

Alternative opportunities

2023 Outlook and methodology | Q1 update | USD

Invesco Investment Solutions



2023 Alternative opportunities: Private market outlook

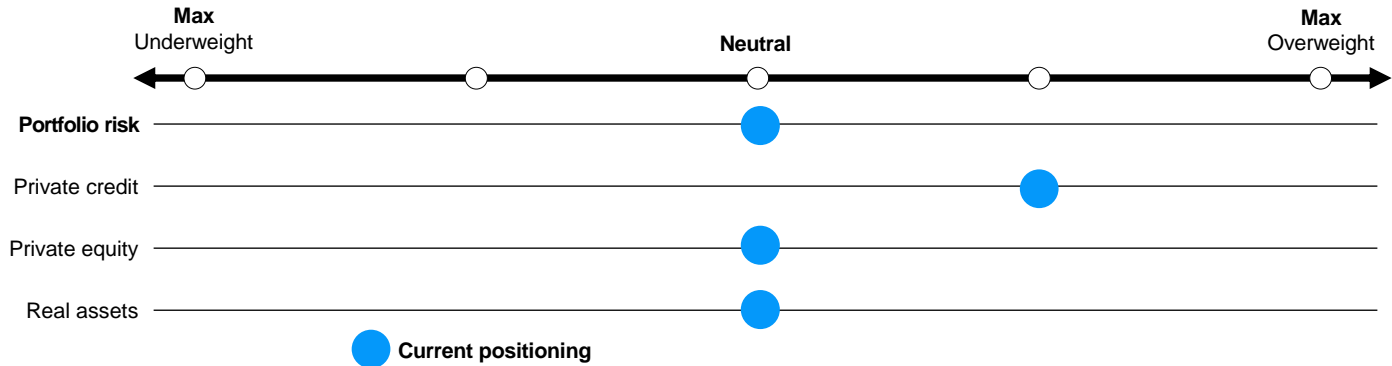


Neil Blundell

Head of Global Client Solutions
and Alternatives
Invesco Investment Solutions

Executive summary

- **Private credit:** As we consider direct lending going forward, the opportunity appears to be quite attractive. As direct middle market loans are generally a floating rate opportunity, the increase in base rates over the last year introduced a material increase in the return profile of the asset class. Importantly, new issuance and new vintages not only benefit from increased yields, but stronger credit protection, increased call protection, lower leverage and lower loan-to-values.
- **Private equity:** We establish a neutral rating on private equity as valuations are moderating and pockets of opportunity appear in private-to-private transactions. At a high level, this an environment that favors dry powder and new investments relative to investments made over the last several years, which in general have yet to be marked down. There are opportunities for growth equity firms to provide capital for private companies that would have looked to access the IPO market.
- **Real assets:** 2022 saw significant increases in global interest rates, and as a result in the funding costs for real estate. The full effect of this on the pricing and fundamentals of real estate are yet to be realized, but it is clear that both the timing and quantum of the adjustments will vary by region, market, and real estate sector. As a result, across all global real estate markets, we are carefully monitoring conditions. We are overweight real asset credit due to increased yields, reduced competition from other lenders and the protected position against any potential weakening of the fundamentals of the assets.



Source: Invesco Investment Solutions, views as of Jan. 31, 2023.

Table of contents

1 **Private credit**
Direct lending & real asset debt

2 **Private equity**
Large buyout

3 **Real assets**
Real estate and infrastructure

Private credit

1

2023 Alternatives outlook: Private credit



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Presently overweight direct lending due to attractive valuations and terms on new vintages

Asset class	Overall	Valuations	Fundamentals	Secular trend
Direct lending	Overweight	Attractive	Neutral	Attractive
Real asset debt	Overweight	Attractive	Neutral	Attractive

The impacts on liquid credit markets during 2022 have been extensive. Fixed income, particularly longer duration assets, have experienced one of the worst years in memory as embedded interest rate risk led to price declines. However, floating-rate assets fared far better, with broadly syndicated loans standing roughly flat for the year. The high floating rate coupon has offset price declines consistent with historical years of similar volatility. However, in stark contrast has been the experience of the direct lending asset class, which provided a high-single digit, positive return experience, significantly outperforming liquid credit and equities.

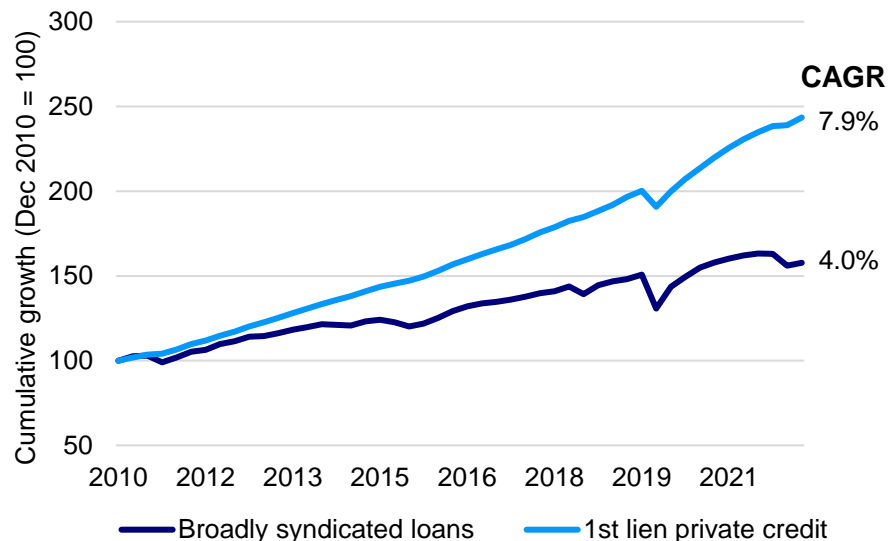
With that context, as we consider direct lending going forward, the opportunity appears to be quite attractive. As direct middle market loans are generally a floating rate opportunity, the change in environment from January 2022 to the present (roughly +4.5%) has introduced a material increase in the return profile for the asset class. Importantly, these increased yields come with stronger credit protection, lower leverage and lower loan-to-values. In combining the present opportunity set with disciplined selection and structuring, we believe the present environment could result in one of the strongest vintages in recent times for direct lending.

Our view on private real asset debt broadly mirrors our view on direct lending as discussed immediately above. US commercial real estate credit appears to be in a much stronger position to navigate a potential period of increased market volatility and has evolved dramatically from the GFC era. The severity of the GFC led to an increase in regulations and tightened credit standards, which were sustained through the last credit cycle. As a result of more disciplined underwriting, leverage and coverage ratios were historically strong in recent years, resulting in current low delinquency rates.

