Investment Directions: 2025

BlackRock

A guide for institutional practitioners

Executive summary

At a moment of economic transformation, investing itself is changing, the BlackRock Investment Institute (BII) explains in its Global Outlook – and this may require investors to rethink their approach to portfolios, particularly when investing for the long term. In this inaugural edition of *Investment Directions – A guide for institutional practitioners*, we outline how we see this transformation affecting institutional portfolios and the opportunities and risks it could create. We explore the growing need for diversification and return enhancement through infrastructure allocations, strategies for liquidity management amid still-high interest rates, and the fixed income opportunity set across private credit, active strategies and fixed-maturity solutions.

Setting the scene

> *We've argued since 2020 that we're not in a business cycle. Historical trends are being permanently broken in real time as mega forces, like the rise of artificial intelligence (AI), transform economies. The ongoing outsized response of long-term assets to short-term news shows how unusual this environment is. We stay risk-on as we look for transformation beneficiaries – and go further overweight US stocks as the AI theme broadens out. We have more conviction inflation and interest rates will stay above pre-pandemic levels.*
>
> ***BlackRock Investment Institute***

Increasingly intersecting mega forces are driving long-term growth. We see a new wave of investment into the real economy helping transform markets. For example, dated infrastructure cycles in OECD countries are meeting with growing structural forces that require rapid infrastructure buildout, such as AI. This creates a generational opportunity for infrastructure investment, in our view (pg. 2). Meanwhile, structurally higher inflation and interest rates present a new environment for fixed income. After a decade in which rock-bottom rates pushed investors into riskier asset classes in pursuit of returns and yield, the yields now on offer – even with developed market (DM) central banks starting to ease – present significant opportunities to enhance risk-adjusted returns through public and private market allocations (pg. 6). Below, we outline ideas to evolve institutional portfolios to capture these opportunities.

Opportunities to evolve institutional portfolios

Financing the future through infrastructure

- **Infrastructure equity** investments can help to enhance a portfolio's risk-adjusted returns, improve diversification and hedge against inflation. We see growing demand across infrastructure equity, including direct, secondaries and solutions (pg. 2-3).
- In addition to the diversification and inflation-hedging properties of infrastructure equity, **infrastructure debt** can provide higher yields and increased resilience versus public credit (pg. 4).
- We show how an increase in infrastructure equity allocations can help improve a portfolio's risk-adjusted returns (pg. 5).

Managing liabilities and yield targets through fixed income

- In an environment where interest rates have increased, but central banks are in a cutting cycle, **liability-driven investors** can employ leverage to reduce funding ratio risk while maintaining return potential (pg. 6-7).
- Higher information ratios mean investors with the ability to pick good managers can generate alpha more efficiently in **active fixed income** for the level of risk taken versus equities (pg. 8).
- **Private credit** offers unique diversification properties and potential for yield enhancement amid structurally growing demand for alternative sources of lending (pg. 8-10).
- **Fixed-maturity exposures** provide an efficient vehicle for private market investors seeking to manage liquidity for future capital calls (pg. 11).

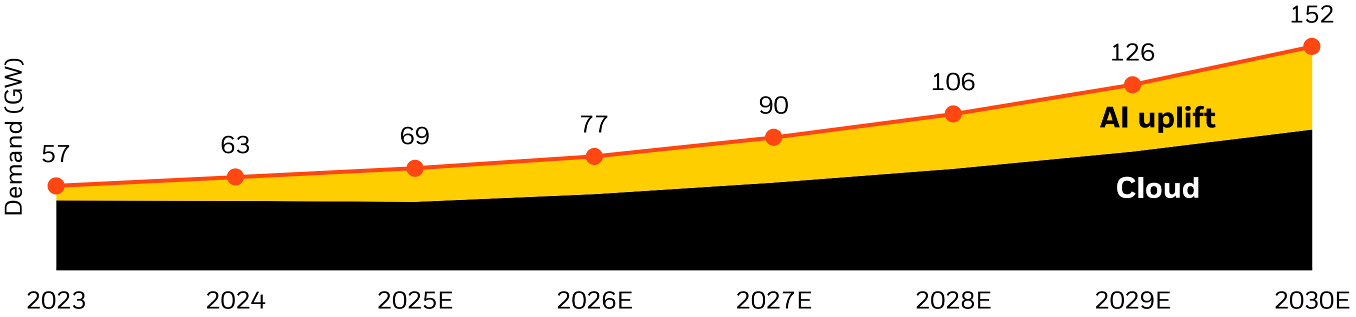
Capitalising on growing structural opportunities with infrastructure

Infrastructure is set to become one of the fastest-growing private market segments. Societies are grappling with various infrastructure challenges, including energy security pressures and the low-carbon transition, demographic change (such as population growth in emerging markets) and urbanisation, realigning supply chains, and the computing and energy infrastructure needed to power AI. Significant capital is also needed to renew ageing infrastructure in developed markets (DM) – a challenge exacerbated by high public debt levels for DM governments, meaning private capital will play a critical role in funding infrastructure investment.

Powering the future: the investment case for AI data centres and energy infrastructure

AI's potential to transform economies and drive innovation creates a multi-trillion-dollar investment opportunity in data centres and power infrastructure globally. The rapid growth of this nascent technology – on top of already powerful demand trends from the growth of data and cloud adoption – mean global data centre demand is expected to grow at a 12-15% CAGR by 2030,[1] with over $1T of data centre investment required by 2030.[2]

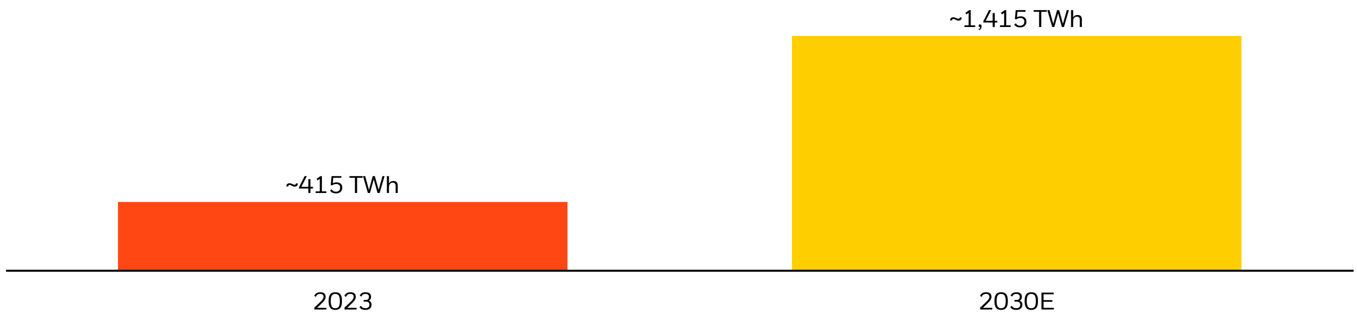
Chart 1: Global data centre demand is expected to grow at a 12-15% CAGR by 2030
Global data centre capacity in gigawatts (GW), 2023-2030



Source: McKinsey AI Trends October 2024, BlackRock Investment Institute November 2024 and Bain & Co April 2024. Note: there can be no assurances that any forecasts or estimates will materialise or that any market trends will continue.

