

PRIVATE CREDIT

CAPITAL MARKETS FORECAST



RUSSELL INVESTMENTS RESEARCH

Contents

Overview of Private Credit	2
Corporate Direct Lending	3
Specialty Finance	3
Special Situations	4
Historical Returns	4
Long-term Return Drivers	6
1. Cash rate (SOFR)	6
2. Margin	7
3. Default losses	7
4. Leverage	7
5. Fees earned	7
6. Equity	8
7. General partner fees	8
References	8
Acknowledgements	8

Private credit: Capital markets forecast

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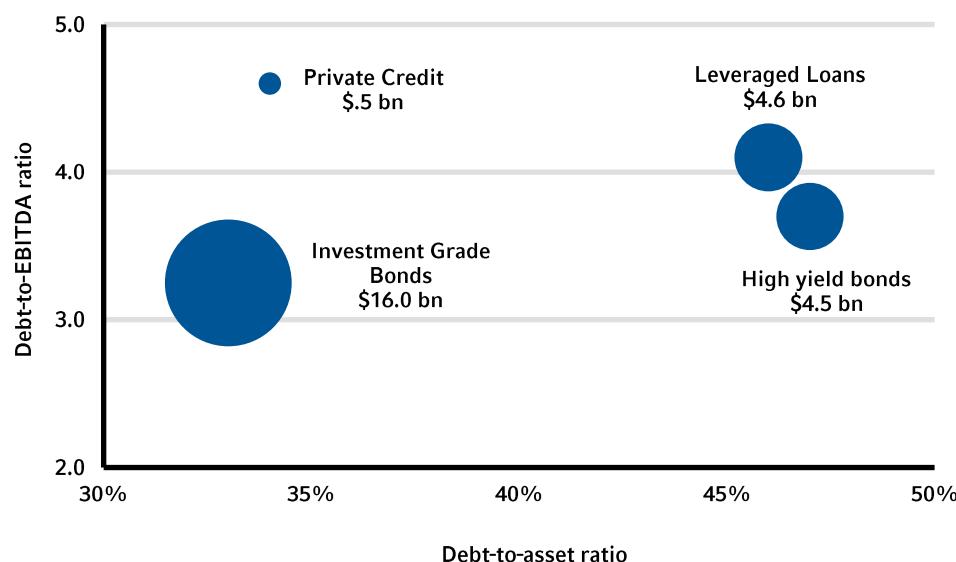
Overview of Private Credit

Private credit is non-bank lending provided by entities like private equity firms, hedge funds, or specialized funds. It finances companies that lack access to public capital markets or need flexible, tailored solutions. This includes direct lending, mezzanine financing, distressed debt, and other non-publicly traded debt forms.

Businesses borrowing through private markets typically have lower credit quality and often cannot secure loans from banks. Private credit emerged nearly three decades ago and gained prominence following the Global Financial Crisis (GFC) due to increased banking regulations. It is now estimated to be between \$1.5 and \$2.1 trillion in size, with approximately three-quarters of this market in the United States. When compared to listed sub-investment grade fixed income (see Exhibit 2), private credit has become a significant source of lending in global markets.

Exhibit 1: Characteristics of private credit borrowers

Median firm size and leverage by issuer type in North America

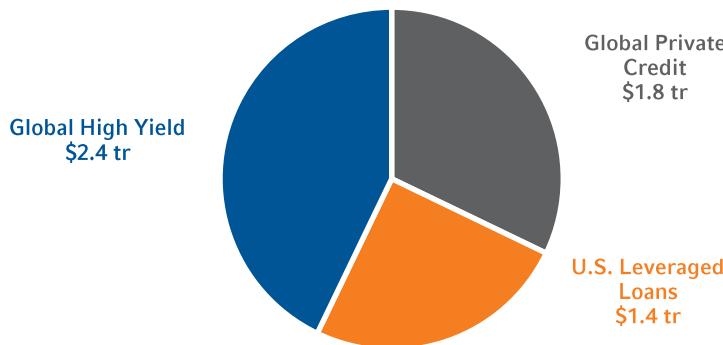


Private credit emerged nearly three decades ago...it is now estimated to be between \$1.5 and \$2.1 trillion in size, with approximately three-quarters of this market in the United States.

Source: IMF - Fast-Growing \$2 Trillion Private Credit Market Warrants Closer Watch (April 2024)

Exhibit 2: Size of the private credit market (Dec 2023)

Below Investment Grade By Market Size



Source: BarCap, CreditSuisse, IMF, Cambridge Associates. Note: Private Credit estimates range from \$1.6-2.1tr

Private credit is not a homogenous asset class; there are a variety of loan types falling under the private credit umbrella. Some of the more widely referenced sectors within private credit include:

Corporate Direct Lending

The largest sector within private credit, representing approximately 46% of the asset class, is direct lending. These deals are negotiated between a lender, such as a private credit manager, and a corporate borrower. Direct lending loans, like many private credit loans, are typically floating rate notes. Corporate direct lending can occupy various positions in the borrower's capital structure, ranging from senior secured to subordinated. In terms of the risk-return spectrum for private credit, direct lending is positioned at the lower end.