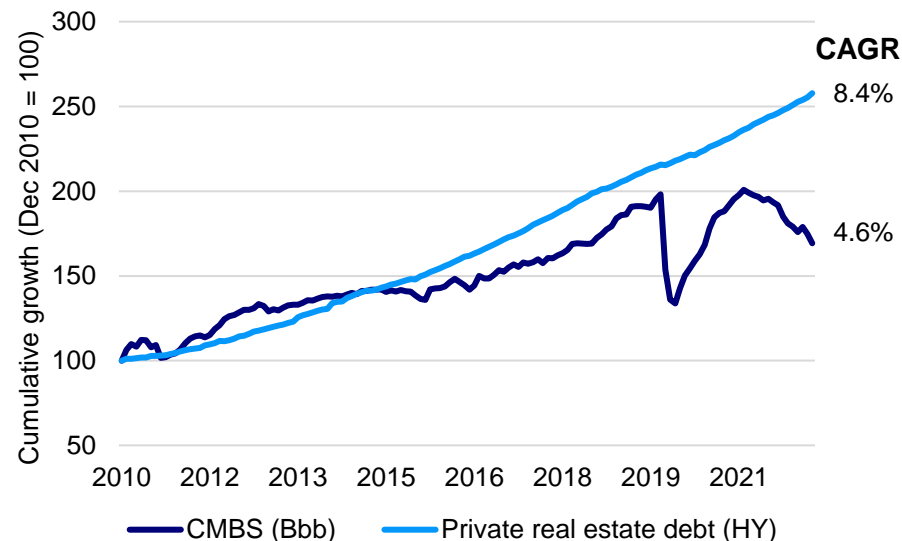
Source: Invesco Investment Solutions, views as of Jan. 31, 2023.

Cumulative growth of private credit vs. public credit

1st lien private credit and broadly syndicated loans



Real estate debt and CMBS



Source: Investment growth of \$10000; Senior direct lending represented by the Cliffwater Direct Lending Index senior and broadly syndicated loans represented by the Credit Suisse Leveraged Loan Index quarterly from December 2010 to September 2022; CMBS (BBB) represented by Bloomberg Non-Agency Investment Grade CMBS: Bbb Total Return Unhedged index and private real estate debt (HY) represented by the Giliberto-Levy High Yield Commercial Real Estate Debt Index (G-L 2), monthly from December 2010 to September 2022. Private credit is net of normative fees while loans are gross of fees. **Past performance does not guarantee future results.**

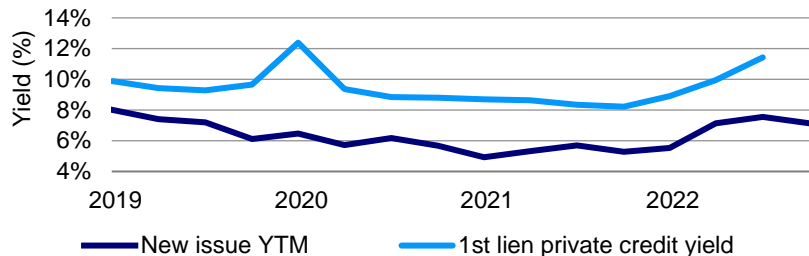
Views on private assets: Private credit

Investment type	Spread (SOFR+)	Allocation range			Comments
		Underweight	Neutral	Overweight	
Direct Lending Senior (1 st Lien)	650-900 bps				<ul style="list-style-type: none"> Anchor for diversified debt private debt portfolios Favorable environment for creditors, with strong covenants and call protections Strong pipeline of opportunities
Direct Lending Junior (2 Lien or Mezz)	800-1200 bps				<ul style="list-style-type: none"> Borrowing that occurs behind senior / 1st lien private corporate debt Potential for opportunistic financing with attractive risk/reward Typically, junior to broadly syndicated 1st lien loan
Real Estate Debt (Whole loan / Mezz)	300-500 / 550-800 bps				<ul style="list-style-type: none"> Mortgage secured by a lien on a commercial property High single-digit, low double-digit, returns available with conservative lending standards and modest LTVs
US Infrastructure Debt	500-800 bps				<ul style="list-style-type: none"> Current environment allows for 1st lien secured Opco loans Long-term contractual cash flows, CPI linkages, and lower defaults/higher recoveries
Alternative Credit	800-1200 bps				<ul style="list-style-type: none"> Non-traditional markets such as loans, leases and other receivables Asset-backed nature of collateral and amortization schedules enhances protection Provides diversification and relies on current income
Opportunistic Credit	1000-1600 bps				<ul style="list-style-type: none"> Focus on dislocations in credit markets High levels of economic and market volatility may create attractive opportunities
Venture debt (First Lien)	1200-1400 bps				<ul style="list-style-type: none"> Loans to well capitalized venture backed borrowers LTVs typically below 20% Limited access to IPO markets and increased cost of capital for venture equity drive more favorable pricing & higher creditor protections
Distressed debt / special situations	1000+ bps				<ul style="list-style-type: none"> Focus on dislocations in credit markets High levels of economic and market volatility may create attractive opportunities

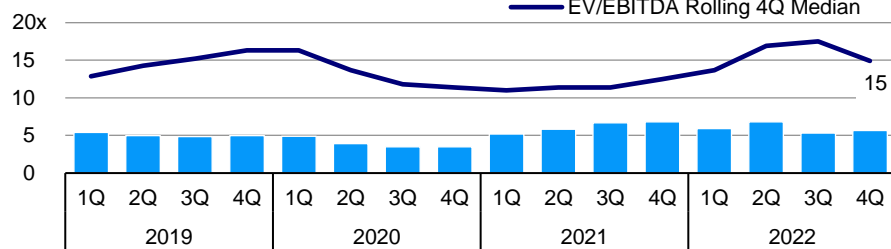
Valuations and fundamentals: 1st lien private credit – new issue YTM and leverage ratios

Spreads on offer to 1st lien lenders are attractive on an absolute, relative, and risk-adjusted basis