Data centres require a substantial amount of power due to the high energy needs of their servers. AI data centres, in particular, demand 10-15 times more power than traditional cloud deployments.[3] Looking ahead, global data centres are forecast to need ~3.5x more energy by 2030 compared to 2023 (see chart 2).[4] This highlights the need for additional power generation and transmission infrastructure, requiring significant capital investment that exceeds what any single company or government can finance.

Chart 2: Data centre energy consumption is expected to grow ~3.5x by 2030
Global data centre energy consumption in TWh



Source: BlackRock, as of 1 January 2025. McKinsey, Equity Research, NVIDIA.

Due to the intricate nature of combining power and data centre development, it's essential for investors to identify managers with expertise in both digital infrastructure and energy sectors (including power and decarbonisation). These managers should also possess the requisite technical knowledge to drive efficient data centre design and scaling, and be capable of collaborating with industry leaders in these areas.

1 Source: McKinsey AI Trends October 2024, BlackRock Investment Institute November 2024 and Bain & Co April 2024. Note: There can be no assurance that any forecasts or estimates will materialise or that any market trends will continue. **2** Source: Dell'Oro estimates, July 2024. **3** Source: BlackRock, "2025 Private Markets Outlook". **4** Source: BlackRock, January 2025. McKinsey, Equity Research, NVIDIA.

Below, we outline the key benefits of **infrastructure equity** and how investors can take advantage of the opportunity on offer:

1. **Stable income from regular cash flows** linked to long-term contracts, meaning resilient returns and a premium above fixed income and equity returns across different market cycles over the long term. This return potential is accompanied by downside protection, given infrastructure's defensive and low-volatility nature.
2. **Idiosyncratic risk characteristics and low correlation to other asset classes,** providing **diversification benefits** in periods of market volatility. The essential nature of infrastructure assets makes it resilient to recession risks.
3. **Explicit and implicit linkages to inflation,** which could strengthen portfolio performance during periods of high inflation. This could be beneficial in what we expect to be an environment of stickier inflation over the long run.

As the asset class matures, a range of strategies with varying risk/return profiles is emerging, providing investors with diverse options. Given that interest rates are set to remain elevated compared to pre-COVID levels, we believe it's essential to concentrate on managers who invest in high-quality assets with growth potential and downside protection. These managers should be diversified across sectors and geographies, possess proprietary access to new opportunities, and demonstrate a strong operational track record across various economic cycles.

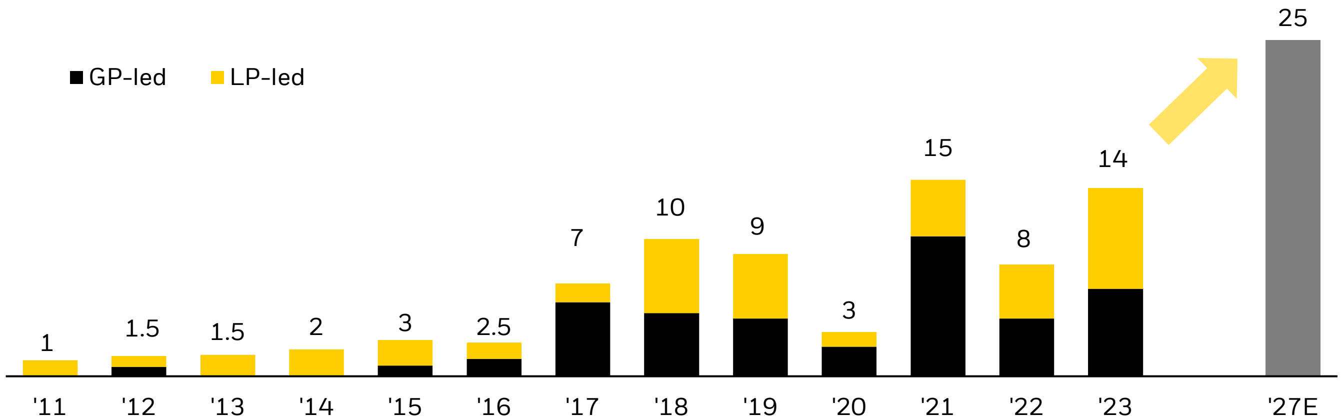
The growing appeal of secondaries and mid-market infrastructure

We're seeing increased investor interest for secondaries and mid-market infrastructure.

Secondaries (investment into existing seed portfolios) provide immediate infrastructure exposure and offer significant whole portfolio benefits. They enhance diversification across sponsors and vintages and provide investors with insights into historical performance, financials, valuations and value creation plans for portfolio companies, leading to potentially strong risk-adjusted returns. Secondaries can also reduce the J-curve effect by investing into portfolios at an advanced stage of deployment, enabling investors to put capital to work faster, while benefiting from earlier portfolio valuation uplifts compared to primaries. The earlier return of capital (given shorter duration exposure), savings on fees and expenses charged early on in a fund's life, and the potential to acquire assets at discounts to net asset values are drivers of the potential alpha generation in secondaries investments. As the primary infrastructure fund market matures, liquidity will become increasingly important in this traditionally illiquid asset class. We expect this to support continued growth of secondaries, which already represent the fastest-growing sub-segment within infrastructure.

A mid-market strategy enables investors to capitalise on mega forces while benefiting from robust deal flow and attractive entry and exit opportunities. The mid-market is attracting investors with its abundant investment flow and access to fast-growing sectors and businesses that offer significant value creation opportunities (e.g. linked to revenue growth, operational improvements, capital structure optimisation and accretive organic growth or tuck-in acquisitions). Additionally, the mid-market space offers bilateral deal sourcing opportunities with limited competition as well as diversified exit routes with a broad range of financial and strategic buyers, leading to more competitive exits and value maximisation. We see a particular opportunity in the upper mid-market segment, which is less competitive, with less than 10% of recent mid-market funds belonging to this upper segment.[5]

Chart 3: Investors are increasingly turning to secondaries to access infrastructure opportunities
Infrastructure secondary market transaction volume (USD billions), 2011-2027



Source: Preqin, excluding infrastructure debt; Campbell Lutyens, June 2024. Small differences may be due to rounding.
There is no guarantee that any forecasts made will come to pass.

5 Source: Campbell Lutyens Infrastructure Market Report Q4 2024, using data from Preqin, vintage funds years 2020-2024.

Infrastructure debt is rapidly becoming one of the most attractive and fastest-growing asset classes in private debt and alternative income markets, serving as an effective inflation hedge and providing:

1. **Enhanced yields,** with higher-for-longer interest rates allowing for higher returns compared to public markets: 70-100bps more from investment grade (IG) infrastructure debt than comparable public IG credit (against a weighted average life of eight to ten years); and 200-300bps more from non-IG infrastructure credit than comparable public HY credit (against a weighted average life of three to four years).
2. **More stable ratings, lower default rates and higher recovery rates** than similarly rated non-financial public credit, helping to boost portfolio resilience. These features are due to infrastructure debt's backing by real assets (or portfolios of assets), robust covenant structures, inflation resilience and low correlation with the credit cycle.
3. **Long-horizon stable cash flows from IG infrastructure debt,** given the predictable and non-cyclical nature of demand for infrastructure assets.

