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Perspectives

Infrastructure debt vs direct lending: A comparative analysis

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Executive summary

- In a recent paper, "Infrastructure debt: First among equals", we highlighted the difference in expected loss and returns between specialised infrastructure debt and corporate credit strategies. Now, we extend our analysis and compare two private credit asset classes – infrastructure debt and direct lending – and examine why each may play a role in a broader portfolio.
- Incorporating both infrastructure debt and direct lending into a private credit portfolio can allow investors to strike a balance between high yields and stability. Infrastructure debt can reduce portfolio volatility via predictable cash flows, whereas direct lending can enhance returns, albeit with a somewhat higher sensitivity to economic fluctuations. This combination can lead to a well-rounded, diversified investment strategy.
- Global infrastructure debt strategies benefit from stability and regulatory support across Organisation for Economic Co-operation and Development (OECD) countries, while regional direct lending strategies leverage local economic insights. This geographic and sectoral diversification helps balance risk and return, capitalising on both market dynamics and regulatory environments.
- Both strategies are influenced by technological advancements, sustainability trends, and macroeconomic factors. Infrastructure debt is poised for growth with a focus on renewable energy and digitalisation, while direct lending is expected to expand as a result of regulatory constraints on traditional banks. Understanding these trends can allow investors to position their portfolios for stability and growth.

Infrastructure debt vs direct lending: A comparative analysis

Investors have increasingly added private credit to their portfolios as a potentially higher-yielding alternative to traditional fixed income strategies. The decision whether to allocate to infrastructure debt, direct lending, or both, depends on the unique needs and risk tolerance of each investor.

Infrastructure debt: Stability and predictability

Infrastructure debt finances large-scale projects that are foundational to our economies, such as roads, bridges, airports, utilities, and renewable energy transition initiatives. These projects are essential to a functioning society, and the debt associated with them can offer the benefit of stable and predictable cash flows. This financial security is largely due to long-term contracts and the essential nature of the services provided, ensuring inelastic demand irrespective of economic downturns and offering a safeguard against inflationary pressures.

A key advantage of infrastructure debt is its historically lower default rates and higher recovery rates compared with corporate debt.* Additionally, its lower correlation to GDP cycles further enhances its resilience during periods of macroeconomic fluctuations and episodic volatility. Enhanced by strong lender protections and a supportive regulatory framework, infrastructure debt can offer investors an effective way to diversify their investment portfolios while reducing their risk profiles.

Infrastructure debt also may be increasingly attractive due to its alignment with sustainable investment standards. Projects that enhance public utilities, advance the renewable energy transition, and improve the transportation network not only provide financial returns but contribute positively to communities. This alignment with sustainability adds another layer of appeal for those seeking to make a meaningful impact through their investments.

For risk-averse investors, infrastructure debt may present a compelling option due to the long-term project stability, robust lender protections, and strong regulatory support. Additionally, the focus on sectors such as utilities, transport, digital infrastructure, and energy – which are essential in nature and can be less correlated with broader market cycles offers valuable diversification opportunities within an investment portfolio.

Direct lending: Flexibility and higher yields

Direct lenders provide capital directly to middle-market companies, bypassing traditional banking channels. This approach is particularly valued for its flexibility, offering the potential to meet various business needs, such as acquisitions, expansions, refinancing, or to provide working capital. In contrast with the more rigid structures of the leveraged loan market, direct lending affords the flexibility to customise features like collateral requirements and repayment schedules. These can be closely aligned with the borrower's revenue stream and operational periods, offering a safeguard often missing in the stricter constructs of leveraged lending.

A key attraction of direct lending for investors is the potential for higher yields compared with that offered by leveraged loans and traditional fixed income securities. These elevated returns are largely driven by the illiquidity premium and the perceived credit risks associated with lending to middle-market companies. Direct lending also frequently features floating interest rates tied to benchmarks such as the Secured Overnight Financing Rate (SOFR) or the Sterling Overnight Index Average (SONIA), providing a natural hedge against rising rates, which can be particularly appealing in a volatile and uncertain economic environment.