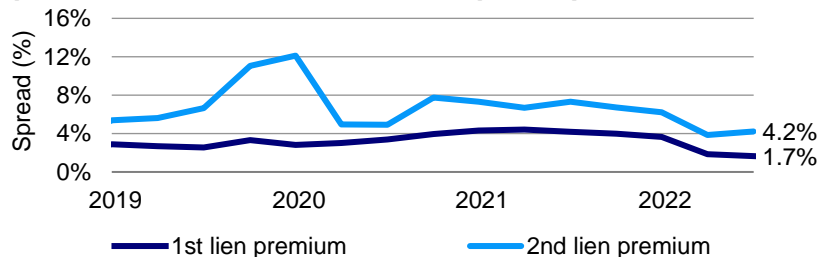
Yields on new issues



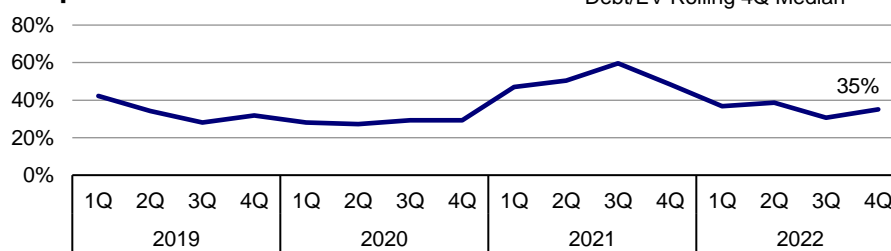
US private credit multiples



Spreads on 1st and 2nd lien debt to public proxies



US private credit LTV

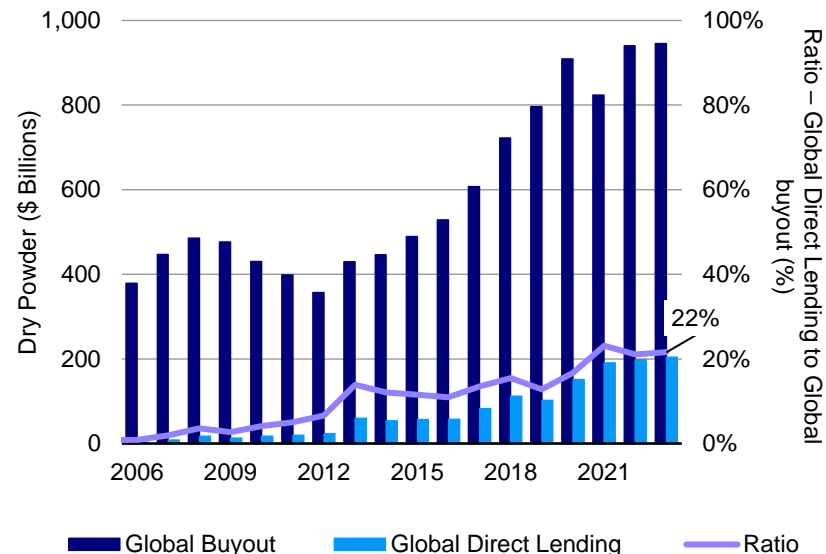


Source: Pitchbook LCD Leveraged Loan, SEC EDGAR, JPMorgan, Bloomberg as of Dec. 31, 2022. New issues refer to bonds issued within the quarter. 1st lien spread over LIBOR estimates are based on SEC filings by a representative sample of BDCs, and the spread is calculated by subtracting a broadly syndicated loan yield based on Spread-to-Maturity on JPM Lev Loan Index. 2nd Lien spread over LIBOR estimates based on SEC filings by a representative sample of BDCs and is calculated by subtracting a HY corporate bond yield based on Option-Adjusted Spread on BBG US Corp HY Index

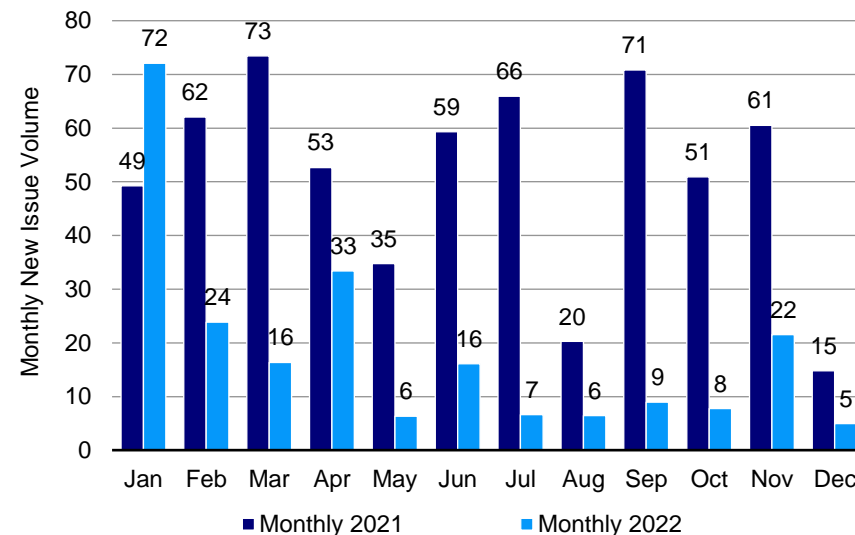
Supply demand dynamics: Direct lending and buyout dry powder and loan issuance

Supply demand dynamics support a robust environment for lenders with available dry powder

Ratio of direct lending to buyout dry powder



US new-issue broadly syndicated loan volume

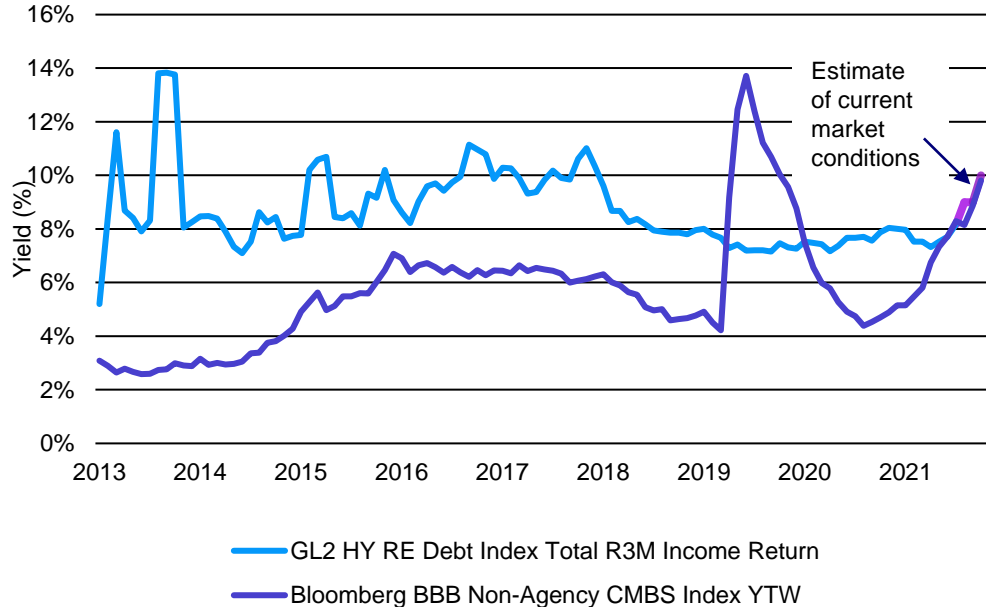


Source: Invesco Investment Solutions, Preqin, Pitchbook LCD; Data as of Dec. 31, 2022

