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Relative Attractiveness of Direct Lending:

Liquidity, Volatility and Drawdowns

Executive Summary

- The sharp increase in yields since the beginning of 2022 has put fixed-income securities back into the spotlight, but we think that direct lending has managed to maintain its edge against public markets.
- While the asset class is illiquid, it provides cash through various means such as high current income, repayments, and its burgeoning secondary market. Traded fixed-income securities are more liquid, but they tend to lose this liquidity in times of market stress.
- High yields provided in the public market are often the result of market dislocations, making them only available during short windows of opportunity. In contrast, direct lending has offered high yields throughout credit cycles.
- Direct lending's low volatility and limited drawdowns enable it to offer relatively high risk-adjusted returns.

Over the past decade, direct lending has attracted more investors looking for alternatives to traditional public fixed-income securities, due to the latter's negative yields resulting from very loose monetary policies enacted in many economies. At the end of 2020, the outstanding value of negative-yielding bonds reached $18 trillion globally, according to Bloomberg. Moreover, the public market volatility experienced in 2022 has presented a challenge for investors, making direct lending an even more viable alternative.

In recent years, direct lending has offered low volatility which combined with its relatively high returns and muted drawdowns indicates that the asset class could be a haven for investors. Nonetheless, the tightening cycle that many central banks initiated in 2022 has brought fixed-income securities back into the spotlight due to rising yields. Yet it is important to note that higher yields were not limited to the public markets as direct lending also tracked rising rates closely thanks to floating rates.

While there may be a temptation to reallocate away from direct lending to public markets owing to their perceived liquidity advantages, it's important to recognize that the liquidity feature of public markets can be more complex than it appears, and liquidity may evaporate when investors need it the most. Building on our previous paper, which explored credit and duration risks of direct lending, this article focuses on the liquidity of direct lending, as well as its volatility and drawdowns relative to fixed-income securities.

Figure 1 | Debt Investments Overview

Feature	Direct Lending	High Yield	Investment Grade
Market	Private	Public	Public
Floating Rate	Yes	No	No
Secured	Yes	No	No
Liquidity	**Limited**	**Conditional**	**Conditional**
Duration	0.3	4.1	7.0
Historical Loss Rates	0.7%	1.9%	0.1%
2022 Max. Drawdown	**0.0%**	**-14.7%**	**-19.6%**
GFC[1] Max. Drawdown	**-7.7%**	**-27.1%**	**-8.6%**
Annualized Volatility[2]	**3.6%**	**10.8%**	**6.6%**
Annualized Return[2]	9.4%	6.8%	4.1%
Current Yield[3]	11.4%	9.1%	5.4%
Current Coupon	11%	5.8%	3.7%
Correlation with DL	1	0.4	0.1

Source: StepStone Group, CS HY Index, Barclays US IG, Moody's, Cliffwater, Refinitiv as of December 2022.
[1]Global Financial Crisis 2008/2009· [2]Annualized volatility and return based on the period between 2005 and 2022. [3]Current Yield defined as yield to worst for HY and IG bonds and gross asset yield for direct lending.

Liquidity

How illiquid is direct lending?

Direct lending, being part of the private markets and thus not traded publicly, is considered an illiquid asset class. However, direct lending is quite different from private equity for instance, which has longer investment periods and where cash flows can be quite unpredictable. In contrast, direct lending still provides some advantages of public securities' liquidity for investors through different features that could provide cash to satisfy investors' needs:

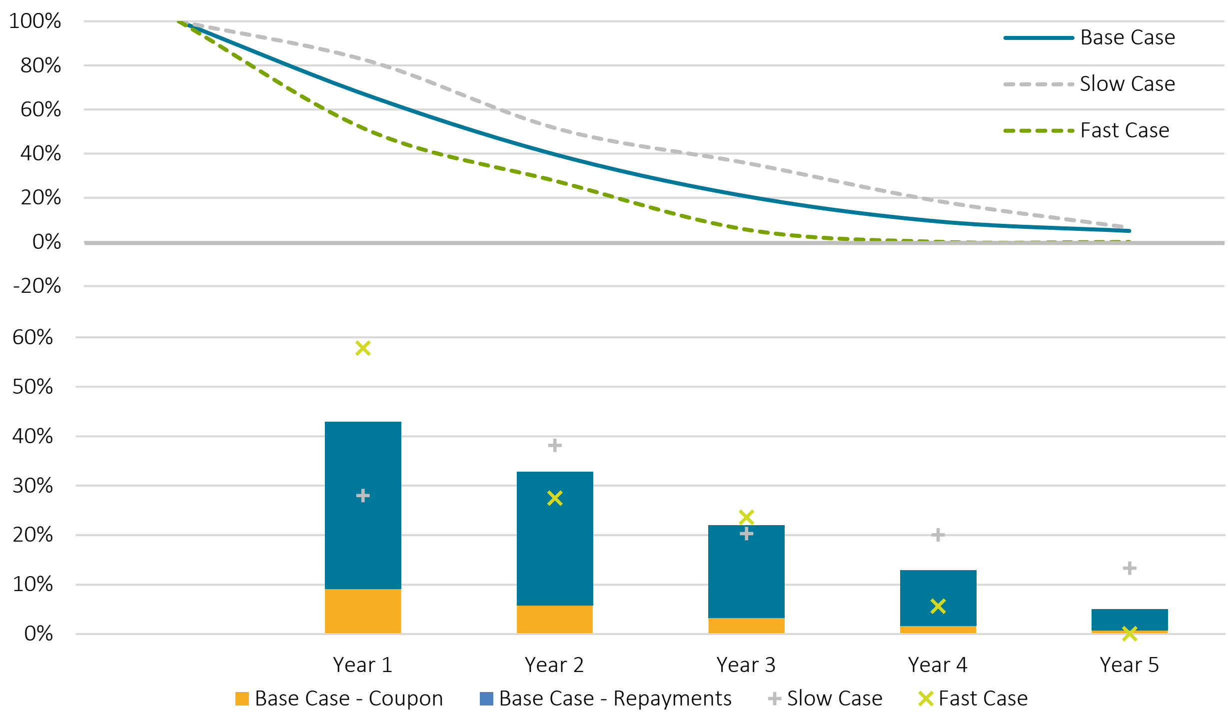
High current income
Direct lending offers investors a reliable source of cash through its high coupon rate, which provides a consistent and predictable stream of liquidity that remains stable throughout the business cycle. Additionally, direct lending deals often incorporate floating rates, which allows the asset class to effectively adjust to current market conditions.

Notably, during 2022 the coupon rate in direct lending has consistently risen as central banks have raised policy rates, providing investors with even more cash. If interest rates fall, the coupons would be protected by a LIBOR floor that limits how low they can fall.

Capital repayments

Direct lending loans typically have a legal maturity of five to seven years, but the usual effective loan life is closer to three years. This means that the loans are repaid rather quickly when compared with the legal maturity. As a result, once the portfolio enters the run-off phase, it can generate significant cash inflows. As seen in **Figure 2**, based on the base-case assumption, approximately 80% of the portfolio is expected to be repaid within three years of harvesting. Consequently, in addition to income, principal-related cashflows provide a valuable supplementary source of cash for investors.

Figure 2 | Harvesting Period Repayments



Source: StepStone estimates as of March 2023. Fast and Slow Cases based on +/- 2 standard deviations from the mean. Assumed coupon: 11%

Secondary market

Direct lending offers the possibility of secondary market transactions to investors who need faster access to cash. Such transactions may take more time to conclude compared with those in the public market and might require offering a discount to close the deal. However, due to stable valuations, secondary discounts may be lower than realizing a loss on the liquid markets. In addition, the secondary market is rapidly developing, enabling the execution of very large secondary sales.

New fund offering

Recently, direct lending managers expanded their offerings by setting up evergreen funds with embedded liquidity features. Those funds are usually subscription based with a low minimum ticket, which provides investors with greater allocation flexibility as well as direct exposure to the asset class, thanks to instant deployment. Moreover, such funds normally also allow for quarterly redemptions, up to a predefined percentage of NAV, giving the possibility to withdraw some cash to meet liquidity needs when necessary.

What are the advantages of direct lending despite its limited liquidity?

The illiquidity feature of direct lending also presents some advantages that investors should consider when making portfolio allocations:

Illiquidity premium

Direct lending compensates investors with an "illiquidity premium." This premium could be particularly attractive to long-term investors who are less concerned with liquidity risks. Cliffwater estimates the illiquidity premium at approximately 2.1%. Naturally, there are other key factors contributing to the yield such as credit risk or the economics of a given borrower. A forthcoming paper from StepStone will delve deeper into these factors by proposing a yield decomposition in the direct lending space.