Specialty Finance

Managers invest in a wide variety of niche strategies that often require highly specialized expertise to navigate. From a risk/risk-return perspective it is typically more risky than direct lending but less risky than special situations. The following are a small subset of the opportunities within specialty finance.

Asset-based lending

Typically involves loans against specific hard assets like data infrastructure or equipment, or against a diversified portfolio of credit receivables like student and auto loans. These assets provide collateral for the private credit manager who needs specialist expertise to appropriately value the collateral and assess the risks.

Structured royalties

Structured royalties are a special case of asset-based lending. A typical case would be where a company that owns rights to a royalty uses this royalty as collateral for a loan.

Equipment leasing

A niche area of specialty finance involving the purchase and lease back of equipment to operators. Aircraft leasing is one of the most well-known types of equipment leasing.

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Special Situations

Encompasses a wide range of strategies that are typically opportunistic in nature, often involving companies in stressed or distressed situations. It is the riskiest of the main private credit strategies. Special situations lenders often have specialized knowledge of bankruptcy procedures, legal enforcement, asset management, and restructuring. Some of the key situations pursued by special situations managers are:

Distressed

Private credit managers seek out companies that are in financial distress and purchasing their debt in the secondary market (usually heavily discounted). These managers often seek to maximize their advantage as creditors through deep understanding of the company's governing document or bankruptcy code.

Pulled-to-par

A smaller subset of special situations investors. These private credit managers base their view on a company's fundamental valuation and rely on the bond being pulled to par value.

Importantly, funds often do not have clear lines in the types of strategies they pursue. Some focus on a single strategy, but many pursue multiple strategies, or pivot from one strategy to another. Flexible credit managers, for example, pivot between direct lending and buying secondary market securities.

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Historical Returns

In terms of historical returns, private credit has exhibited all the major characteristics of a private asset: a return premium over a listed market equivalent (leveraged loans are a reasonable proxy for a listed market equivalent) and lower volatility.

Exhibit 3: Private credit capital market historical returns

Historical Returns and Volatilities (2004 – 2024)

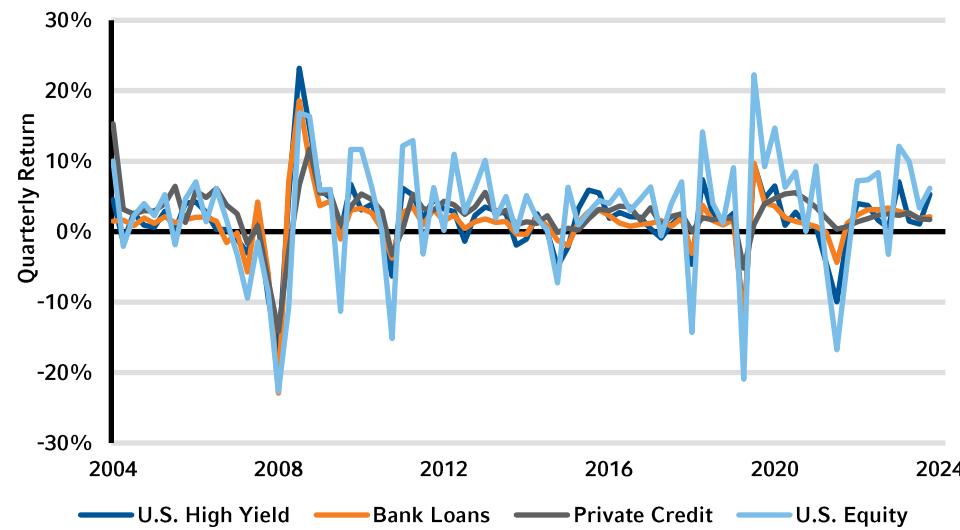
	HISTORICAL RETURN	HISTORICAL VOLATILITY
US High Yield ICE BofA US High Yield Index	6.9%	10.4%
US Bank Loans Credit Suisse Leveraged Loans Index	5.2%	9.0%
Private Credit Hamilton Lane Private Credit Universe (2004- 2022)	8.5%	6.2%
Private Credit Preqin Private Debt Index	10.0%	7.0%
US Equity MSCI US IMI Index	11.8%	16.6%

Source: Historical statistics are annualized from quarterly returns.