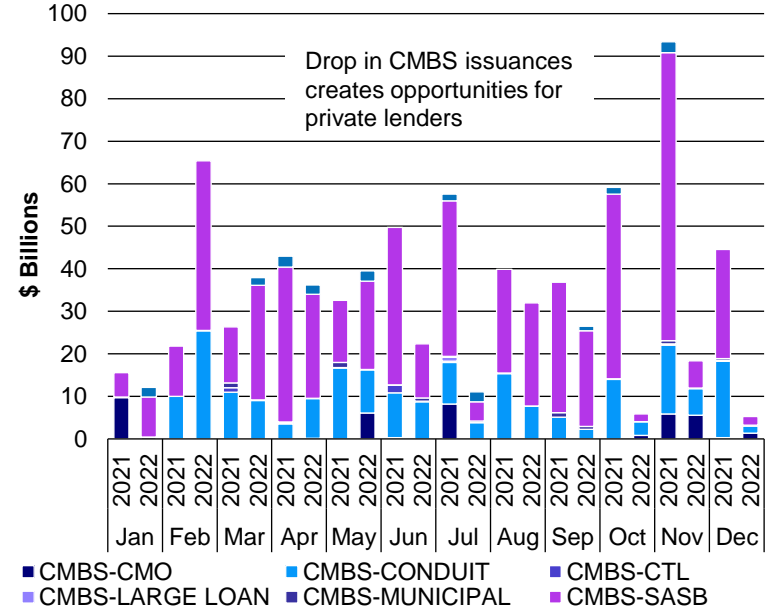
Valuations and fundamentals: Real estate credit

Robust absolute yields and “illiquidity premium” supported by limited competition from the CMBS market

Real estate credit yields compared to proxy CMBS YTW



Monthly CMBS issuance year-over-year



Source: Invesco Investment Solutions; Gilberto-Levy, Bloomberg as of Dec. 31, 2022.

2

2023 Alternatives outlook: Large buyout



Jeff Bennett, CFA
Head of Manager Selection
Invesco Investment Solutions

Neutral on PE as valuations are moderating, with pockets of opportunity in private-to-private transactions

Asset class	Overall	Valuations	Fundamentals	Secular trend
Private equity: LBO	Neutral	Neutral	Neutral	Neutral
Growth equity	Attractive	Neutral	Attractive	Attractive

Private equity has historically provided outsized returns relative to both public equity investments as well as other private asset classes. In monitoring the current environment a few themes emerge:

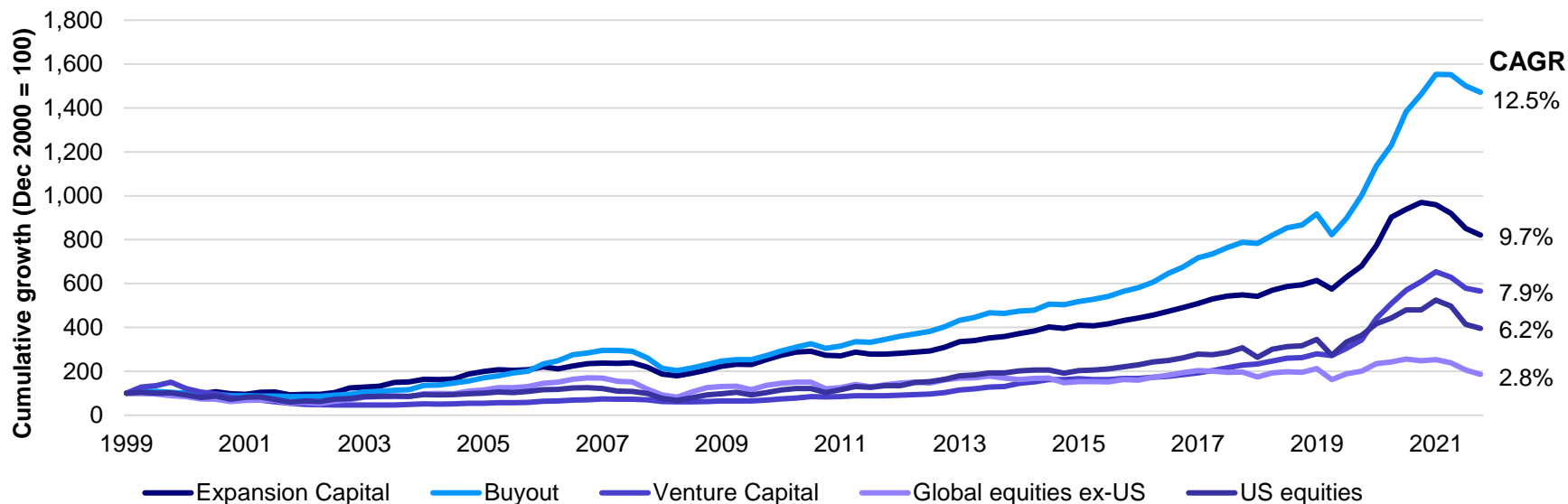
Declining purchase multiples: We are starting to see evidence that transaction multiples are beginning to moderate, both in the take private and private-to-private space. The offsetting impact of declining equity multiples versus substantial increases in the cost of financing is something we are monitoring closely. As a result, we are seeing a modest pullback in our primary measure of valuation for buyouts in the levered free cash flow yield. These dynamic benefits sub-strategies such as healthcare focused growth equity which are less reliant on the use of leverage to generate returns.

Favorable supply-demand balance: The opportunity set for private equity has expanded across a variety of channels. First and foremost, this includes a heightened window for private-to-private transactions which benefit from a limited opportunity for private equity firms to access the IPO market, but also includes take private opportunities which are now much more likely to occur at favorable valuations. At a high level, this an environment that favors dry powder relative and new investments relative to investments made over the last several years which in general have yet to be marked down.

Source: Invesco Investment Solutions, views as of Jan. 31, 2023.




Cumulative growth of private equity versus public equity

Private equity vs. public equity investment growth



Source: Investment growth of \$1000; Private asset index return data from (Large buyout, expansion capital, and VC / growth equity) data from Burgiss and are net of fees, US equity returns represented by Russell 3000 TR index; Global ex-US equity returns represented by MSCI ACWI ex USA net TR index are gross of fees, quarterly from Dec. 2010 to June 2022. **Past performance does not guarantee future results.**