While the promise of higher yields is appealing, it comes with increased credit risk. Middle-market companies, which are the typical recipients of direct lending loans, can be more susceptible to economic fluctuations and have a higher historical potential for default compared with larger, more stable entities that typically obtain financing through the leveraged loan market. For investors willing to embrace this underwriting challenge, the rewards can be substantial, especially in a growing economy in which middle-market companies may be well positioned to thrive.

* Moody's Investors Service (2023), accessed August 2024.

Another benefit of direct lending is its shorter investment horizon compared with longer-term options like infrastructure debt. The shorter maturities of loans in direct lending portfolios can allow for more frequent reinvestment opportunities, which can be advantageous in a dynamic economic environment. This aspect can make direct lending particularly attractive to investors seeking both flexibility and the potential for higher returns in the short to medium term.

The table below highlights the key characteristics of infrastructure debt and direct lending, showcasing their similarities and differences (Figure 1). By examining them side by side, investors may better understand how each strategy operates, the risks involved, and the potential benefits they offer.

Figure 1:
Key characteristics of infrastructure debt and direct lending

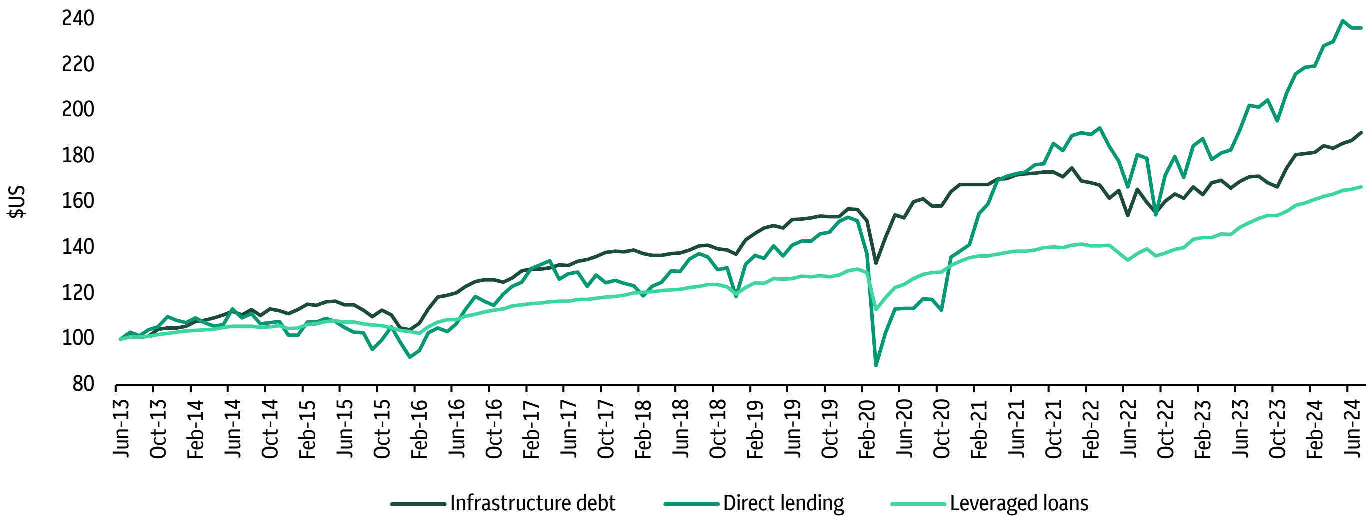
	Specialised infrastructure debt	Middle-market direct lending
Rating	B / BB	B
Seniority	Senior or subordinated	Senior
Structure	Operating company, holding company	Corporate
Yield (gross)	10-11%	10.5-11.5%
Yield (net of fees and expected losses)	8-9%	8-9%
Format	Private	Private
Term	3-10 years	5-7 years
Origination	Bilateral or club	Bilateral or club
Fund diversification	15-20 loans	30-50+ loans
Coupon	Fixed, floating, or payment-in-kind (PIK)	Floating or payment-in-kind (PIK)
Financial covenants	Debt service coverage or leverage	Not always present or leverage
Other covenants	Business restrictions, restriction on use of funds, restriction on additional borrowing, asset maintenance requirements	Leverage test, though upper middle market more frequently covenant-lite
Security	Physical asset as first or second lien, shares over operating company	Shares over corporate
Borrowers	Public-private partnerships, project finance special purpose vehicles (SPVs), specialised companies	Mid-sized companies
Market participants	Banks, government entities, insurance companies	Business development companies (BDCs), collateralised loan obligations (CLOs), insurance companies, pension funds
Sectors	Utilities, transport, power, digital, social, infrastructure services	Software, insurance services, education, healthcare, business and industrial services
GDP linkage	Predictable cash flows mean that assets are less correlated to GDP cycles	While cash flows may be stable, they still exhibit some cyclicality
Due diligence	Underlying technology, historical track record of assets, underlying contracts and counterparties	Historical track record of cash flow, profitability, competition, customer concentration, and renewal rates
Prepayment protection	Common to have prepayment protection – non-call or prepayment penalty	Prepayment protection – non-call