Limited volatility

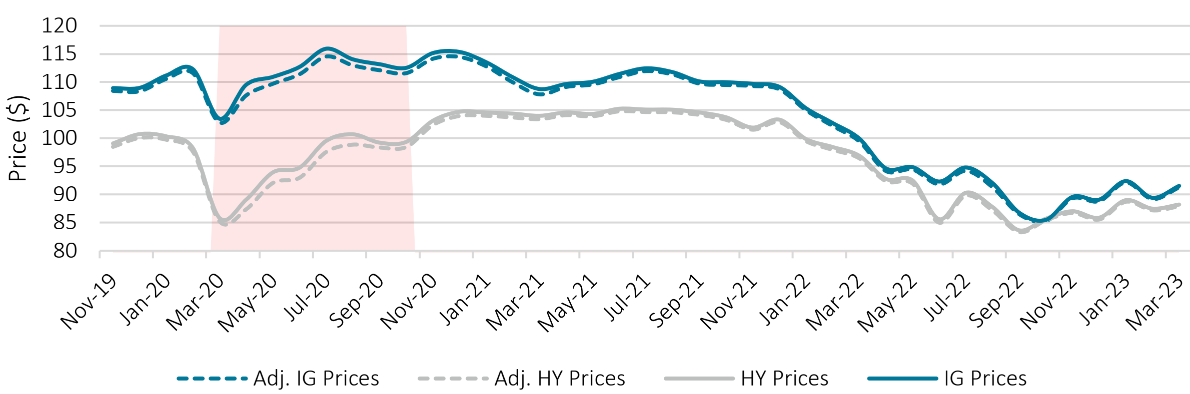
Direct lending's limited liquidity is one factor that shields it from major fluctuations in financial markets, making it less volatile compared with other asset classes. In addition to duration, security structures, and credit risk, the illiquidity of direct lending helps to contribute to its stability. This was particularly evident in 2022 when investment grade and high-yield bonds were quite volatile while direct lending remained much more stable.

How liquid are public markets?

In the public market, fixed-income securities are often considered to be liquid because they are expected to be easily traded and converted to cash whenever needed. However, this may not always be the case: Tradable credits tend to lose some of that liquidity when markets are stressed and prices are likely to fall. While it is possible to sell these securities, it usually results in a loss, which investors have to bear. Therefore, investors need to keep in mind the wider bid-ask spread and discounted prices when evaluating the liquidity advantage of public markets, as this liquidity may disappear when they need it most.

Figure 3 shows that liquidity costs rose at the beginning of the pandemic before plummeting. For example, the average price for high-yield debt fell to $85 while the liquidity cost increased to 2%. This implies an investor would need to realize a material loss to liquidate its holdings.

Figure 3 | Fixed-Income Liquidity



Source: Bloomberg BI, BofA ICE HY Index and BofA ICE IG Index, as of March 2023. Adj. Prices take into account liquidity costs.

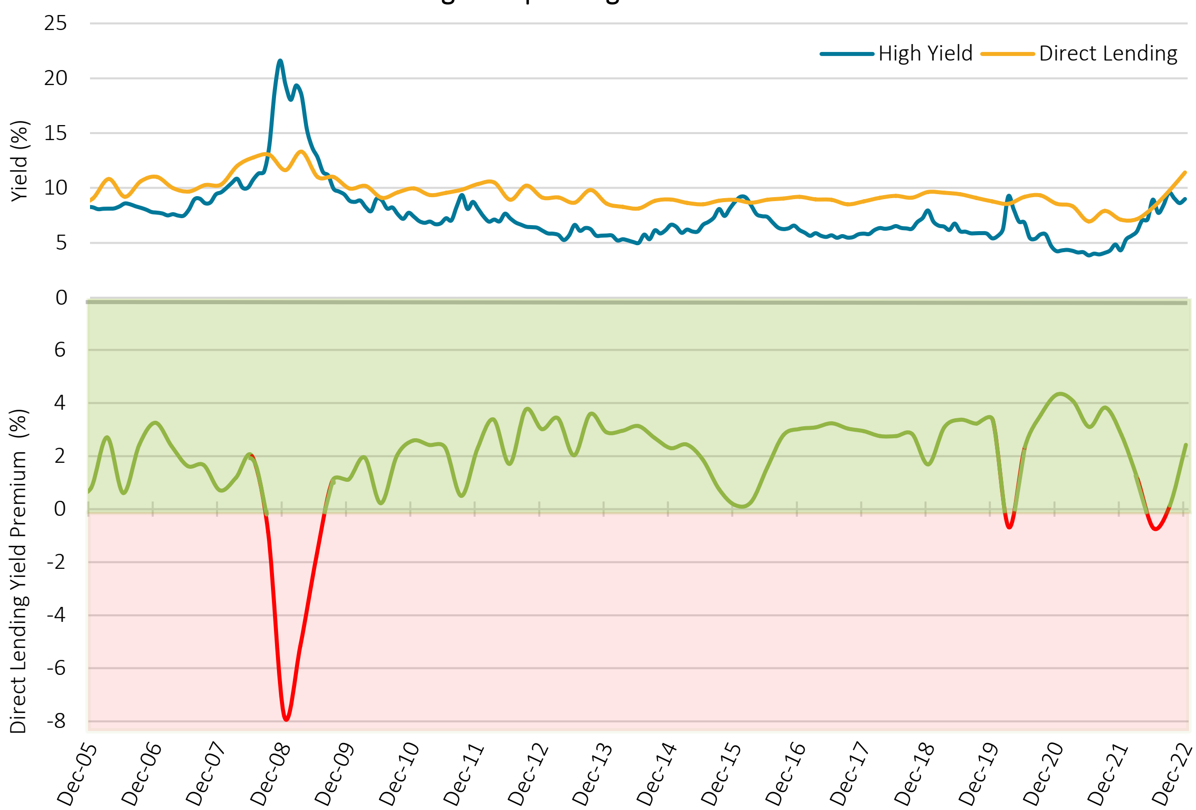
"Liquidity cost is a percentage transaction cost estimate for fixed income securities based on Bloomberg's proprietary liquidity assessment methodology. Liquidity cost is a per-issue percentage round trip transaction cost estimate for an institutional size trade, i.e., a value of 1 equals to 1% cost as a percentage price (market value), therefore a lower liquidity costs indicates better liquidity." Bloomberg Intelligence