Enhancing income with non-investment grade infrastructure credit

Non-IG infrastructure credit, which has a shorter term than IG infrastructure debt, typically provides bridge financing or back leverage to borrowers and asset owners. It can offer higher income and potential for capital appreciation versus IG infrastructure debt and has delivered better performance with lower volatility than liquid HY credit over the past decade.

Non-IG infrastructure credit can complement private credit/equity allocations, offering diversification with historically strong risk-adjusted returns, and lower default rates and risk than private credit. We tend to see investors building core private credit allocation, then diversifying with non-IG infrastructure credit. Relative to core infrastructure equity, non-IG infrastructure credit typically provides seniority in the capital structure and greater certainty of capital return, as core infrastructure equity funds often face longer lock-up periods or need to sell stakes on the secondary market to redeploy capital. Non-IG infrastructure credit can therefore also reduce the J-curve effect of a portfolio's private equity allocations.

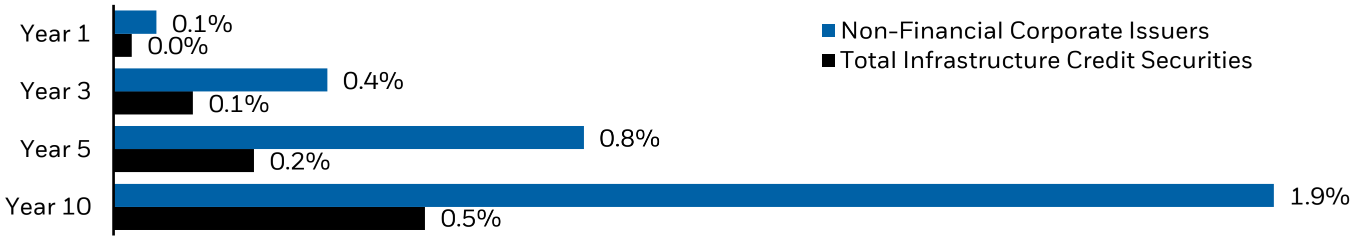
To minimise default risk, it's crucial to ensure that the debt portfolio is well diversified and actively managed. Credits tend to be secured by underlying infrastructure assets or companies, meaning infrastructure expertise is required to appropriately calibrate business plans and manage operational improvement or recovery of investments if needed. Infrastructure credit investors benefit from underwriting based on visible cashflows, enhanced with appropriate structuring and protections, such as interest coverage and adequately sized covenants.

IG infrastructure debt as a core fixed income allocation

IG remains an important growth segment of the infrastructure debt market, skewed towards energy transition and digital investments. This debt is usually fixed-rate, issued by projects or companies with an investment grade credit rating and long maturities ranging from 10 to over 25 years, matching the underlying contractual framework of the assets. Opportunities are generally anchored by long-term contracts, concession agreements, stable regulated return frameworks and strong asset-level collateral and covenant structures.

Investors can use IG infrastructure debt as a core component of fixed income portfolios alongside liquid strategies to manage duration. We see the biggest demand for IG infrastructure debt coming from insurers, who typically fund these allocations from their conservative public market sleeve for liability matching purposes. IG infrastructure debt offers higher yields compared to public fixed income securities of a similar rating, due to the illiquidity premium – which can be more attractive to investors for whom liquidity is less of a concern, such as insurers. Private transactions can offer additional benefits such as customised terms that meet an investor's specific requirements. Average 10-year default rates are 75% lower than similarly rated non-financial corporates, which can contribute to portfolio resilience. Finally, long-term, predictable cash flows help match the liabilities of institutional investors.

Chart 4: IG infrastructure debt has historically had lower default rates than similarly rated non-financial corporates
Investment grade default rates (%) (1983-2023)



Diversification may not protect against market risk or investment loss. Risk management and due diligence processes seek to mitigate, but cannot eliminate, risk nor do they imply low risk. Source: Moody's Investor Services, December 2023 (latest available); Total infrastructure securities comprise corporate infrastructure and project finance securities as well as US municipal infrastructure securities. Nonfinancial corporate issuers comprise a data set of global rated nonfinancial corporates. Moody's include corporate infrastructure securities in this data set but exclude project finance entities.

Case study 1 – Enhancing risk-adjusted returns of an average German pension scheme with private markets and infrastructure equity

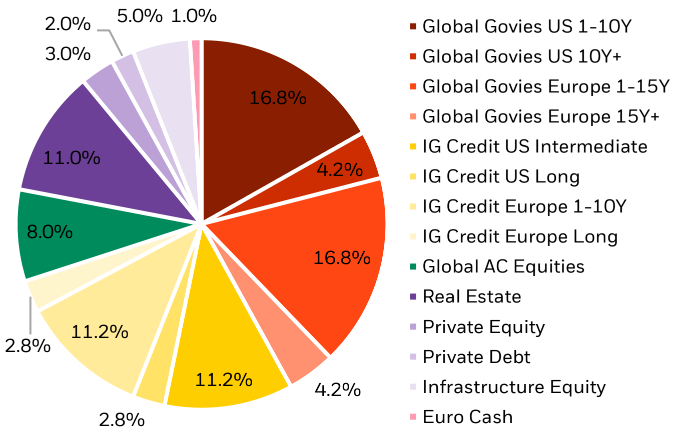
To demonstrate the potential impact of an allocation to infrastructure, we consider a proxy for an average German pension scheme – although many of the benefits outlined here can also apply to other types of institutional portfolio.

The German government, supported by the German Association for Occupational Pensions, has drafted a bill to strengthen company pension schemes with a 5% quota for infrastructure investments. In the case study below, we explore the impact of an additional infrastructure equity allocation on the risk/return profile. Within the starting average German pension fund portfolio:

- Private markets excluding real estate have a maximum allocation of 15%, with a current allocation of 10%.
- Real estate has a maximum allocation of 25%, with a current allocation of 11%.

We use BlackRock's climate-aware capital market assumptions (CMAs) in an optimisation process to:

Chart 5: Average German pension allocation

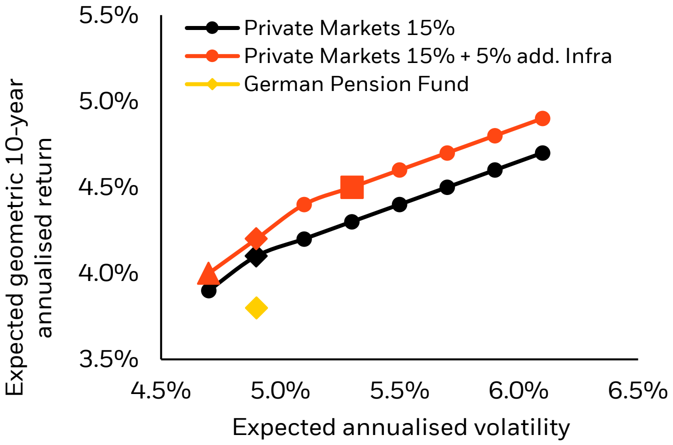


Source: GAC Institutional Portal, 30 September 2024. Fixed income assumptions : 60% government bonds/ 40% credit; 80% intermediate duration/ 20% long duration.