Views on private assets: Private equity

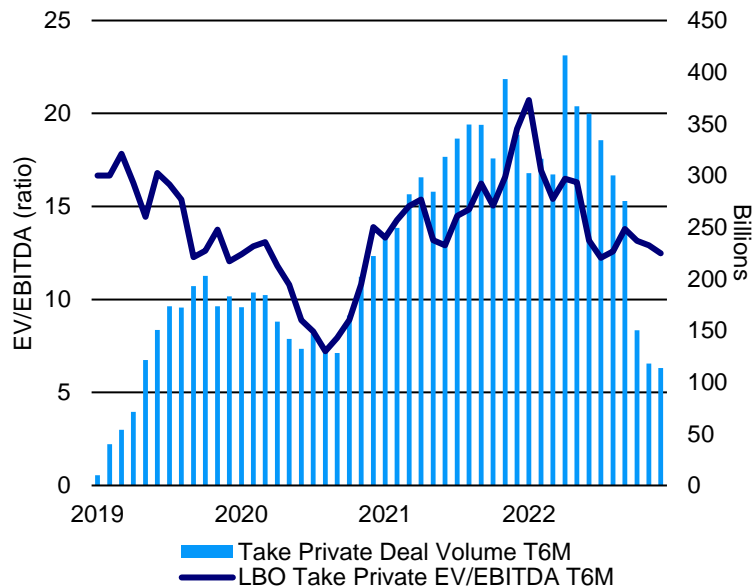
Investment type	Allocation range	Comments
	Underweight Neutral Overweight	
Large buyout		<ul style="list-style-type: none">• Exposure to high quality companies backed by strong management teams• Renewed opportunity for take private transactions and private-to-private exits at favorable valuations balanced by headwinds from an increasing cost of debt
Growth/expansion equity		<ul style="list-style-type: none">• Profitable franchises exposed to secular growth themes• Less competition for deals from the IPO or SPAC markets
Venture Capital		<ul style="list-style-type: none">• Exposure to a broad variety of disruptive technologies and secular growth themes at an early stage• Challenging exit environment with the potential for a sustained period of “down rounds”

Source: Invesco Investment Solutions views as of Jan. 31st, 2023. For illustrative purposes only.

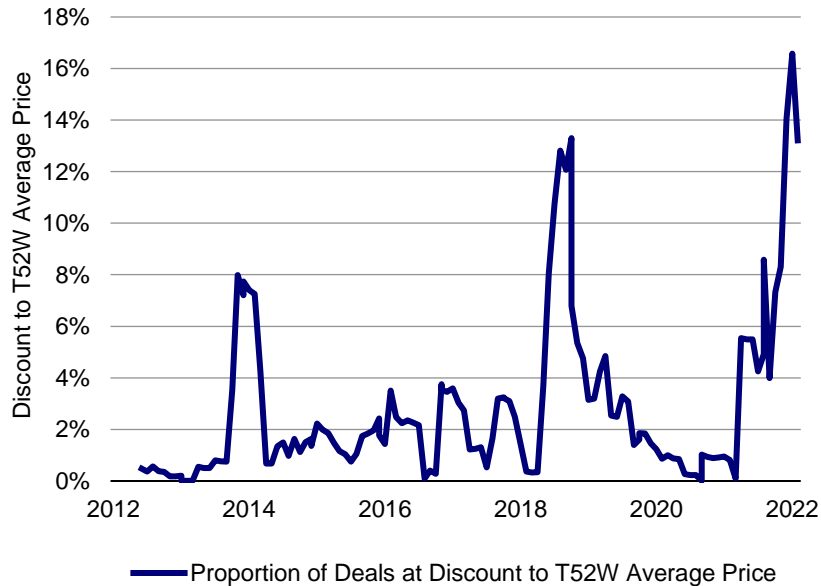
Valuations: US large buyout take private volume and EV/EBITDA valuations

Early indications of improving valuations, albeit with a drop-off in new deal activity and heightened cost of leverage

Take private deal volume compared to EV/EBITDA



Deal discounts compared to prior year's trailing average

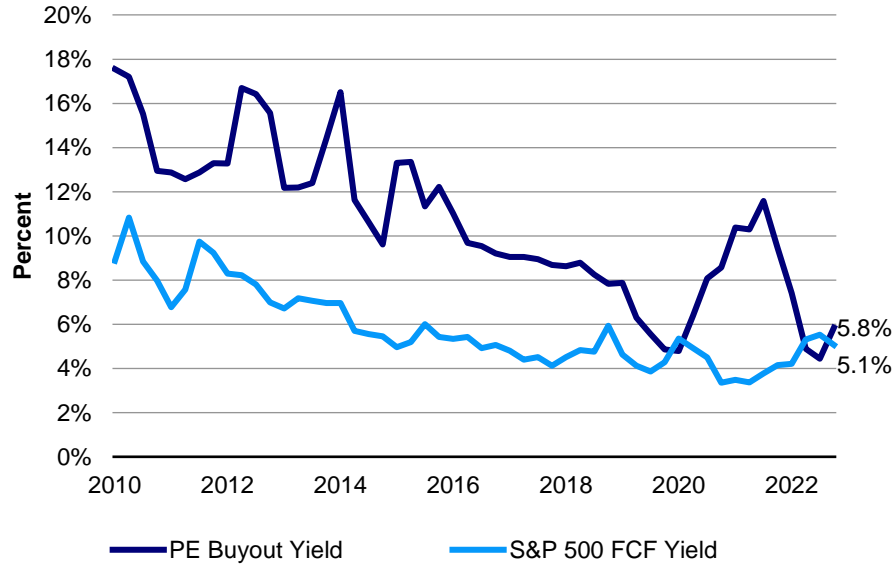


Source: Invesco Investment Solutions, Pitchbook, Bloomberg L.P. as of Dec. 31, 2022.

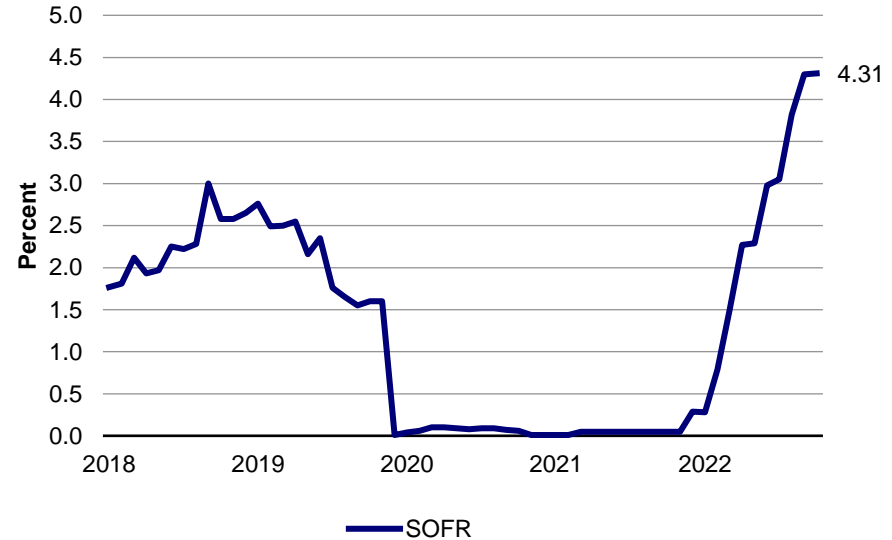
Valuations: US large buyout vs. equity market yield

While purchase prices are lower, this offset by rising financing costs

Take private deal volume compared to EV/EBITDA



Financing rates (SOFR)