Sources: For illustrative purposes only. Return estimates are based on internal analysis for infrastructure debt and direct lending and should not be relied upon. Actual returns may vary. Yield represents the all in return currently observed in the market by Macquarie Asset Management. It is inclusive of the base rate, credit spread, and additional upfront borrower paid fees or original issue discounts.

Tracking the success: Historical performance, risks, and potential benefits

Next, we take a closer look at historical performance by illustrating the growth of a $US100 investment across strategies and the compounding effects of returns over time (Figure 2). As mentioned, infrastructure debt can offer stability and long-term, predictable cash flows, making it an appealing choice for reducing portfolio volatility and aligning with long-term liabilities. In comparison, direct lending may offer attractive yields and significant diversification across industries and borrowers, enhancing overall portfolio returns, but with the potential for greater sensitivity to economic cycles. Lastly, leveraged loans, while often compared to direct lending, exhibit lower, but steady and resilient, growth.

Figure 2:
Growth of a $US100 investment

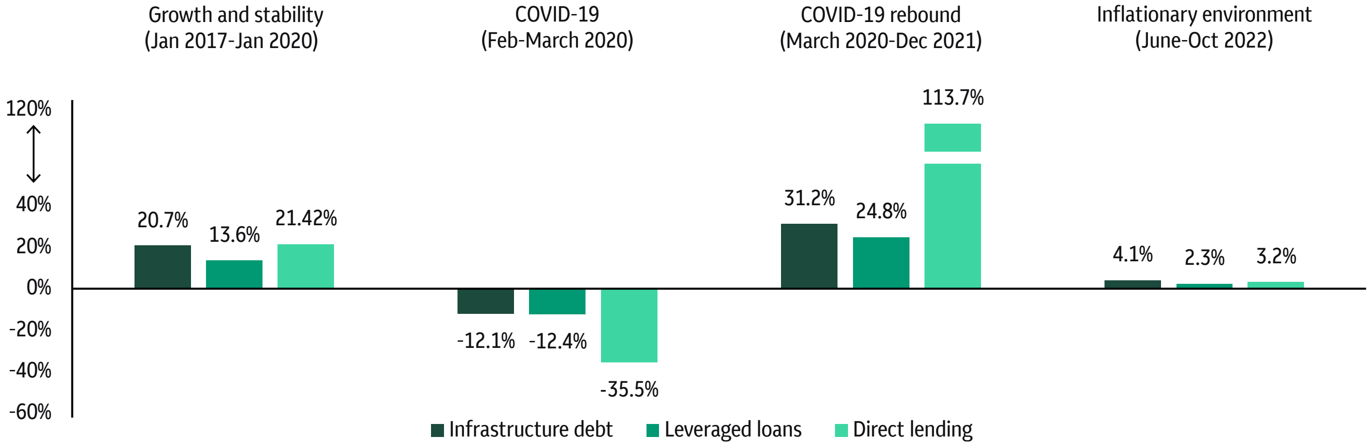