- Generate an efficient frontier assuming the current regulation constraint, with a maximum 15% allocation to private markets (excluding real estate). We call this **Optimisation 1**. In this case, **allocating more of the permitted 15% budget to private markets (excluding real estate) improves risk-adjusted return** (see black efficient frontier in chart 6). On this new frontier, a portfolio with the same risk as the starting portfolio (4.9%) has a higher return (4.1% vs. 3.8%) and therefore a higher Sharpe ratio (0.84 vs. 0.78) than the original portfolio.
- Generate another efficient frontier, adding an additional 5% budget to infrastructure equity, considering potential regulatory changes. We call this **Optimisation 2**. In this case, **increasing the permitted budget by an additional 5%, allocated to infrastructure equity, could further improve the portfolio's risk-adjusted return** (see orange efficient frontier in chart 6). On this new frontier, a portfolio with the same level of risk as the starting portfolio (4.9%) has an even higher return (4.2%) and higher Sharpe ratio (0.86). If an investor is able to tolerate a slightly higher risk level (e.g. rising from 4.9% to 5.3%), they may be able to achieve even higher returns (increasing from 4.2% to 4.5%), keeping the Sharpe ratio broadly consistent.

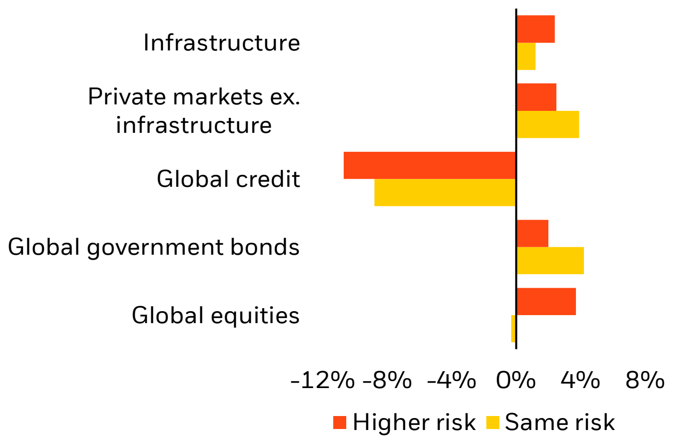
In the optimised portfolios above, higher returns for the same level of risk are achieved thanks to a barbell approach, with the optimisation process resulting in reallocation from public credit to infrastructure equity and government bonds. The reallocation away from credit is, to a large extent, driven by tight credit spreads and limited excess return potential. Conversely, infrastructure equity acts as a return enhancer with diversification benefits, while government bonds help mitigate risks and serve as a safe haven during stress scenarios. Infrastructure investments provide stable, inflation-linked income through contractual agreements, ensuring consistent cash flows, even in downside scenarios. Strong operational management enhances asset value, leading to long-term returns. These factors make infrastructure investments an attractive option for reliable and resilient returns in a portfolio context.

Chart 6: Efficient frontiers for Optimisations 1 (black line) and 2 (orange line)



Source: BlackRock, as of 30 September 2024.

Chart 7: Allocation changes under new regulation (orange frontier) vs. average German pension allocation



Source: BlackRock, as of 30 September 2024.

Managing liabilities amid higher rates

The US economy entered 2025 on relatively solid footing: while rates stayed higher for longer than expected at the start of the year, growth didn't drop, as the AI investment boom and loose fiscal policy took effect. This helped keep inflation relatively elevated, even as a labour supply boom helped to soften wage pressures, feeding through to a fall in inflation. We see proposed US tariff and immigration policy keeping inflation sticky, even as growth moderates, and the USD higher for longer this year, while potentially growing US budget deficits add to ongoing fiscal pressures. Europe, in contrast, faces downside risks to growth, evidenced in weakness in PMIs and rising trade uncertainty – yet rates remain significantly higher than they have been over the past decade. We expect mega forces to keep inflation and rates structurally elevated – a hallmark of the new regime. In this new regime of structurally higher rates, we outline three compelling opportunities in fixed income for institutional practitioners:

1. Locking in yields through LDI in a high-rate environment where funding ratios are more positive.
2. Getting more dynamic in fixed income, to capture higher information ratios than in equities through an active approach, and diversifying into private credit.
3. Using fixed-maturity exposures to manage liquidity for private markets allocations.

LDI management in a high-rate environment

Low and even negative interest rates in the pre-Covid decade presented a significant challenge to liability-driven investors, requiring them to lean heavily on higher-risk growth assets with a wide range of forecast returns – particularly over longer time horizons. We expect interest rates and bond yields to remain elevated relative to the pre-Covid era, despite major DM central banks having started to cut rates – marking a sea change for LDI. We see a major opportunity for investors to improve hedge ratios (HR) and reduce dispersion of funding ratios while maintaining existing exposure to growth assets, by leveraging integrated LDI solutions. Below, we outline how this could work in practice.

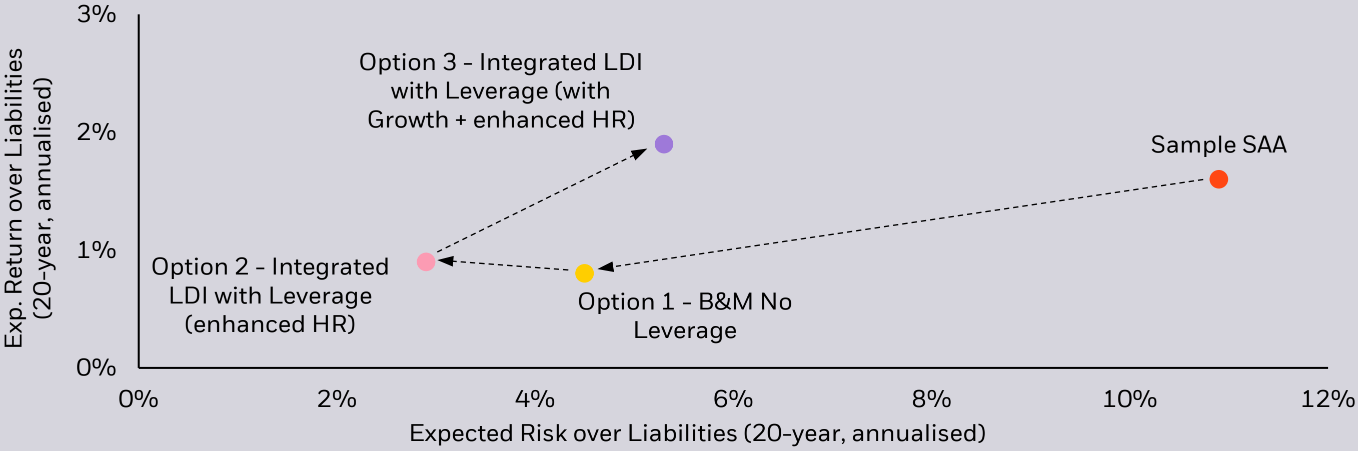
Case study 2 – The impact of LDI integrated solutions for a hypothetical DB scheme

Below, we explore how an integrated LDI mandate that combines credit and leveraged exposure to interest rates may offer a solution to managing risk while boosting expected returns. For the purposes of this case study, we consider a range of different scenarios reflecting some of the activities we typically see German pension schemes undertaking, yet these concepts and outcomes can also apply to DB schemes in other countries, and other types of institutional portfolio. This example reflects some of our best ideas on how to balance generating returns with managing risks.

