NEUBERGER BERMAN

FIXED INCOME
CHANGING RISKS EVOLVING STRATEGIES

Fixed Income in the Post-Inflation World: Changing Risks, Evolving Strategies

With cash rates peaking and bond yields at attractive levels, many investors have begun to put fixed income back into their portfolios, both for income potential and for ballast and diversification. But they are doing so in an exceptionally dynamic environment. The return of high inflation made the recent rate-hiking cycle one of the most rapid and aggressive ever. The demands of the pandemic have left government balance sheets under strain, while many companies managed to strengthen their balance sheets with cheap, long-term borrowing while rates were low. That has left bond market risks constantly shifting, creating pitfalls and often fleeting value opportunities. Whatever their objectives, as investors return to fixed income they should do so with strategies fit for the dynamic risk environment, and embrace a flexibility that goes beyond traditional bond investing.

FIXED INCOME INVESTING BEYOND…

The "Single-Lever" Approach	Investment Grade Bonds	Home Markets	Liquid Markets
In an environment of high uncertainty around growth and fiscal policy… …we believe investors should be able to pull every lever, managing interest rate and credit risks actively in all fixed income strategies, not just government bonds	To manage risks and maximize potential income… … we believe investors should augment investment grade with other credit markets	Different regions have different issuers, a different balance of sectors, and are often at different points in their economic cycles… … resulting in notable dispersion in returns	Illiquid private credit markets can offer additional return potential… … and meaningful diversification by asset class, borrower type and structure
SEEK OUT: **Fully flexible multi-sector fixed income strategies, and core/core-plus strategies that actively manage both rates and credit risks**	**SEEK OUT:** **High yield bonds and loans, securitized credit, and fully flexible multi-sector fixed income strategies**	**SEEK OUT:** **Global fixed income strategies**	**SEEK OUT:** **Less-liquid credit markets**

Changing Risks

Which are riskier, investment grade bonds or high yield bonds?

It seems like a strange question. High yield issuers tend to be smaller, sometimes privately owned companies with (by definition) lower credit ratings, while investment grade issuers include the world's biggest listed companies and sovereigns that can print their own money. High yield has historically generated a higher return, but investment grade has given investors a much smoother ride.

Until the past two years. During 2023 and 2024, high yield continued to deliver a higher return than investment grade, but it did so with considerably lower volatility. The traditional risk relationship flipped.

WHICH IS RISKIER—INVESTMENT GRADE OR HIGH YIELD?

Global investment grade and high yield bond total returns and volatility, 2010 – 2024 and 2023 – 2024

	2010 – 2024		2023 & 2024	
	IG	HY	IG	HY
Annualized Return	3.5%	6.3%	9.8%	23.1%
Volatility	5.2%	7.3%	6.3%	4.8%
Return/Risk	0.67	0.86	1.56	4.78

Source: FactSet. Data as of February 10, 2025. Total returns. Indices used: BofA Global Corporate Bond Index; BofA Global High Yield Bond Index.

To understand why, remember that bond risk is largely about two factors: interest rate risk (how bond prices respond to changes in rates) and credit risk (how bond prices respond to changes in the likelihood of borrowers paying back their interest and principal).

The credit risk associated with investment grade issuers is relatively low. That results in a less volatile credit spread, which means that the main determinant of movement in investment grade corporate bond prices and yields is typically interest rate risk. For high yield issuers, by contrast, credit risk is typically more important.

