a material portion of junior debt and equity, tends to have a loss rate similar to leveraged loans, while high-yield bonds usually experienced higher losses between 2005 and 2022 (Figure 10). This is partly attributable to direct lenders’ higher control in the deal, which enables them to secure higher recovery rates through their senior position within the capital structure. In public debt markets, lenders tend to have limited negotiation capabilities with borrowers, often leaving selling their positions at a loss as the sole possible exit.

An advantage of direct-lending and syndicated loans is their use of floating rates, which substantially reduces interest rate risk. By comparison, high-yield bonds are subject to a material duration risk. This helped direct lending to experience lower volatility and drawdowns than other asset classes, as depicted in Figure 11.

FIGURE 11: DRAWDOWNS BY PERIOD



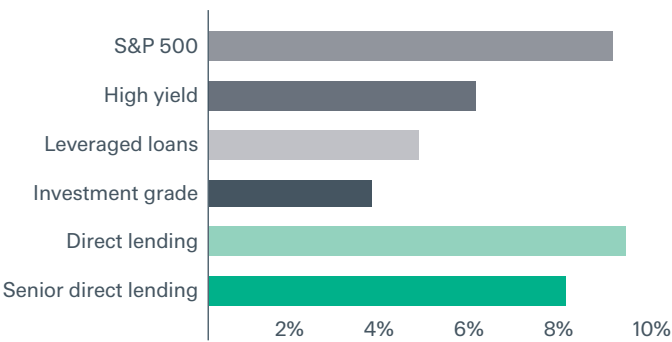
Sources: Cliffwater, Bloomberg and Morningstar LCD, as of December 2022.

Overall, direct lending has been able to provide better risk-adjusted returns than sub-investment grade debt alternatives in the traded markets.

DIRECT LENDING VS. EQUITIES AND INVESTMENT-GRADE BONDS

Historically, as shown in Figure 12, direct lending has been able to provide equity-like returns at reduced volatility. Because direct-lending loans tend to sit at the top of the capital structure, equity and junior debt act as the buffer against losses for direct lenders.

FIGURE 12: US ANNUALIZED HISTORICAL RETURNS



Sources: Cliffwater, Bloomberg and Morningstar LCD, as of September 2023.

Period: January 1, 2005 through September 29, 2023. Senior direct lending period: September 30, 2010 through September 30, 2023. The broad Cliffwater Direct Lending Index used to be mainly comprised of junior loans until a shift to a majority of senior debt. Currently, the broad index incorporates 80% of senior debt and 20% of subordinated debt and equity.

Although investment-grade debt provides lower credit risk (those bonds are issued by companies rated BBB- and better), the returns offered are also significantly lower than those that may be available in direct lending. The lower volatility experienced by direct lending compared with equity and investment-grade bonds is again partially the result of its floating rate. Investment-grade bonds are susceptible to interest rate risk, which explains the significant volatility in 2022.

Similarly, traded equities can also suffer from significant market volatility as returns are quickly accommodating to actual and expected changes in company performance and broader market conditions.

An advantage of direct lending, and debt in general, is its reliance on contractual cash flows, which do not rely on capital appreciation to achieve the target returns, unlike equity investments.

An overview of the main features of different asset classes with the relevant return and risk numbers is provided in the table below.

FIGURE 13: SUMMARY TABLE

Feature	Direct lending	Senior direct lending	Syndicated loans	High yield	Investment grade	Public equity ³
Market	Private	Private	Public	Public	Public	Public
Floating rate	Yes	Yes	Yes	No	No	-
Secured	Yes	Yes	Yes	No	No	-
Liquid	No	No	Yes	Yes	Yes	Yes
Duration	0.3	0.3	0.3	3.5	6.8	-
Historical loss rates	1.0%	0.2%	0.9%	1.5%	0.1%	-
Post-GFC max. drawdown*	-4.8%	-4.8%	-13.0%	-14.7%	-19.6%	-28.1%
GFC ¹ max. drawdown	-7.7%	-	-30.1%	-27.1%	-8.6%	-45.8%
Annualized volatility ²	3.5%	2.9%	9.6%	10.5%	6.5%	16.1%
Annualized return ²	9.4%	8.2%	4.7%	6.1%	3.7%	9.1%

Sources: StepStone Group, Bloomberg, Moody's, Cliffwater, JPMorgan Markets and Morningstar LSTA Leveraged Loan Index, as of September 2023. Senior direct lending based on the Cliffwater Senior Direct Lending Index.

¹ Global Financial Crisis 2007–2009.

² Annualized volatility and return based on the period between January 1, 2005 and September 29, 2023. Senior direct lending between September 30, 2010 and September 29, 2023.

³ Approximated by the S&P 500.

* Direct lending and syndicated loans in 2020, high yield and investment grade in 2022, public equities in 2010.

Means of accessing direct lending

To access direct lending, investors must consider the type of vehicle that is most suitable to their investment objectives as well as whether a single- or multi-GP approach is preferable.

FIGURE 14: HOW TO ACCESS DIRECT LENDING

		Vehicle approach		
		SMA	Closed-ended fund	Open-ended fund
GP approach	Single-GP	Single-GP SMA	Single-GP closed-ended fund	Single-GP open-ended fund
	Multi-GP	Multi-GP SMA	Multi-GP closed-ended fund	Multi-GP open-ended fund

Source: StepStone, for illustrative purpose only.