- **Option 1 –** this is representative of changes we've seen many European DB schemes make since interest rates rose in recent years. It entails shifting the asset allocation away from growth assets and into a buy and maintain (B&M)/ cashflow-matching credit allocation, boosting the hedge ratio to 50% but at the cost of most of the growth assets.
- **Option 2 –** this is an evolution of option 1, with equivalent allocations to growth assets, but deploying a modest amount of leverage to fund an integrated LDI sleeve and reach a higher hedge ratio of 66%.
- **Option 3 –** this builds on option 2, adding a higher amount of leverage in order to not only achieve the 66% hedge ratio, but also maintain growth assets at the sample SAA level, thereby not sacrificing return potential.

We find that combining an LDI approach and leverage (option 3) can materially improve portfolio efficiency (defined as return per unit of risk), as shown in the chart below.

Chart 8: An integrated LDI with leverage may reduce risk without sacrificing return potential
Expected risk and return relative to liabilities, based on hypothetical DB scheme



Source: BlackRock, as of 28 March 2024. Sample SAA based on 35 German DB schemes.

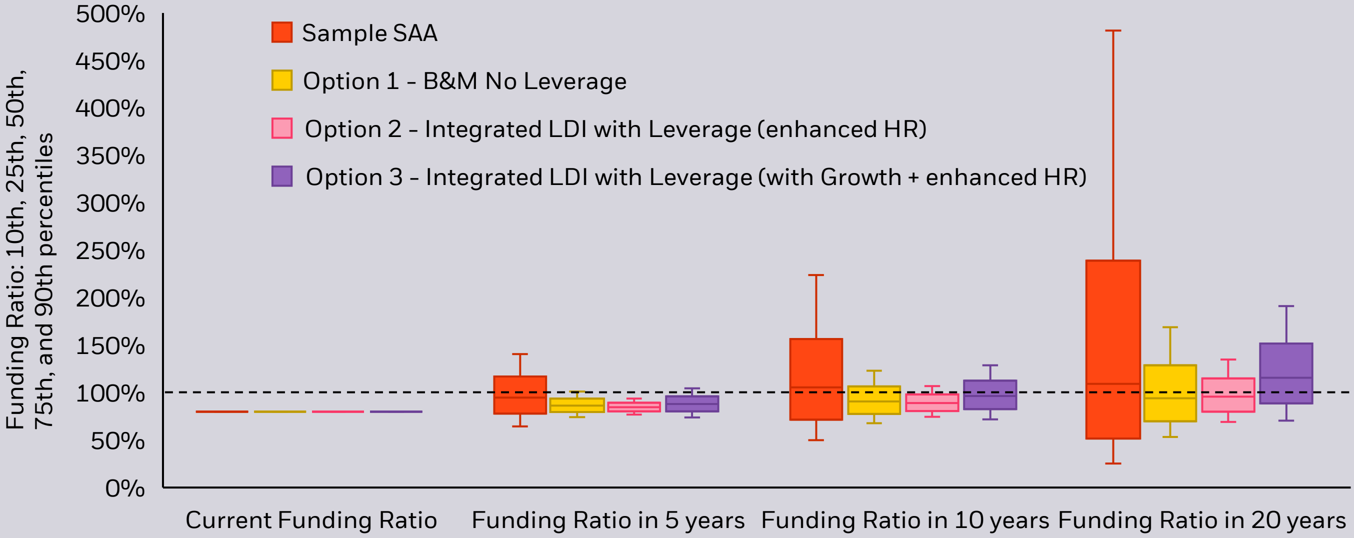
Portfolio KPI	Sample SAA	Option 1 - B&M No Leverage	Option 2 - Integrated LDI with Leverage (enhanced HR)	Option 3 - Integrated LDI with Leverage (with Growth + enhanced HR)
Ann. geometric return over liabilities (%)	1.6	0.8	0.9	1.9
Ann. excess volatility over liabilities (%)	10.9	4.5	2.9	5.3
Portfolio efficiency (return / risk)	**0.15**	**0.18**	**0.31**	**0.36**
Dispersion at 20Y over liabilities (%)	5.7	2.2	1.3	1.9
Ann. CVaR at 95% over liabilities (%)	-10.1	-3.8	-1.7	-2.1

This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise - or even estimate - of future performance. Forecasts are not a reliable indicator of future performance. Source: BlackRock CMA data as of 28 March 2024; currency: EUR; time period: 20 years. Return assumptions are total nominal returns. Asset return expectations are net of assumed fees. Indices are unmanaged and one cannot invest directly in an index. BlackRock has not considered the specific needs of the client and is not making any recommendation of any particular option. You should consider the most appropriate allocation for your needs. For illustrative purposes only.

Another way to consider risk and return is the range of expected funding levels over time. Below, we simulate 20 years forward to demonstrate the ranges of outcomes of the different strategies, which grow with time and with the risk exposure. It's instructive that while all options narrow the range of outcomes and reduce downside risk, only option 3 does so without materially degrading the pace of improvement in funding levels. Option 3 is projected to generate a strong surplus over a 20-year horizon, with a far narrower range of adverse outcomes where full funding is not reached.

Chart 9: Narrowing the range of outcomes without significantly sacrificing upside

Dispersion of funding ratio over a 20-year time horizon



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In summary, German defined benefit pension schemes are facing a new environment after the yield moves experienced over the past few years. Many are seeking to de-risk by switching more of their asset allocation into corporate bonds to increase certainty and hedge against the risks of yields falling again. However, this introduces practical challenges, given the scarcity of long-duration credit available and the impact it can have on expected returns as growth assets are liquidated. Options that aim to boost returns and hedge liabilities using an integrated LDI approach can narrow the range of outcomes while not sacrificing so much return. Deploying modest amounts of carefully managed leverage can enable such allocations, while the integration of assets maximises efficiency and resilience and minimises additional governance requirements. **While we've demonstrated how this approach could potentially benefit the average DB scheme, we believe these concepts and benefits also applies to other institutional investor types – please contact BlackRock Portfolio Consulting to request a consultation.**

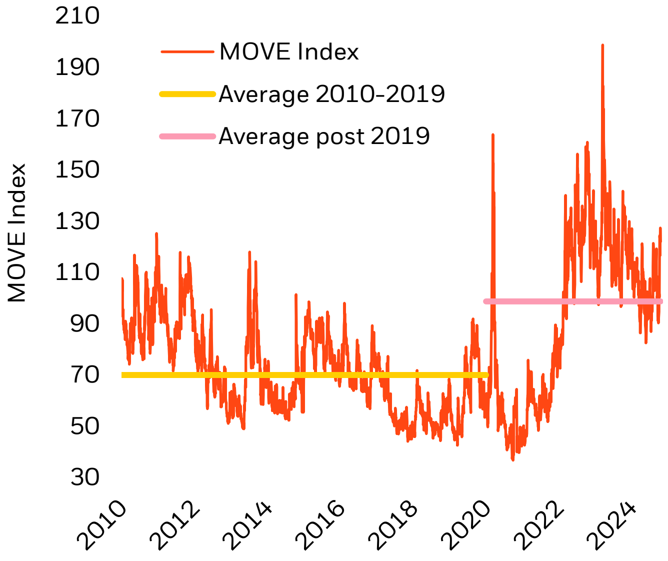
Getting more dynamic in fixed income by:

Going active...