Source: Bloomberg. Infrastructure debt represented by the iBoxx USD High Yield Infrastructure Index; leveraged loans – Morningstar LSTA US Leveraged Loan Index; direct lending – Cliffwater BDC Index. Due to the limited availability of private market data for infrastructure debt and direct lending, public market data has been used as a proxy.

We can see performance characteristics play out over time, through periods of market volatility and different inflationary environments (Figure 3). Infrastructure debt has demonstrated resilience and reliability through various economic cycles, anchored by the essential infrastructure services that the asset class supports. On the other hand, direct lending exhibits more dynamic growth, reflecting its higher yield potential and associated risk.

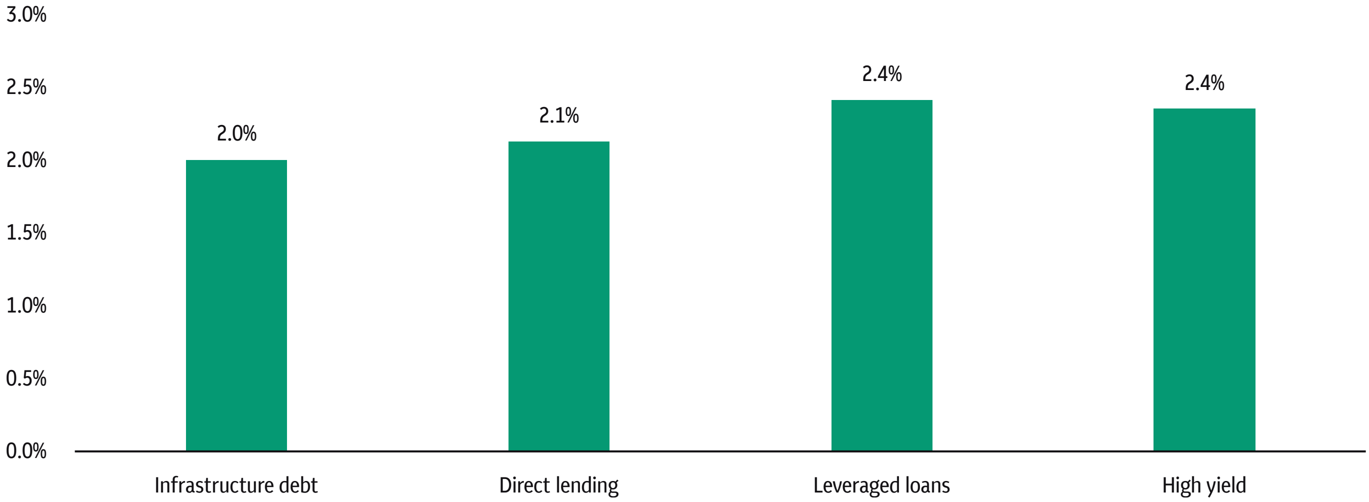
Finally, leveraged loans, a potential alternative between the stability of infrastructure debt and the high yield potential of direct lending, generally offer lower yields than both.

Figure 3:
Historical returns in a variety of environments



Source: Bloomberg. Infrastructure debt represented by the iBoxx USD High Yield Infrastructure Index; leveraged loans – Morningstar LSTA US Leveraged Loan Index; direct lending – Cliffwater BDC Index. Due to the limited availability of private market data for infrastructure debt and direct lending, public market data has been used as a proxy.