Like other private assets, the observed volatility of private credit has historically been much lower than that of equivalent public market investments. While it is true that private market assets have tended to exhibit lower volatility, it is important to note that volatility alone is a poor measure of risk for private assets because volatility ignores the entire shape of the

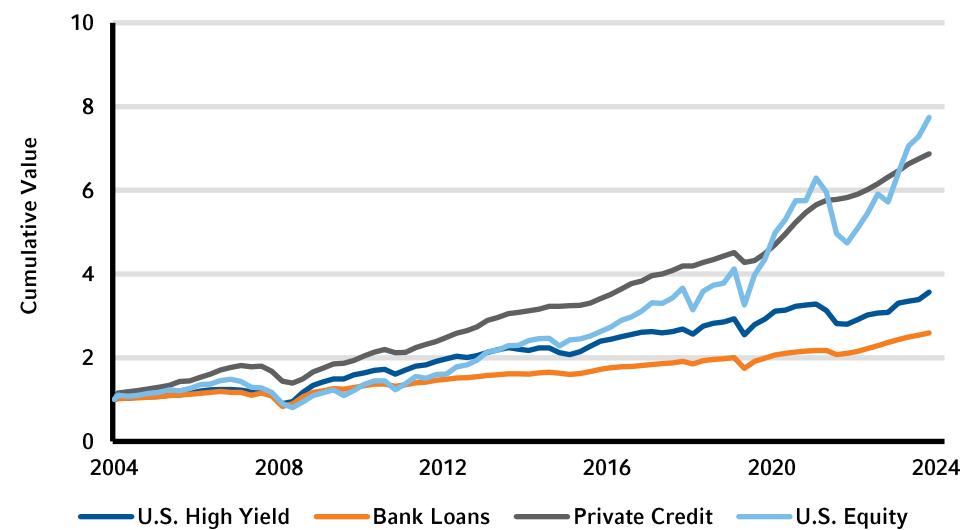
return distribution. Private assets may have negatively skewed returns (frequent small gains and occasional large losses) or fat tails (extreme returns), which are not captured by volatility. Putting aside the nuances of probability distributions, there is still the undeniable truth that if a private asset investor is forced to sell, the potential losses can be significantly larger than those implied by volatility alone.

Exhibit 4: Historical Returns – Quarterly



Source: # Private Credit is Prequin Private Debt Index

Exhibit 5: Cumulative asset values



Source: # Private Credit is Prequin Private Debt Index

While it is true that private market assets have tended to exhibit lower volatility, it is important to note that volatility alone is a poor measure of risk for private assets because volatility ignores the entire shape of the return distribution.

Long-term Return Drivers

We now turn to forecasting private credit. Our forecast for private credit is most representative of a unitranche debt¹ exposure, with an approximate mix of 75% senior and 25% junior debt. In the U.S. market, this type of debt is generally issued as floating rate notes.

When estimating a model for an unlisted asset like private credit, it can be informative to estimate a model relative to some other higher confidence asset. We take this approach with private credit and consider it relative to leveraged loans. Being a public market asset that comprises of below-investment-grade floating rate notes, leveraged loans are an obvious choice.

Between 2004 and 2022, the arithmetic return difference between private credit (proxied by the Hamilton Lane Credit Universe) and Leveraged Loans (Credit Suisse Leverage Loan Index) has been 4.1% per annum (pa).

However, we believe it's reasonable to expect this premium to be lower going forward given:

- A more efficient market due to more market participants and growing size
- The extended loose financial conditions that led to high refinance activity and fees earned versus what is likely going forward
- Reporting and survivorship bias in the Hamilton Lane universe data

We therefore calibrate our forecasts to achieve a 3% return premium over leveraged loans.

Despite their similarities to leveraged loans, private credit loans generate several additional sources of return beyond the margin. Exhibit 6 lists the various sources of return generated within a private credit fund.

Exhibit 6: Private credit return drivers in equilibrium²

RETURN SOURCE	EXPECTED VALUE (EQUILIBRIUM)
SOFR (1% floor)	3.3%
+ Margin	+ 5.4%
- Default losses	- 0.7%
+ Leverage gains	+ 2.0%
- Leverage cost	- 1.6%
+ Fees Earned	+ 1.9%
+ Equity Upside	+ 0.5%
- General Partner Fees	- 2.4%
= Total Return	= 8.5%

1. Cash rate (SOFR)

As with any floating rate note forecast, our projections are primarily influenced by the prevailing cash rate and a spread, or margin, over this rate. We use the prevailing secured overnight funding rate (SOFR) to model the base cash rate for private credit. It is standard practice to apply a 1% floor to this rate. Although, in equilibrium, our expected cash rate typically exceeds this floor, applying the floor increases the expected cash rate above our equilibrium cash rate, given the stochastic nature of cash rate movements.

Despite their similarities to leveraged loans, private credit loans generate several additional sources of return beyond the margin. Exhibit 6 lists the various sources of return generated within a private credit fund.