Financial markets are adjusting to the new regime of greater volatility, uncertainty and divergence in market performance. The BII argues this new regime calls for more use of active strategies in its paper *A bigger role for active strategies*. If investors have confidence in their ability to pick good managers, active strategies should play a bigger role in portfolios today, in our view. In an extension of this research, our colleagues in the BII and Fundamental Fixed Income delve into two questions. Firstly, is the market environment more fruitful for skilled managers to exploit in fixed income? And secondly, how efficiently is active risk rewarded? In summary, they find that:

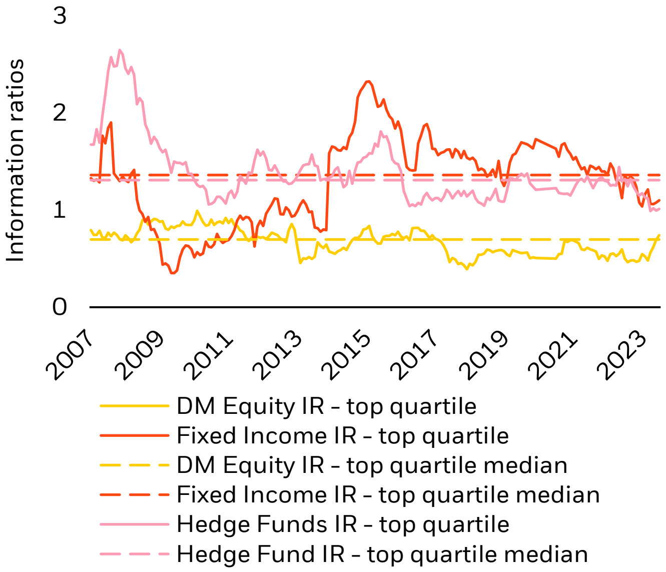
1. **Bond market volatility is materially higher** in the new regime than it was in the pre-Covid era (see chart 10), meaning that skilled active managers who have more license to take active risk could be rewarded.
2. **Active strategies in bonds have some of the highest alpha information ratios,** meaning that active risk-taking in bonds can be efficiently rewarded (see chart 11).
3. **More dynamic strategies could outperform,** but it's important for investors to balance the frequency of investment decisions with transaction costs.

Chart 10: Bond volatility is higher in the new regime
MOVE Index, 2010-2024



Source: BlackRock, Bloomberg. Chart shows the MOVE Index and the median MOVE Index level between 2010 and 2019 and the median MOVE Index level between 2019 and October 2024.

Chart 11: Active risk-taking can be efficiently rewarded
Information ratios of active strategies, 2007-2023



Source: BlackRock, eVestment. Note: Chart shows the 3-year rolling information ratios of active strategies in Developed Market Equity, Fixed Income and Hedge Funds based on data between 2004 and June 2023.

...and introducing private debt

We see significant portfolio benefits from integrating private market allocations into fixed income sleeves, stemming from increased borrower demand for private credit solutions.

The future of private credit: structural growth and global expansion

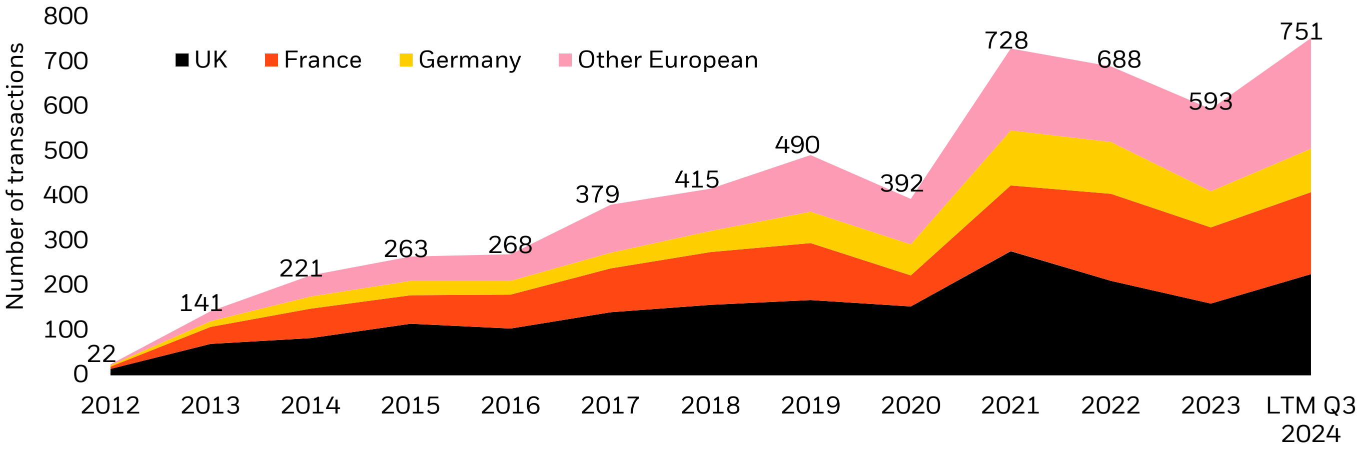
Market forces, technology and regulation are moving financial activity to where it can be done most efficiently, making private credit a structural growth segment. We expect the private debt market will more than double to $4.5T by 2030, as the addressable market of investors and borrowers expands. Specific growth drivers include more selective lending by banks, investors' desire for diversification and income, public market deals becoming too large for many middle-market firms, and borrowers staying private for longer and favouring customised funding solutions. We also believe it will become more global, having grown in Europe and fast emerging in APAC, alongside continued expansion in North America.

We believe the future of fixed income investing requires building public and private portfolios to optimise liquidity, yield and diversification, with private credit providing complementary sources of risk (idiosyncratic and economic growth) relative to a public credit sleeve. We expect that structurally higher interest rates (relative to much of the post-financial crisis era) can be digested by private credit borrowers, as long as growth remails resilient. However, this will continue to drive dispersion among borrowers, emphasising the need for credit selection and structural protections.

Opportunities in core European middle market direct lending

We identify a promising opportunity in core European middle market direct lending, which has the potential to deliver stronger risk-adjusted returns with lower volatility compared to liquid credit strategies. Since their peak in 2008, bank lending volumes in Europe have decreased by $2.4T, with European middle-market borrowers increasingly relying on non-bank lenders for financing, as shown in chart 12. This shift is partly driven by borrowers' needs for more flexible financing solutions as well as faster and more certain execution versus traditional bank offerings.

Chart 12: European middle-market borrowers increasingly rely on non-bank lenders for financing
Number of senior deals completed by leading alternative lenders, 2012-2024



Source: Deloitte Alternative Lender Deal Tracker as of September 30, 2024.