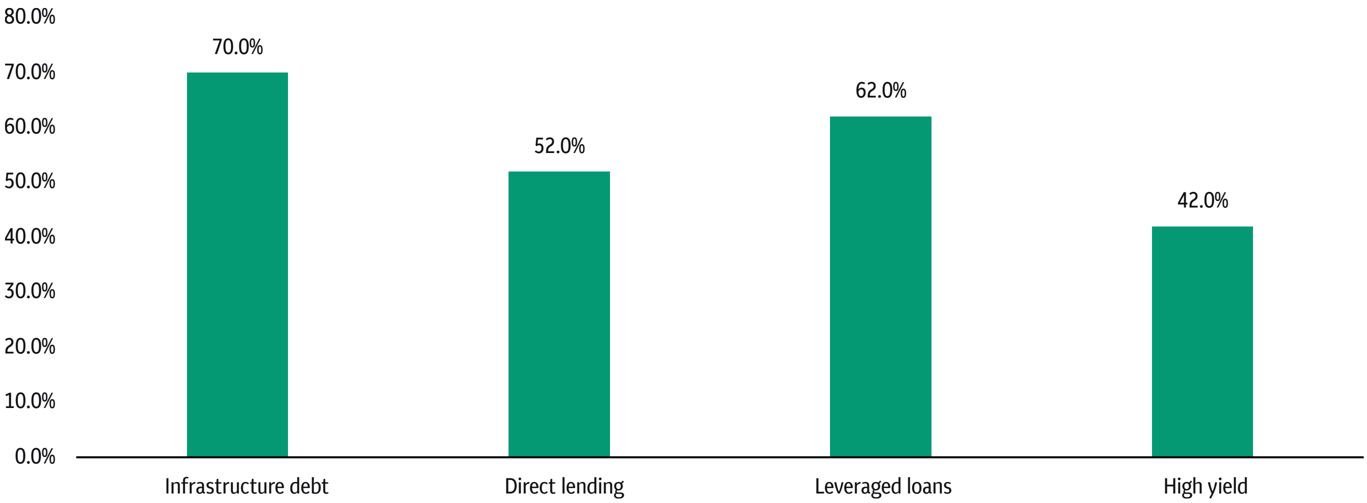
Figure 4:
Default rate, by asset class



Sources: Cliffwater Report on US Direct Lending (4Q2023), JP Morgan Markets (2024), Moody's Infrastructure default and recovery rates (2023).

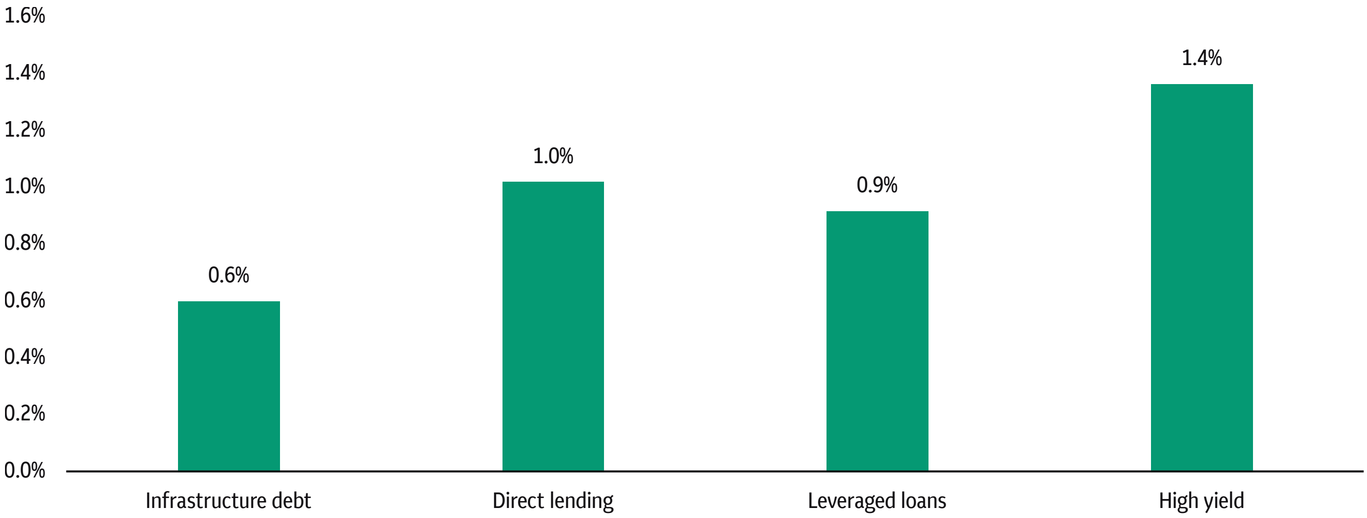
Recovery rates and expected loss are crucial metrics in evaluating the risk-return profile of these different strategies. Infrastructure debt has historically exhibited a lower default rate (Figure 4 on previous page) and higher recovery rate (Figure 5) due to the essential nature of the underlying assets and strong collateral backing, which can provide a safety net in a default scenario. On the other hand, direct lending can experience somewhat lower recovery rates due to cash flow versus asset-based loan profiles. As such, expected loss for direct lending can be modestly higher, reflecting the increased risk of capital impairment despite the prospect of higher returns (Figure 6).