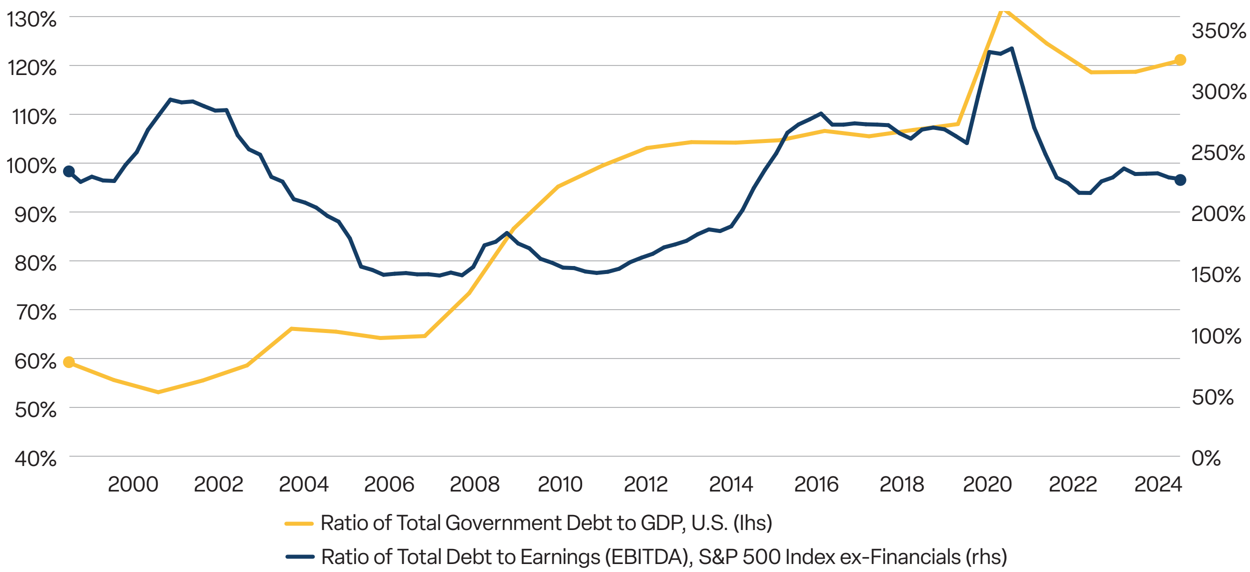
Over the past two years of inflation fighting, uncertainty about the path of interest rates has been unusually high. At the same time, concern about corporate creditworthiness has been unusually low, because many corporate borrowers took advantage of very low rates, before 2022, to build their cash reserves. This is why the volatility of investment grade bonds has risen slightly, while the volatility of high yield bonds has fallen quite notably.

Now that inflation and policy rates have declined from their peaks, we would expect the relationship between interest rate volatility and credit spread volatility to normalize somewhat, but interest rate volatility may yet remain elevated.

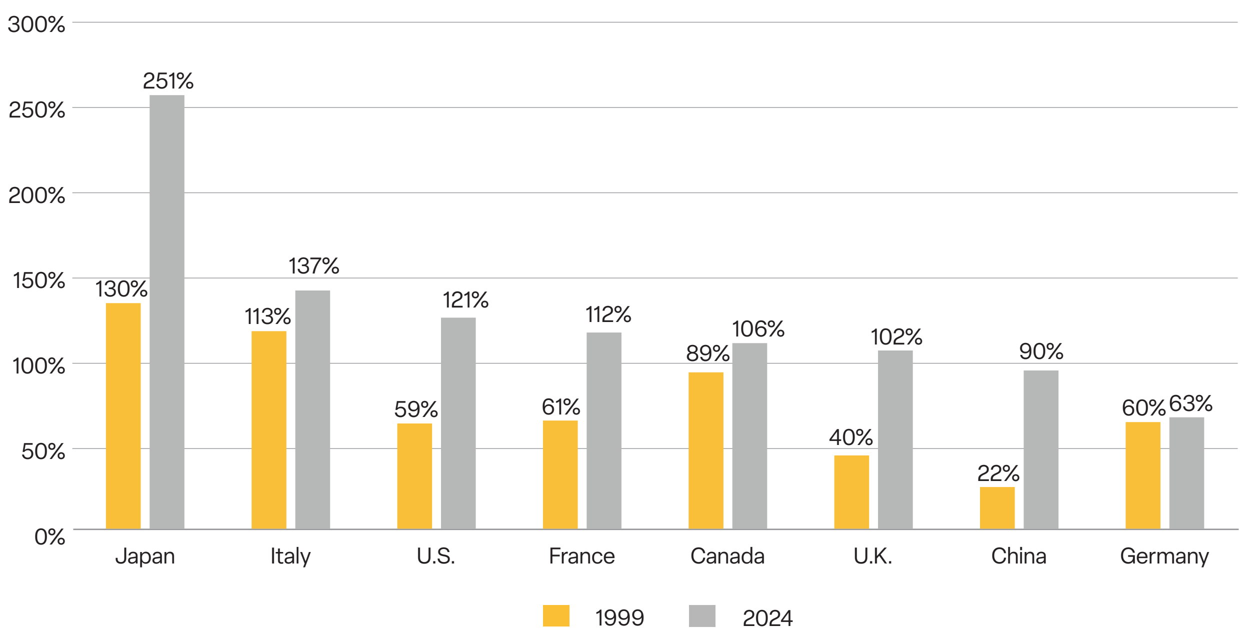
While bond investors are less concerned about rising policy rates, they are shifting their concern to the economic cycle and, especially, to the strength of government balance sheets. The demands of the Global Financial Crisis and the Covid-19 pandemic have resulted in debt burdens rising much more for governments than for corporates.