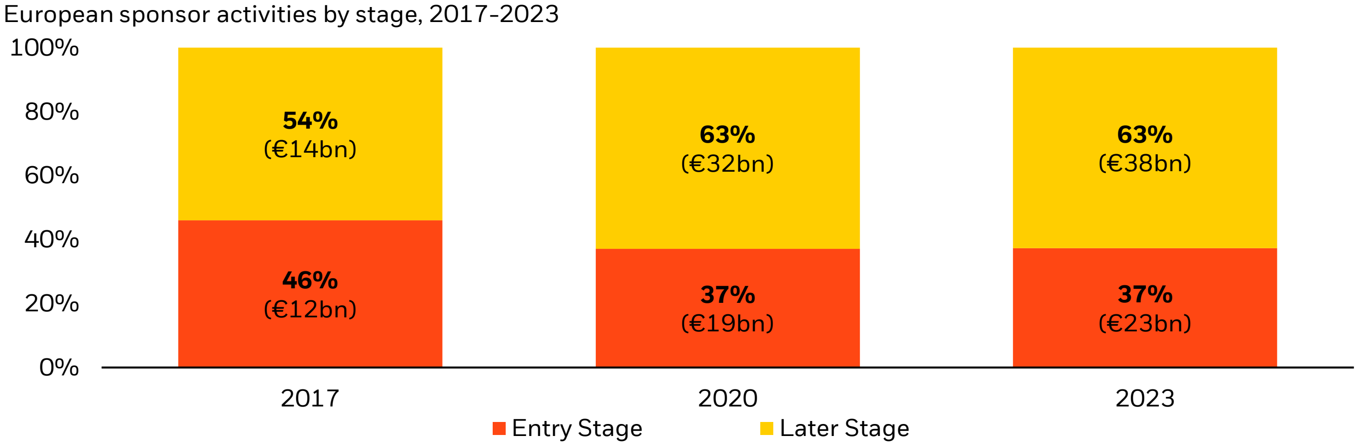
Specifically, we see core mid-market lending (to companies with €10-50m EBITDA) as a sweet spot from a risk-adjusted returns perspective. This segment is less intermediated, has more proprietary deals, and offers stable pricing and documentation terms. In contrast, the upper mid-market, in particular in PE-backed market, (companies with €75m+ EBITDA) faces competitive auctions, driving erosion of terms and pricing. Meanwhile, the lower mid-market (companies with €5-10m EBITDA) offers attractive proprietary deals – but comes with higher default risk. We see an opportunity in lending to cash flow-generative core mid-market businesses in defensive sectors supported by structural trends, such as healthcare and technology, particularly in Western and Northern Europe, which enjoy creditor-friendly frameworks.

Although spreads have narrowed recently across both private and public markets due to still-resilient economic growth and falling inflation in Europe, European private credit, which has an average credit spread of c.700bps, still offers a yield pick up of over 200bps vs. European high yield at c.470 bps. European private market fundamentals have also proven resilient. Although breach rates increased during the Covid-19 pandemic, they quickly returned to pre-pandemic levels and were significantly lower than during the global financial crisis. Additionally, typical asset leverage has decreased in European, UK and US markets since the Q3 2022 dislocation, stabilising at an average range of 4.5x to 5.75x by Q2 2024.

Enhancing a portfolio's risk-adjusted returns with growth debt

Growth debt is benefiting from favourable market dynamics as growth capital, both equity and debt, matures as an asset class, driven by companies' demand for flexible financing solutions. Firms remaining private for longer also results in a deeper market across all stages and an increase in high-quality, large and later-stage opportunities.

Chart 13: Firms remaining private for longer has meant an increase in later-stage opportunities in recent years
European sponsor activities by stage, 2017-2023



Source: Pitchbook Data, as of 31 October 2024.

Specifically, we see an opportunity in providing senior secured debt solutions to high-growth European companies in innovative sectors such as technology, healthcare and life sciences. We focus on companies that are close to profitability, have expansion potential, strong management teams and sponsor backing.

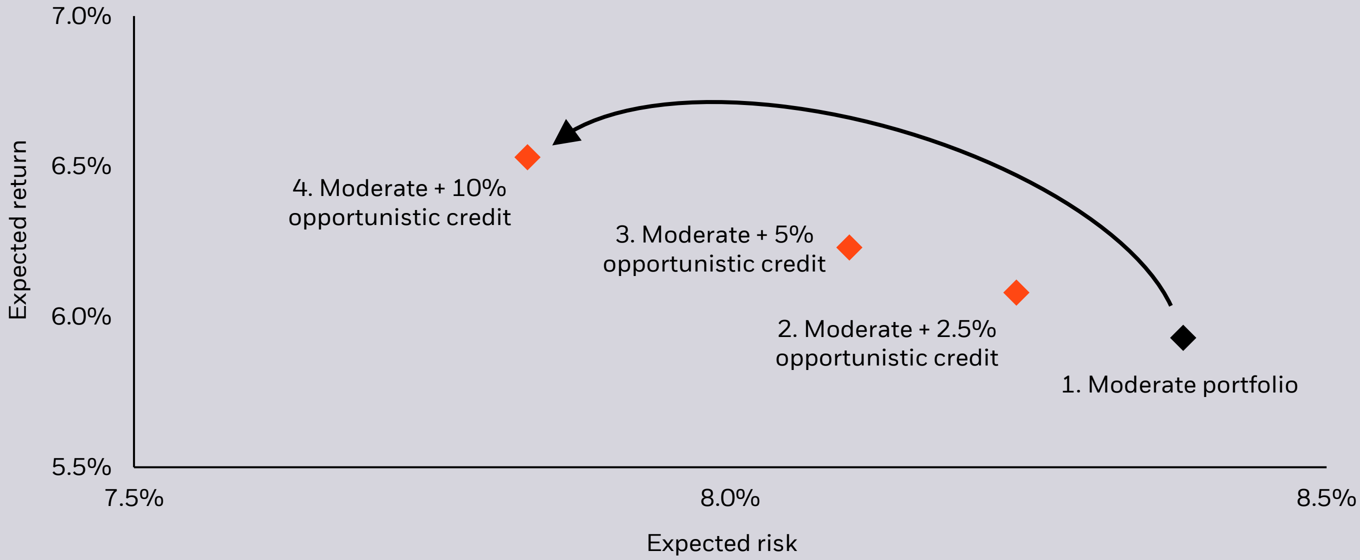
Such investments can complement core private debt and private equity portfolios by delivering an attractive risk-return profile, driven by contractual debt IRR plus an additional yield enhancement (for example equity warrants) which enables the strategy to capture portfolio company upside. They can also provide risk mitigation through diversification, senior security, and amortisation.

Given the expectation that rates in Europe will remain higher than pre-pandemic levels, we believe it's crucial to select growth debt managers with established proprietary origination channels, a majority of bilateral or lead arranger deals, diversified portfolios, strong credit underwriting and low loss and covenant breach rates. We look to those that can generate consistent and predictable cash flow and leverage a strong network of top-tier sponsors (ranging from entry-level participants to large growth and private equity sponsors) and historical company relationships to unlock enhanced deal flow and follow-on investment opportunities.

Case study 3: adding private credit in portfolios

Opportunistic credit strategies can provide flexibility to dynamically capture opportunities across the credit spectrum and sectors. These opportunities often have low correlation to other public and private assets, which can help reduce overall portfolio volatility. Opportunistic credit tends to be better suited to capturing market dislocations and investing in assets that may be undervalued or overlooked, which could result in more attractive risk-adjusted returns, especially through a whole portfolio lens.

Chart 14: Moderate shifts into opportunistic credit can boost returns and enhance derisking through diversification
Risk-return profile of a moderate risk portfolio, adding incremental amounts of global opportunistic credit exposure



Measure	Portfolio 1	Portfolio 2	Portfolio 3	Portfolio 4
Target return (%)	5.93%	6.09%	6.26%	6.58%
Target risk (%)	8.38%	8.24%	8.10%	7.83%
Return / risk	**0.71**	**0.74**	**0.77**	**0.84**

Source: BlackRock; Risk is calculated using Aladdin® risk models as at 28 March 2024, currency: EUR. Risk explains ex-ante volatility for the next one-year time horizon, using a 84% confidence annualised analytical VaR, with a one-year risk horizon. 282 monthly observations are used, with a constant weighting. For illustrative purposes only. **Diversification may not fully protect you from market risk**.