Figure 5:
Recovery rate, by asset class



Sources: Cliffwater Report on US Direct Lending (4Q2023), JP Morgan Markets (2024), Moody's Infrastructure default and recovery rates (2023).

Figure 6:
Expected loss, by asset class



Sources: Cliffwater Report on US Direct Lending (4Q2023), JP Morgan Markets (2024), Moody's Infrastructure default and recovery rates (2023).

Given the distinct performance and risk characteristics of these asset classes, the key challenge is how best to identify investment opportunities. In our view, success hinges on the quality of the collateral, a careful assessment of loan documentation, and a broad understanding of the borrower's objectives and risk tolerance.

While direct lending is known for its high returns, infrastructure debt offers the advantage of enhancing portfolio resilience through higher recovery rates and lower expected losses. This can lead to better capital preservation, particularly in challenging economic conditions, making it an attractive option for investors seeking both safety and performance.

We believe that integrating infrastructure debt alongside direct lending in a private credit portfolio creates a more resilient investment portfolio. This combination may help mitigate market volatility while offering a blend of attractive returns from direct lending and the stability and diversification benefits of infrastructure debt. The result is a well-rounded portfolio that offers the potential for secure, steady returns without compromising on performance.

A holistic approach to investing in private credit

Besides the factors laid out in the previous section, we believe there are other important considerations from a broad market understanding, including key geographic and jurisdiction parameters, that can help optimise investment opportunities.

Geographic diversification

Geographic diversification plays a pivotal role in both infrastructure debt and direct lending portfolios.

Investing in infrastructure debt, particularly across OECD countries, provides several advantages. These developed markets offer a stable, yet diversified investment environment characterised by strong regulatory frameworks, robust governance, and low political risk. The economic stability of OECD countries helps to create an environment in which infrastructure projects have a higher probability of successful completion and commercial operation, which in turn contributes to more reliable cash flows.

Furthermore, the infrastructure needs of OECD countries are substantial, driven by the combined requirements to upgrade aging infrastructure and meet environmental targets. Projects in these regions also often benefit from favourable regulatory policies and incentives aimed at promoting sustainability and innovation. This support reduces regulatory and political risks, enhancing the attractiveness of OECD infrastructure debt investments.

Direct lending portfolios, on the other hand, are typically more regionally focused, which creates a different set of opportunities and challenges. By focusing on specific regions, direct lending portfolios can capitalise on local economic conditions, industry sector strengths, and market dynamics. For instance, a direct lending portfolio focused on North America might benefit from a robust and dynamic middle-market economy, while one in Europe could benefit from the region's diversified industrial base and supportive regulatory environment.