2. Margin

For clarity, the margin is defined as the interest rate spread payable in addition to the cash rate. At the issuance of any new floating rate note (FRN), the margin is fixed for the life of the note at a level such that the price of the FRN equals its par value. Mathematically, this means the margin is set equal to the credit spread at the time of issuance. This is also true for private credit; however, the spread is not purely the public market spread. The spread we assume for private credit is the public market spread adjusted for differences in recovery rates, spread volatility, and a private spread premium. The private spread premium is calibrated to achieve the expected total return premium over leveraged loans. The resulting margin in equilibrium is 5.4%, which is consistent with margins reported by our private credit managers.

3. Default losses

As anticipated for any credit asset, particularly below-investment-grade assets, loan defaults do occur, resulting in a drag on the return. We approximate the default rate using data from Cliffwater, which indicates an average 2% default rate with a 65% recovery rate. The ability to negotiate more favorable terms and investor protections enhances the recovery rate relative to public credit. Other sources suggest historical recovery rates have been even higher. However, we believe increased investment flows into the asset class may lead to some convergence in the recovery rates toward the public market experience.

4. Leverage

We assume an average leverage of 25% over the life of a fund, reflecting how Russell Investments structures private credit offerings. Cliffwater estimates the median leverage at approximately 100%, indicating that we use less leverage than the median manager. The cost of borrowing typically aligns with the borrowing cost of a BBB-BB-rated corporate borrower. Specifically, we base the cost of leverage on a BB-rated borrower with a 3-year term, consistent with the loan pool we model. It is important to note, however, that there is variation by manager, strategy, and the timing of when the funds are borrowed.

5. Fees earned

Private credit funds essentially act as a bank. Like banks, there are fees charged to borrowers which contribute to the returns for private credit investors.

Origination fees

An origination fee is typically a percentage of the loan amount charged by a lender as compensation for originating the loan. Although the payment mechanism can sometimes be negotiated between the borrower and lender, lower origination fees are usually offset by a higher interest rate over the life of the loan. Origination fees tend to constitute a significant portion of the fees earned and increase when financial conditions are loose, interest rates are low, and refinancing activity is high.

Prepayment fees

Charges imposed on borrowers if they repay their loan before the end of the agreed term. These fees are designed to compensate the lender for lost interest due to early repayment. The structure of these fees can vary and is dependent on the lender's terms.

PIK toggles, fees

PIK (payment in kind) toggles are a common feature of private credit loans. They allow the borrower, in the event of temporary cash flow difficulties, to defer interest payments by adding them to the principal balance. Any deferred interest accrues at a higher rate. Additionally, fees may be payable upon exercising the toggle, which are typically added to the principal balance. Since PIK toggles are generally implemented when a borrower is experiencing difficulties, PIK fees tend to increase when financial conditions tighten.



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Coupon step-ups

Coupon step-ups can occur when loan covenants, designed to protect the lender, are breached. Upon breach, the coupon paid by the borrower increases. Since these fees are only payable if covenants are breached, they are more likely to be earned when financial conditions are tight and covenants are more likely to be breached.

Undrawn line fees

Fees that lenders impose on the undrawn (unused) portion of the extended credit. Undrawn line fees compensate the lender for reserving funds for the borrower to draw through a line of credit.

We estimate the contribution of these combined fees to be 2% across a book of loans on average, although we recognize this estimate can vary with the prevailing financial conditions.

6. Equity

Equity is an additional source of return that private credit managers earn through equity participation in companies to which they have made loans. Equity returns are more commonly associated with loans lower in the capital stack, such as subordinated or junior debt. The magnitude of this return component is typically relatively small at the total fund level, approximately 0.50% per annum in equilibrium.

We estimate the contribution of these combined fees to be 2% across a book of loans on average, although we recognize this estimate can vary with the prevailing financial conditions.

7. General partner fees

General partner³ fees, or manager fees, are a combination of a fixed annual fee at 1% pa and performance fees at 15% of the whole of life return with a 0% hurdle. Using the private credit manager fees from 2022 Cliffwater data, we assume a total general partner fee of 2.5% pa.

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Acknowledgements

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¹ A type of financing that combines senior and subordinated debt into a single loan facility. This structure simplifies the capital stack by providing one comprehensive loan agreement, which can reduce administrative burdens and expedite the financing process. Unitranche loans typically feature a blended interest rate that reflects the combined risk of both senior and subordinated tranches.

² The sources of return for private credit are a combination of being additive and multiplicative. As a result, it is not possible to create a perfect decomposition of the returns. These decomposed values are approximate log geometric returns.

³ A general partner (GP) is responsible for managing a partnership and assumes unlimited liability, while a limited partner (LP) contributes capital but has limited liability and, typically, no role in day-to-day management.

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