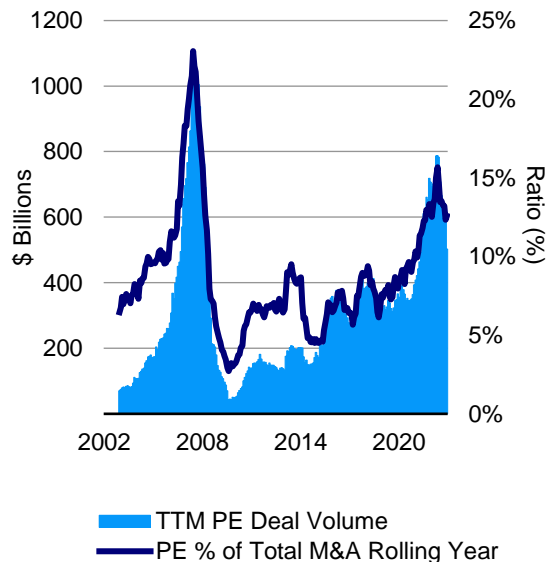


Source: Invesco Investment Solutions, Pitchbook, Bloomberg L.P. as of Dec. 31, 2022.

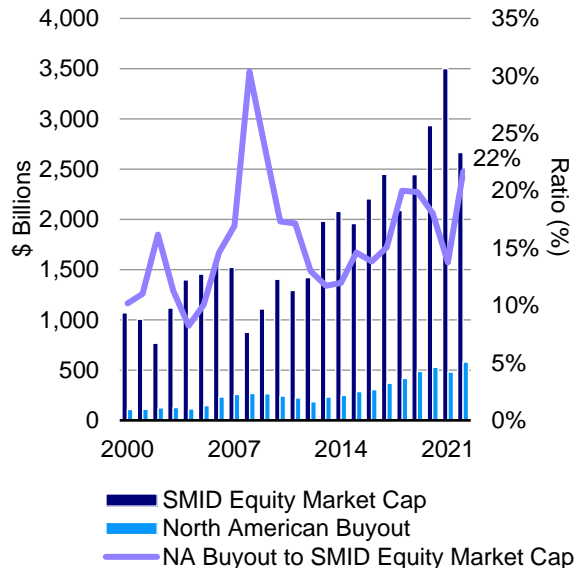
Fundamentals: Buyout and IPO deal volume

Robust levels of dry powder combined with limited exit opportunities should drive an increase in private-to-private deal activity

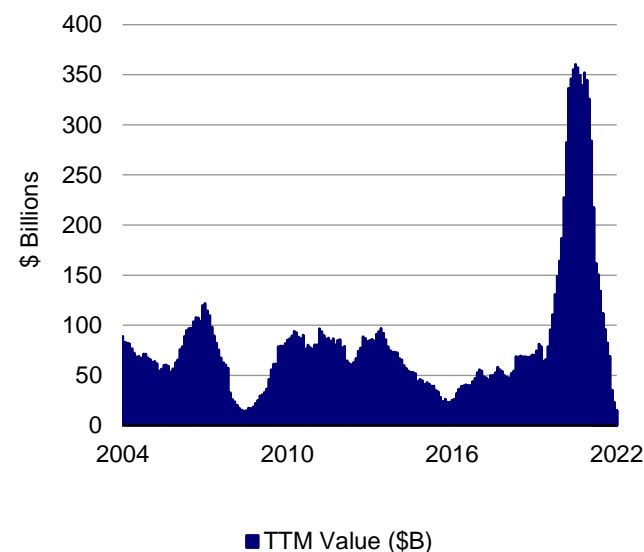
PE deal volume



PE dry powder to target's market cap



Trailing year IPO activity



Source: Invesco Investment Solutions, Pitchbook, Bloomberg L.P. as of Dec. 31, 2022.

3

2023 Alternatives outlook: Real assets



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Mike Bessell
Investment Strategist
Invesco Global Real Estate

Neutral on real assets as base rate pressures are weakening historically strong fundamentals

Asset class	Overall	Valuations	Fundamentals	Secular trend
Core RE	Neutral	Unattractive	Neutral	Neutral
Value Add	Neutral	Neutral	Neutral	Attractive
Infrastructure	Neutral	Unattractive	Attractive	Attractive

2022 saw significant increases in global interest rates, and as a result in the funding costs for real estate. The full effects of this on the pricing and fundamentals of real estate are yet to be realized, but it is clear that both the timing and quantum of the adjustments will vary by region, market, and real estate sector. As a result, across all global real estate markets, we are carefully monitoring conditions, focusing most closely on:

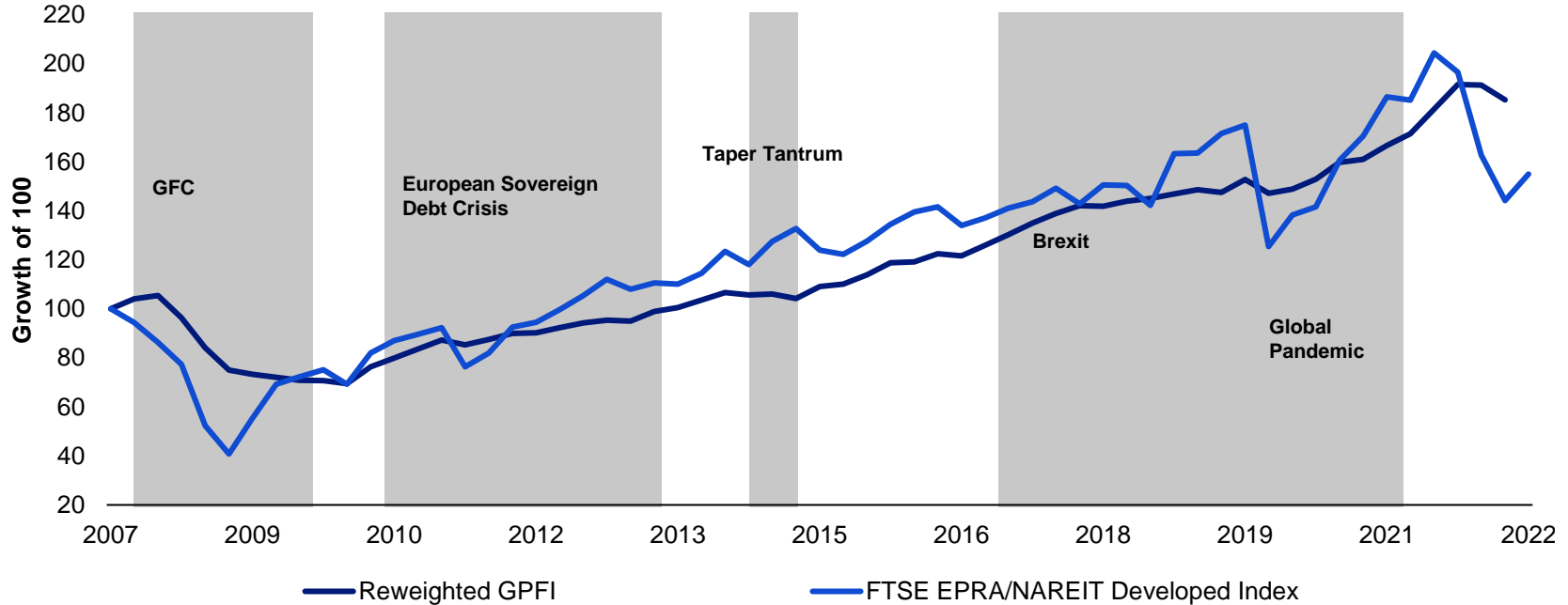
- Occupational trends, where we continue to see strong demand for logistics, a shortage of residential supply in many cities, and strong take-up of Grade A office space in key markets in Europe and APAC.
- Capital markets are seeing price adjustments for certain sectors and asset profiles, both in transactional evidence and in valuation sentiment.
- The combination of evolving price discovery, construction cost inflation, and a lack of available construction financing is resulting in development pipelines reducing and developers delaying projects.