Investing regionally allows for deeper understanding of local market conditions, borrower characteristics, and economic cycles. This localised knowledge can lead to better risk management and more tailored lending terms. However, regional direct lending portfolios also face unique risks, including localised economic volatility, regulatory changes, and varying levels of borrower creditworthiness.

What's the opportunity now, and what's next?

In our view, both infrastructure debt and direct lending are influenced by evolving market dynamics and secular trends that are shaping their growth and development.

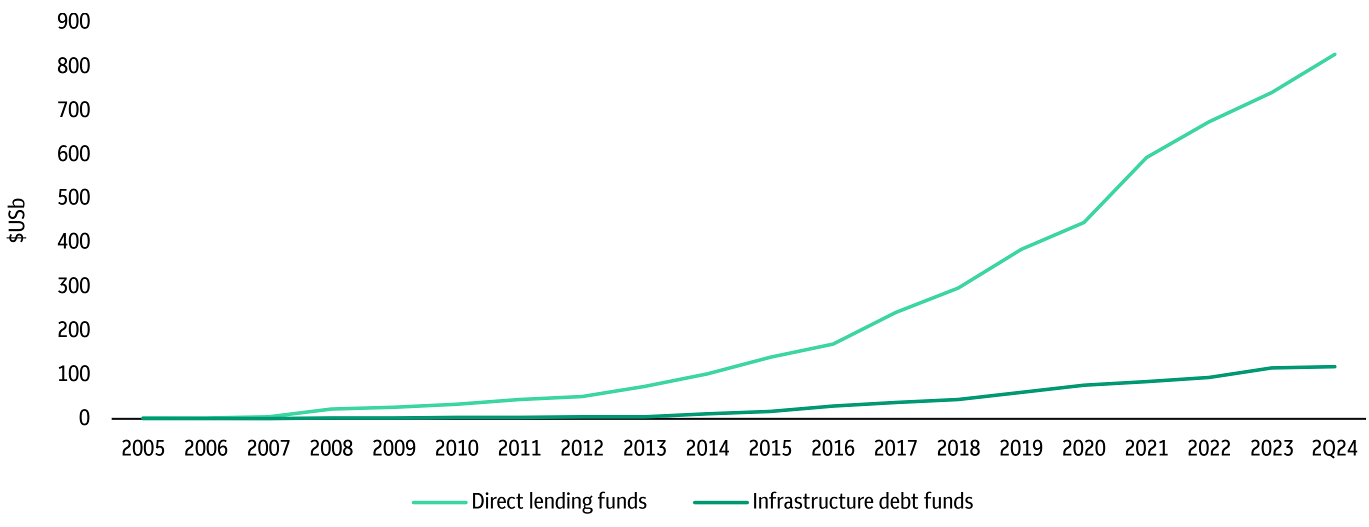
Infrastructure debt, particularly renewable energy and public utility-focused projects, may align well with the increasing emphasis on sustainable and responsible investing. Direct lending is also adapting to this trend, with more funds incorporating sustainability criteria in their investment processes.

Additionally, technological innovations are transforming both infrastructure and corporate lending. Smart infrastructure projects and digital platforms for direct lending are enhancing efficiency and reducing risks.

Lastly, global economic conditions, interest rates, and inflation trends significantly influence both infrastructure debt and direct lending markets. Investors should stay attuned to these factors, as they affect borrowing costs, investment returns, and the overall economic environment for infrastructure debt and direct lending alike.

These trends have led to increased capital flows into private infrastructure debt funds, reflecting a consistent demand for financing infrastructure projects. Meanwhile, direct lending funds have seen exponential growth in capital raised, driven by investors seeking to capitalise on rising base rates and continued bank retrenchment. This capital-raising surge has intensified competition in the direct lending space, with more players vying for deals, potentially putting pressure on returns (Figure 7).

Figure 7:
Cumulative capital raised globally



Source: Pitchbook (August 2024).