DL vs HY yields—Timing the market

Investors who allocate to direct lending typically have a long-term focus, given the assumed illiquidity of the asset class. This strategic allocation, coupled with direct lending's high cash coupon, allows investors to capture high yields through the credit cycle. This makes direct lending much less reliant on timing than public markets.

As shown in **Figure 4**, yields for high-yield bonds increase during narrow windows of opportunity when prices correct due to the macroeconomic environment and dislocations in the financial market. Conversely, driven by cash coupons linked to the base rate and spreads, direct lending has offered high returns throughout the credit cycle.

Figure 4 | Timing the Market



Source: BofA ICE HY Index YTW, StepStone estimates (DL GAY 2005–2021) and Refinitiv (DL 3Y 2022) as of December 2022.

Based on historical data, during the last 15 years, there were only six quarters in which high-yield bonds outperformed direct lending. Investing in falling high-yield bond prices during these quarters would have also introduced volatility into the portfolio. Hence, most of the time direct lending benefits from a yield premium over public securities such as high-yield bonds.

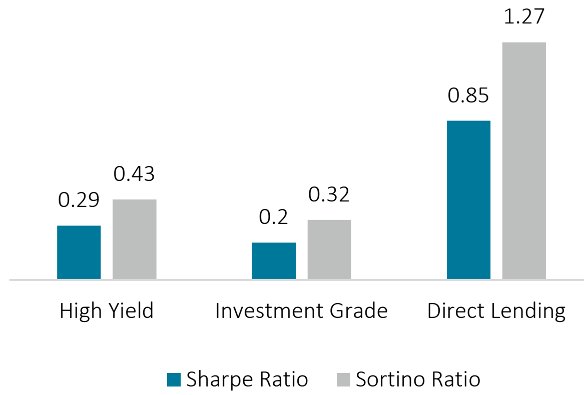
Drawdowns and Volatility

Volatility of direct lending compared to public markets

As previously stated, direct lending's relative illiquidity has allowed it to experience less volatility than tradable credits without sacrificing the high returns. Another factor contributing to the asset class's low volatility is its low interest rate duration.

Unlike high-yield and investment-grade bonds, which are exposed to both credit and interest rate risk, direct lending is only subject to credit risk due to its floating rate feature. This feature allows for regular coupon resets, usually quarterly. This significantly reduces the volatility potential of direct lending. The past year is a prime example of this advantage as tradable credit experienced sharp swings in valuations due to an increase in interest rates, while direct lending mainly benefited from its floating rate feature, which acts as a hedge against potential future losses and provides protection against inflation.

Figure 5 | Higher Ratios for Direct Lending



Source: Barclays US High Yield Index, Barclays US IG Index, Bloomberg US Treasury Index and Cliffwater Direct Lending Index, as of March 2022. Time period Jan. 1, 2005 – Dec. 30, 2022, using a quarterly frequency.