Within infrastructure, while valuations and the level of dry powder remain elevated, multiple secular tailwinds support the long term especially with regards to brownfield and greenfield oriented strategies. Tailwinds include but are not limited to (1) the public-private partnerships supported by Bipartisan Infrastructure act passed in 2022; (2) the heightened focus on energy infrastructure in the wake conflict in the Ukraine; and (3) continued secular tailwinds in both the digital and energy transition/renewables sectors

Source: Invesco Investment Solutions, views as of Jan. 31, 2023.

Cumulative growth of listed real estate versus unlisted real estate

Listed and unlisted global real estate performance 2007-2022, Dec. 2007=100



Note: MSCI Global Quarterly Property Fund Index (GPF) was reweighted to 25% Asia Pacific, 25% Europe and 50% North America. All returns shown in USD. Source: Invesco Real Estate based on data from MSCI Global Quarterly Property Fund Index as of 30 September 2022 and Macrobond as of 31 Dec. 2022. Listed real estate is gross of fees while unlisted is net of fees.

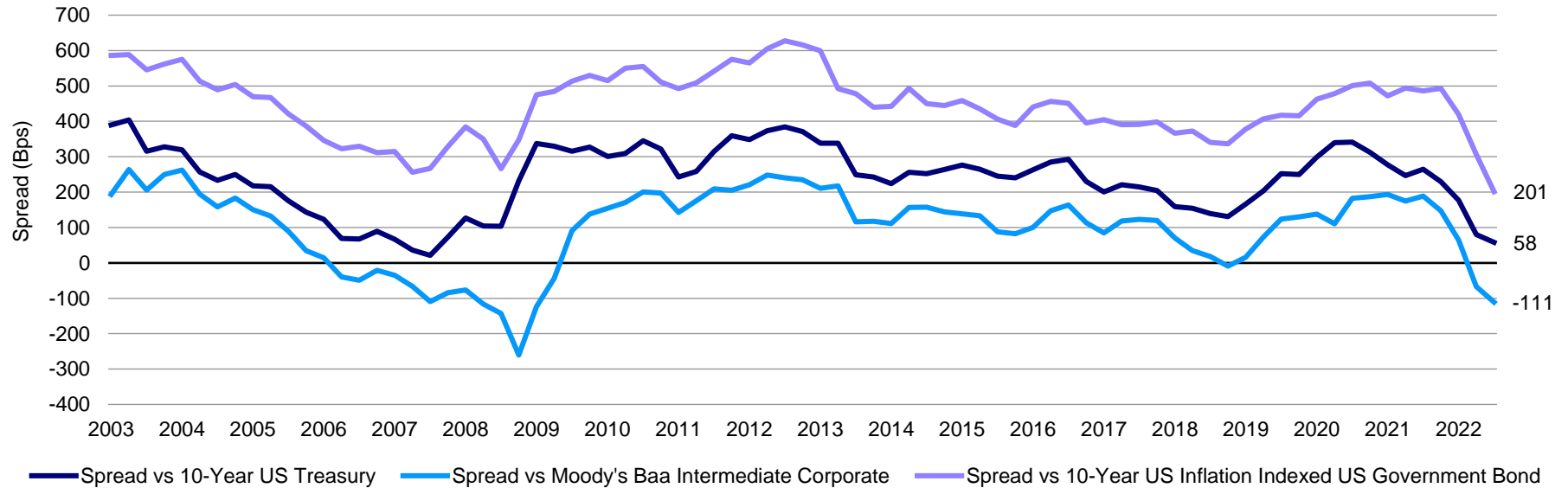
Views on private assets: Real assets

Investment type	Allocation range	Comments
	Underweight Neutral Overweight	
Real estate core		<ul style="list-style-type: none"> • Exposure to high quality real estate assets with stable current income • Potential headwinds to existing cap rates resulting from rapid rise in interest rates • Mixed outlook varies by sub-sector
Real estate value add / opportunistic		<ul style="list-style-type: none"> • Focus on dislocations in credit markets • High levels of economic and market volatility may create attractive opportunities
Infrastructure core		<ul style="list-style-type: none"> • Exposure to current inflation linked income backed by long-term contracts and/or concessions • Broad based fundamental tailwinds across sub-sectors balanced by high valuations
Infrastructure value add / opportunistic		<ul style="list-style-type: none"> • Includes exposure to brownfield and greenfield projects • Tailwind from secular growth themes (renewables, digital), and increased government support (IIJA)

Source: Invesco Investment Solutions views as of Jan. 31st, 2023. For illustrative purposes only.