Looking ahead, we believe the demand for infrastructure investment is expected to remain robust, driven by increasing infrastructure demand in developed markets and rapid urbanisation in emerging markets. Governments are likely to continue supporting infrastructure projects, particularly those that contribute to sustainability goals. The focus on the renewable energy transition and green infrastructure should also create new investment opportunities.

Direct lending is also poised for growth as traditional banks continue to face regulatory constraints, leaving a financing gap that private lenders can fill. The middle-market sector is expected to expand, providing ample opportunities for direct lending funds. Technological advancements will further streamline the lending process, making it more efficient and accessible.

Leveraging the expertise of a manager who understands these trends and changing market dynamics, in our view, is critical in making informed investment decisions and identifying future opportunities.

Conclusion

In summary, both infrastructure debt and direct lending are essential components of a comprehensive private markets and diversified credit portfolio. They offer downside protection, strong cash yields, and an illiquidity/complexity premium with the potential to offer comparable net returns. We believe the growing trend of incorporating infrastructure debt into private credit allocations speaks to its value in providing duration and diversification benefits, which can also complement an infrastructure equity allocation, as gross returns have converged. Geographic diversification within both asset classes can enhance returns and mitigate risks by balancing investments across OECD countries.

Understanding the unique attributes, market trends, and future outlook for these asset classes should allow investors to optimise their portfolios for stability and growth. By leveraging the strengths of both infrastructure debt and direct lending, investors have the potential to achieve well-balanced, diversified portfolios that align with their financial objectives.

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Diversification may not protect against market risk.

Credit risk is the risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation. Credit risk arises whenever a borrower expects to use future cash flows to pay a current debt. Investors are compensated for assuming credit risk by way of interest payments from the borrower or issuer of a debt obligation. Credit risk is closely tied to the potential return of an investment, the most notable being that the yields on bonds correlate strongly to their perceived credit risk.

A business development company (BDC) is an organisation that invests in small- and medium-sized companies as well as distressed companies. A BDC helps these firms grow in the initial stages of their development. With distressed businesses, the BDC helps the companies regain sound financial footing.

Collateralised loan obligations (CLOs) are securities backed by a pool of debt, often low-rated corporate loans. Investors receive scheduled debt payments from the underlying loans but assume most of the risk in the event that borrowers default.

The default rate is the percentage of all outstanding loans that a lender has written off as unpaid after a prolonged period of missed payments.

Expected loss is the product of the probability of default, loss given default, and exposure at default.

Payment-in-kind refers to a financial instrument that pays interest or dividends to investors of bonds, notes, or preferred stock with additional securities or equity instead of cash.

The recovery rate is the extent to which principal and accrued interest on defaulted debt can be recovered, expressed as a percentage of face value.

A special purpose vehicle is a subsidiary created by a parent company for a variety of purposes. The SPV can be used to isolate financial risk, securitise assets, and perform separate financial transactions.

The Secured Overnight Financing Rate (SOFR) is a benchmark interest rate for dollar-denominated derivatives and loans that replaced the London Interbank Offered Rate (LIBOR).

The Sterling Overnight Index Average (SONIA) rate is an interest rate benchmark used in the UK. It is the effective overnight interest rate paid by banks for unsecured transactions in the British sterling market. Administered by the Bank of England (BoE), SONIA is used to fund trades that occur overnight during off-hours. As such, it represents the depth of overnight business in the marketplace.

The **Cliffwater BDC Index** measures the performance of lending-oriented, exchange-traded business development companies (BDCs), subject to certain eligibility criteria regarding portfolio composition, market capitalisation, and dividend history.

The **Cliffwater Direct Lending Index** seeks to measure the unlevered, gross of fees performance of US middle market corporate loans, as represented by the underlying assets of business development companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility criteria.

The **iBoxx USD Liquid High Yield Infrastructure Index** reflect the US-dollar-denominated high yield corporate bond universe with material infrastructure exposure in developed markets.

The **Morningstar LSTA US Leveraged Loan Index** is designed to deliver comprehensive, precise coverage of the US leveraged loan market.

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