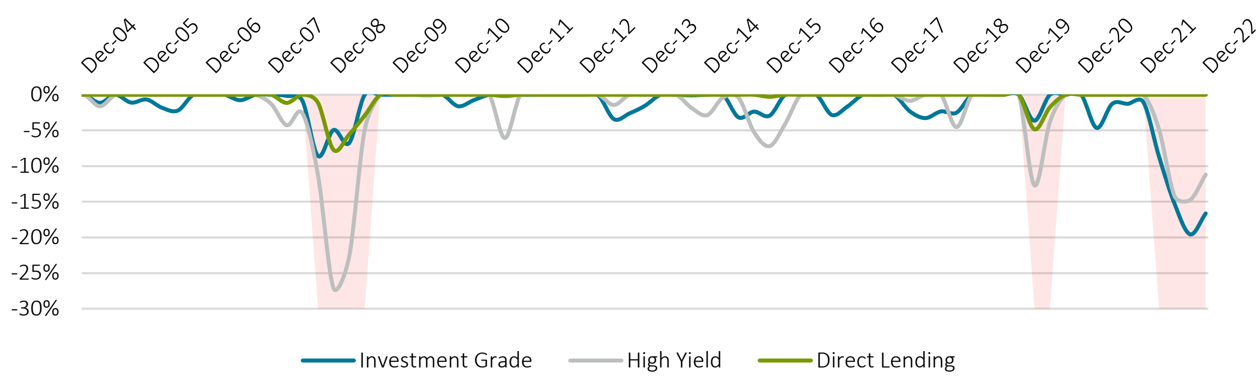
Figure 5 shows that direct lending compares favorably to fixed-income securities as it has delivered higher returns per unit of standard deviation (i.e., the Sharpe ratio) as well as per unit of negative deviation (i.e., the Sortino ratio).[1]

Relatively low drawdowns compared to tradable credit

This low volatility, combined with other factors detailed below, has enabled direct lending to continually perform well relative to fixed-income securities in benign and inclement conditions alike. As seen in **Figure 6**, direct lending delivered relatively low drawdowns in each of the last three crises.

This feature of direct lending is highly appealing as it provides a reliable and stable source of returns across the entire credit cycle.

Figure 6 | Relatively Small Drawdowns



Source: Credit Suisse High Yield Index, Barclays US IG and Cliffwater DL Index (Based on broad Cliffwater Direct Lending Index, which includes 30-50% Junior Debt. Senior Debt is expected to have lower drawdowns), as of March 2022. Time period Jan. 1, 2005 – Dec. 30, 2022.

[1] The Sortino Ratio is similar to the Sharpe Ratio but considers only the volatility of negative returns instead of all volatility. It is computed by dividing the excess return of the investment over a risk-free rate by the investment's downside volatility.

Other factors contributing to lower drawdowns:

Covenants
Most of the time direct lending loans include financial maintenance covenants whereas high-yield and investment-grade bonds do not. Those covenants protect the lender by helping them detect early signs of financial stress in the borrower's balance sheet to rectify the situation before it worsens. The lender can renegotiate the terms of the loan, implement changes in the company, and enforce them to prevent the borrower from defaulting. In contrast, lenders in the public market would usually have to wait for a payment default before being able to act. This could considerably lower the probability of recovering the investment in a default event.

Sponsors
As of 2022, StepStone estimates that about 85% of direct lending borrowers were backed by a private equity firm. "Sponsors" usually provide further due diligence work about the borrower to the lender while also taking an active role in the management of the firm to ensure its financial wellbeing. In addition, sponsors can also provide cash injections in times of financial stress, reducing the chances the borrower defaults.

Capital structure
Direct lending loans mostly benefit from a senior position in the capital structure. According to StepStone estimates, more than 90% of new direct lending loan issuances were first-lien loans in 2022, meaning the lender will be the first to be reimbursed in case of default which increases the recovery rate. The long-term average recovery rate on first-lien term loans is 72% according to the 2022 Moody's annual default study; senior secured bonds' long-term average recovery rates are 61% and senior unsecured bonds are 47%.

Conclusions

Direct lending is not as illiquid as it is generally perceived, and the liquidity of the public markets is conditional:

- Direct lending offers liquidity through cash coupons, material amounts of repayment prior to legal maturity, and through a burgeoning secondary market. Since it is more illiquid relative to the traded markets, it does offer an illiquidity premium to the longer-term investors which is a notable advantage for strategic allocations.
- The assumed liquidity of tradable credit might only be conditional as it tends to be limited in times of financial stress which is precisely when investors tend to need more cash.
- While the higher yields offered by direct lending are predominantly based on cash coupons, achieving the same or higher yields in public markets requires investors to time the market precisely, which is challenging, to say the least.
- Partly due to the non-regularly traded nature of the asset class and many features of its loans, direct lending offers higher risk-adjusted returns resulting in higher Sharpe and Sortino ratios. The drawdowns experienced by direct lending compare favorably throughout the credit cycle. In contrast, high-yield and investment-grade bonds can experience high maximum drawdowns in times of financial stress.