This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise - or even estimate - of future performance. Forecasts are not a reliable indicator of future performance. Source: BlackRock Investment Institute, Capital Market Assumptions data as of 28 March 2024; time period: 10 years; currency: EUR. Notes: Return assumptions are total nominal returns. Asset return expectations are net of assumed fees. Fees and alpha are estimates for illustrative purposes only and do not represent any actual fund performance. Indices are unmanaged and one cannot invest directly in an index.

Managing liquidity for private market capital calls

The final area we highlight in fixed income centres on the opportunity to use fixed-maturity strategies, such as iBond ETFs, to match scheduled capital calls when investing in private markets.

iBonds are unique investment vehicles offering the benefits of ETFs – which include liquidity and diversification – but with a predefined maturity date, similar to individual bonds. Upon maturity, the fund is liquidated, and proceeds are returned to investors.

Key benefits of iBond ETFs

1 **Reduces cash drag in the portfolio**

2 **Improves diversification relative to individual bonds**

3 **Provides relatively more certainty of yield (if held to maturity) compared to constant duration strategies**

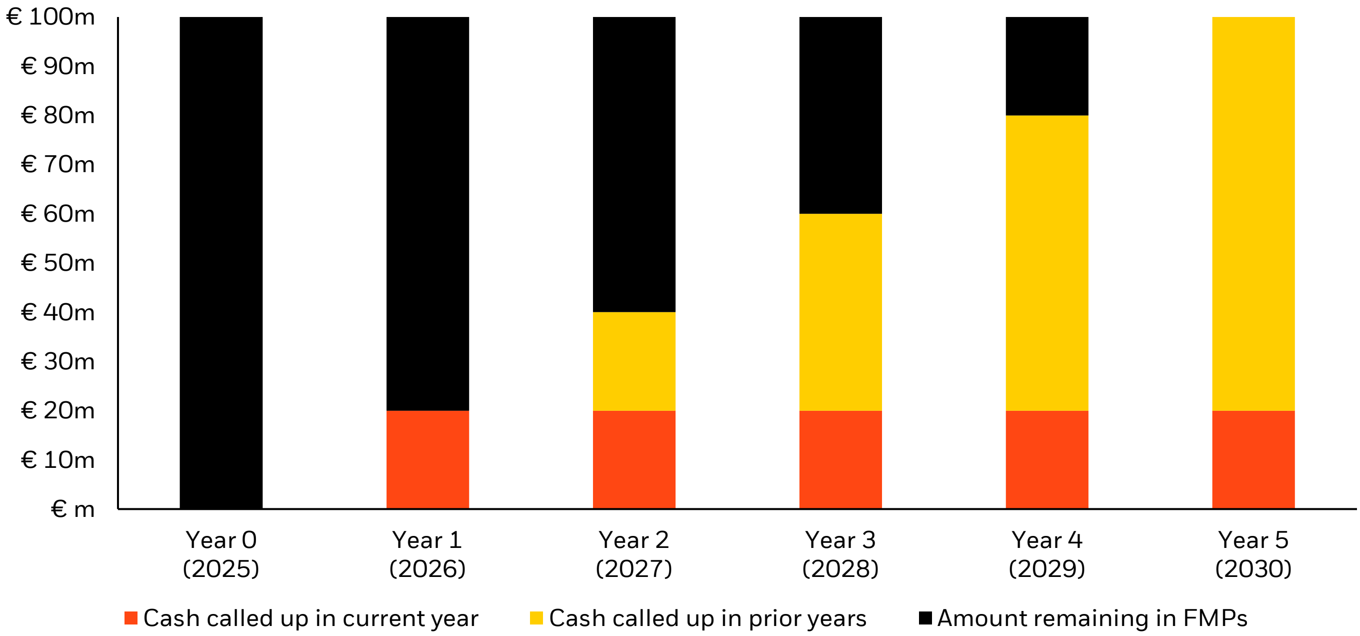
Case study 4 – Using fixed-maturity ETFs to match capital calls

Unintended cash can build up after committing to private market investments. This can be invested into fixed-maturity products (FMPs), such as iBond ETFs, that mature in line with expected capital call dates. Capital calls are by nature unpredictable. However, in practice, sophisticated private market investors allocate across multiple vintages and different strategies, which may result in reducing the volatility of these cash flows and therefore smoothing the capital call schedule.

In the simplified example below, we assume an investor has committed €100m to a private market fund, with the expectation that this will be called up at a rate of €20m per year over the next five years. In such a scenario, we see an opportunity for an investor to generate income through investments into fixed-maturity products with maturity dates aligned to capital calls, by investing €20m each into iBond ETFs maturing in 2026, 2027, 2028, 2029 and 2030.

Chart 15: Fixed-maturity products can enable investors to lock in yields while aligning to capital call funding requirements

Simplified example assuming a €100m commitment to a private market fund, called up at a rate of €20m per year over five years



Source: BlackRock, February 2025. For illustrative purposes only.

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(24 investment professionals)

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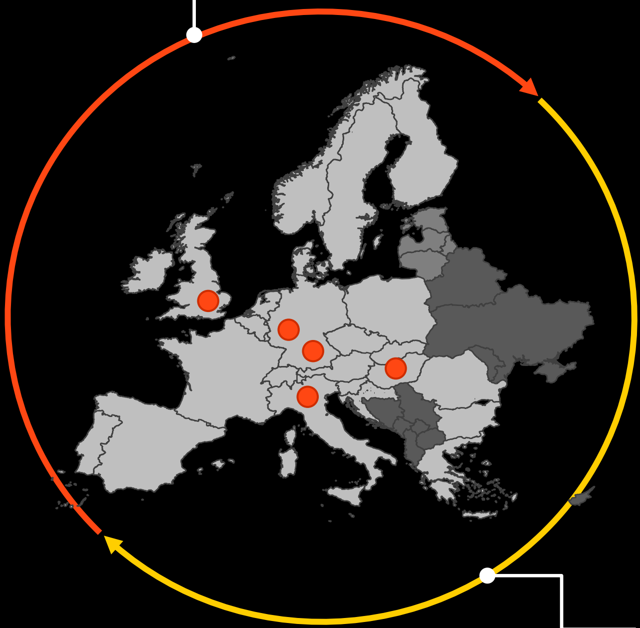
(1 investment professional)

Budapest
Technology
(1 investment professional)



500
Institutional investors engaging with IPS

45
Countries in which IPS has worked with institutional investors

1500
Portfolio analyses completed for institutional investors

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A global platform offering unparalleled access and insights into portfolio construction and market access.

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Improve diversification
Using Aladdin® risk model to identify diversification opportunities

Enhance yield/returns
Maximising portfolio yields and income through tactical and strategic asset allocation

Net-zero transition
Using transition analytics to help achieve portfolio decarbonisation

Simplify portfolios
Consolidating portfolio to achieve the targeted risk profile

Peer comparison
Peer insights across the institutional investment landscape

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