Starting with the most suitable vehicle, investors have the choice among three main types of vehicles:

Created for a single investor, a **separately managed account (SMA)** offers a high degree of customization and allows investors to tailor their portfolios to their risk, return and liquidity needs. An SMA allows for flexibility in investment timing as the investor will not be dependent on the GP fundraising schedule. It will also usually allow for higher transparency as the GP will normally offer quarterly reports on the investor’s portfolio containing details on fundamentals and performance of the portfolio companies. However, these accounts usually come with higher capital requirements and involve capital calls, which entail additional operational complexity. In addition, SMAs tend to provide very limited liquidity to investors and as such are more suitable to investors comfortable with long-term investment objectives. Finally, SMAs are flexible in duration and can continue as long as the agreement between the investor and manager remains active.

A **closed-ended commingled fund** pools capital from a group of investors and is more accessible owing to lower minimum investments. Because prespecified guidelines determine the fund’s investment strategy, closed-ended funds offer less flexibility and customization than SMAs. Moreover,

the capital in these funds is locked up until a preset end date, thus limiting liquidity. Like SMAs, closed-ended funds tend to involve capital calls and can be more operationally complex. In terms of transparency, investors in closed-ended commingled funds usually receive less information than an LP invested in an SMA. Once the investment period ends, the capital is returned to the investor as the underlying loans are repaid.

Open-ended commingled funds also pool capital from a range of investors, but in contrast to closed-ended funds, they offer certain liquidity features, are often subscription-based, which provides instant deployment, and do not have a defined term.

Open-ended funds allow investors to withdraw their capital under certain conditions specific to each fund, usually as a predetermined percentage of NAV.

Subscription-based open-ended funds eliminate the need for capital calls, which reduces operational complexity. The minimum capital threshold to access these funds is also materially lower than for SMAs and closed-ended funds, thus allowing a broader range of investors to participate.

Open-ended funds typically adopt an evergreen structure, meaning the manager reinvests repayments, offering continuous investment opportunities, thereby largely eliminating the reinvestment risk typically seen in closed-ended funds.

They usually offer a relatively consistent level of minimal transparency, as many of the vehicles need to submit reports on their holdings to regulatory authorities on a regular basis.

However, like closed-ended funds, predetermined fund guidelines mean that open-ended funds offer less flexibility and customization than SMAs.

In addition to the type of vehicles, investors must decide between a single-GP and a multi-GP approach.

The single-GP approach entails investing in a fund or SMAs where the underlying investments will be provided by a single

GP. The most common way of accessing private debt is usually through single-GP commingled funds. However, these funds are prone to several challenges.

Alternative lenders are not always in market, which means that highly desirable GPs may not always be available.

Unless an investor can commit a material amount of capital, they will need to commit to one or very few alternative lenders. This limits diversification at both the manager level and the single-loan level. The latter is largely due to individual managers potentially running fairly concentrated portfolios.

Deploying committed capital efficiently is vital to optimizing performance, as the asset class depends largely on income generated by interest payments from underlying lending transactions. However, investing in different commingled funds makes an investor dependent on their individual capital deployment speed, which could lead to suboptimal levels of capital at work if deployment is slow.

Investing in one or several single-GP commingled funds can require an elevated operational effort due to frequent capital calls and distribution payments. Furthermore, because reporting methodologies may vary from one manager to the next, comparing or aggregating performance can be challenging.

The multi-GP approach is an alternative to the single-GP approach where an LP can access multiple GPs through a single SMA or commingled fund. This approach addresses several of the challenges faced by single-GP commingled funds. For instance, they normally have a fairly large pool of GPs sourcing the deals, which leads to continuous capacity availability. Coincidentally, the larger pool of GPs also allows for greater diversification benefits, limiting downside risk. It also means that deployment of capital is less reliant on a few GPs, making deployment faster and more efficient. In addition, the multi-GP approach allows access more easily to alternative deployment channels, be it secondaries or co-investments. Finally, the multi-GP funds or SMAs provide convenience in the form of aggregated reporting.

FIGURE 15: DIRECT LENDING SOLUTION FEATURES

Feature	SMA	Closed-ended fund	Open-ended fund	SMA	Closed-ended fund	Open-ended fund
	Single-GP	Single-GP	Single-GP	Multi-GP	Multi-GP	Multi-GP
Flexibility of entry ¹	High	Low	High	High	Moderate	High
Diversification	Moderate ²	Low	Moderate	High	High	High
Transparency	High	Moderate	Moderate	High	Moderate	Moderate
Customization	High	Low	Low	High	Low	Low
Investment mechanism	Capital calls	Capital calls	Subscription based ³	Capital calls	Capital calls	Subscription based ³
Deployment volume & speed	Low ⁴	Low	High ⁵	Moderate	Moderate	High ⁵
Liquidity	Low	Low	Moderate	Low	Low	Moderate

¹ Independent of fund or GP fundraising schedule.

² Can be low during the ramp-up period in the short term.

³ Open-ended funds using capital calls exist, but the focus here is on subscription-based open-ended funds.

⁴ Can be increased and diversified by including co-investments, secondaries and specialty finance.

⁵ Would be "Low" in the case of an open-ended fund using capital calls.

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