Valuations: Real estate cap-rate spreads

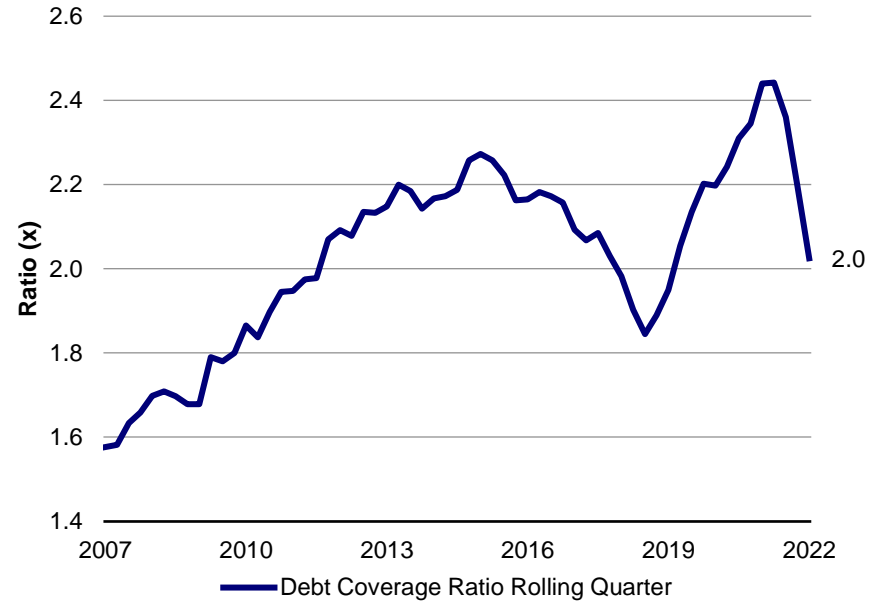
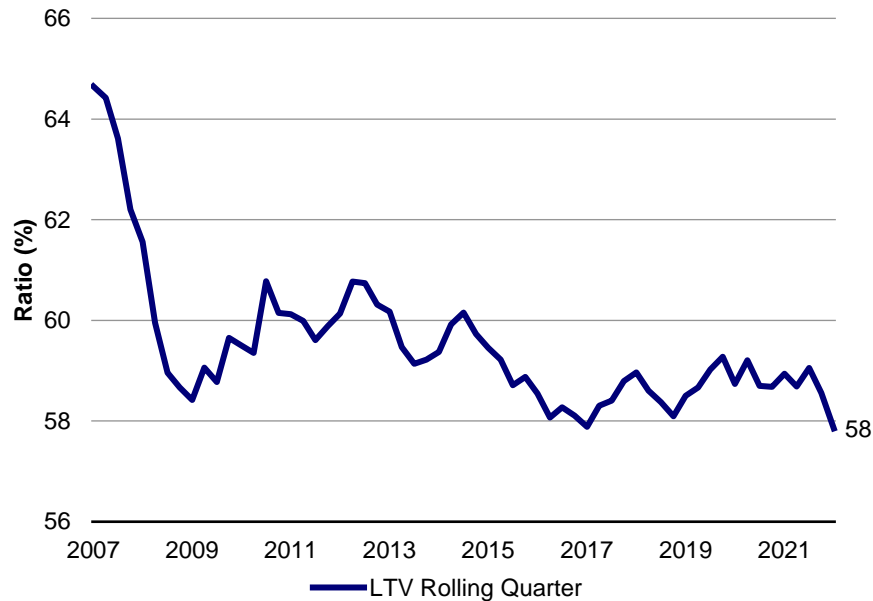
Direct real estate valuations remain elevated relative to other income-generating alternatives



Source: Invesco Investment Solutions, NCREIF, Moody's Analytics as of September 30, 2022.

Fundamentals: Real estate leverage (LTV) and debt coverage ratio

Modest levels of leverage in the system post-GFC should moderate downside risk

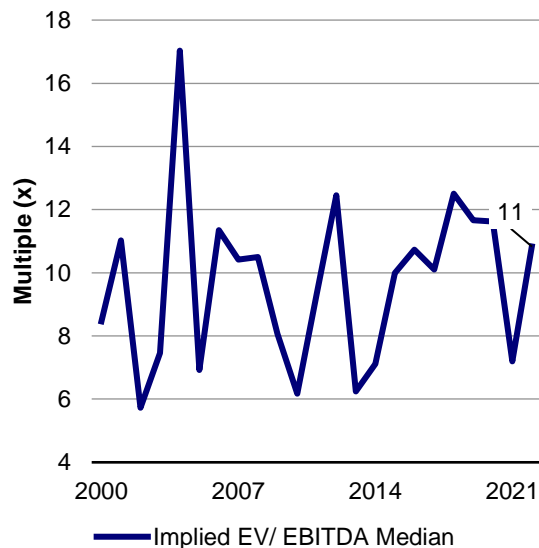


Source: Invesco Investment Solutions, NCREIF, Moody's Analytics as of September 30, 2022.

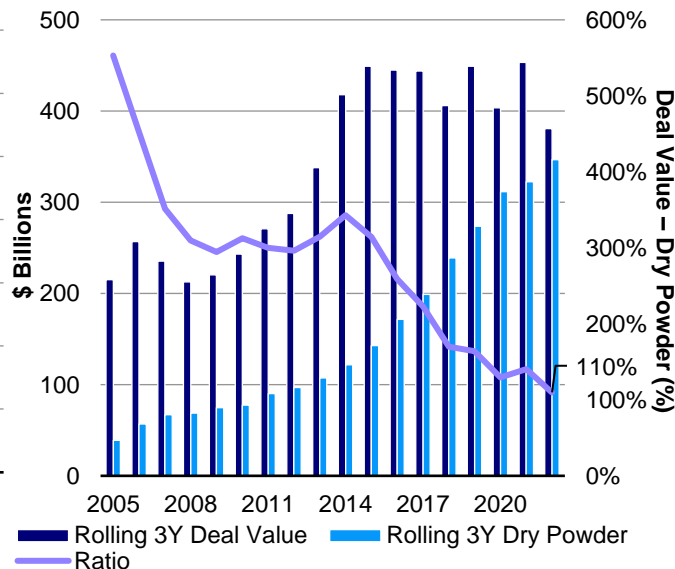
Valuations and fundamentals: Infrastructure

Relatively high valuations combined with robust dry powder offset by an expanding opportunity set with long term secular tailwinds

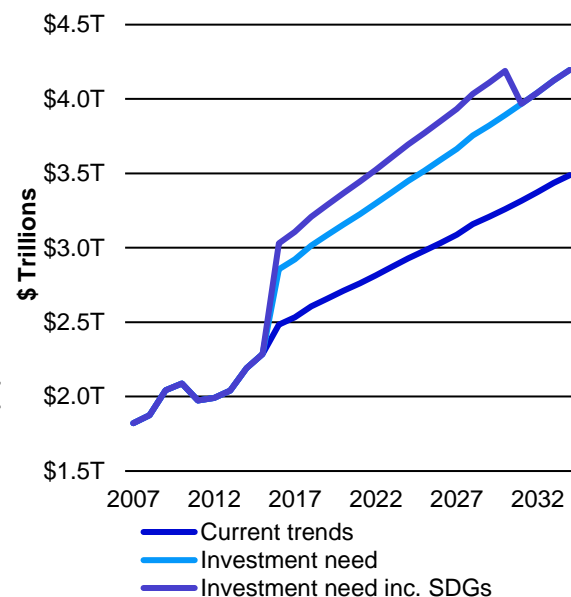
Infrastructure EV/EBITDA



Deal value to dry powder ratio



Investment need in infrastructure



Source: Invesco Investment Solutions, Pitchbook, Preqin, Global Infrastructure Hub as of Dec. 31, 2022.

Invesco Investment Solutions

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