WHICH IS RISKIER—LENDING TO COMPANIES OR TO GOVERNMENTS?

U.S. corporate indebtedness has remained stable while government indebtedness has soared



Debt-to-GDP Ratio, G7 + China, 1999 & 2024

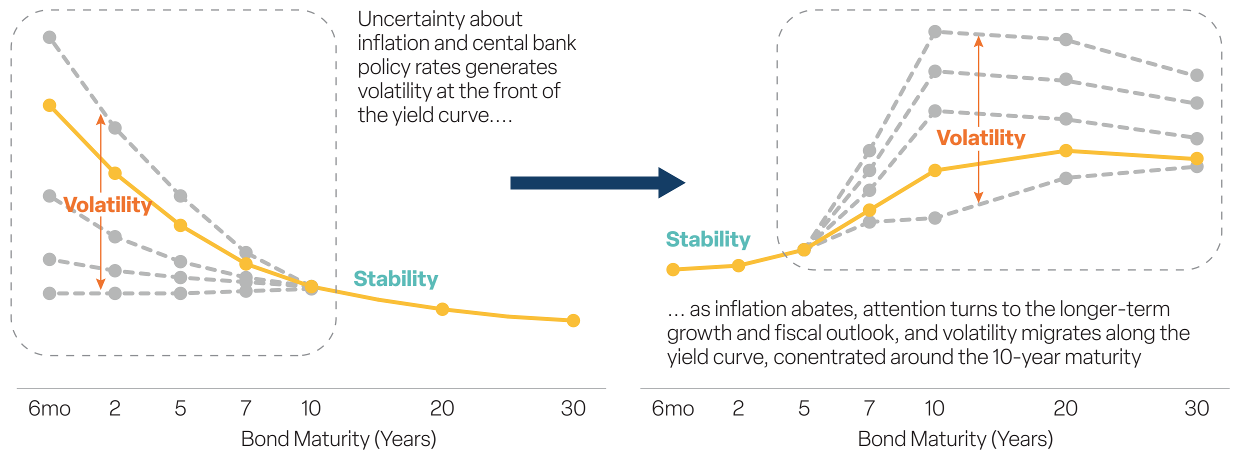


Source: World Bank, Bloomberg. Data as of February 10, 2025.

Government yield curves could therefore remain just as volatile as credit spreads. The difference, as we move from 2024 to 2025 and beyond, is that the volatility is migrating from short-dated yields (which tend to be the most sensitive to changing central bank rate expectations) to intermediate and longer-dated yields (which tend to be more sensitive to changing expectations of economic growth and the long-term path of government debt).

BOND MARKET VOLATILITY IS MIGRATING OUT ALONG THE YIELD CURVE

Volatility profile of an illustrative bond yield curve, under inflation and monetary policy uncertainty and under growth and fiscal policy uncertainty



Source: Neuberger Berman. For illustrative purposes only.

Overall, we expect government bond yields to trade in a range during 2025, but with high volatility relative to their longer-term history; at the same time, we expect corporate credit spreads to remain tight and exhibit low volatility, relative to their longer-term history. We anticipate dynamic fluctuations in relative value between these two sectors, and within them.

Evolving Strategies

As investors return to fixed income they should do so with strategies fit for this dynamic risk environment. We think that means embracing a flexibility that goes beyond traditional bond investing: the ability to hold back meaningful "dry powder" for opportunistic trading and investment; and the willingness to use every available lever for active management.

1 Beyond The "Single-Lever" Approach

Whether your aim is to add diversifying ballast to your exposures with core investment grade bonds, or to seek income from an expanded credit allocation, we see great potential advantage in integrating the management of interest rate and credit risk in a single portfolio.

Traditionally, managing interest rate risk has been the preserve of government bond strategies. Corporate bond strategies have focused on credit risk, usually with the interest rate risk maintained close to that of the strategy's corporate bond benchmark index. We think both levers should be available for active management.

What do we mean by managing interest rate risk? Imagine buying a newly issued bond that pays an interest rate (or "coupon") of 4%. Now imagine that economic conditions change, perhaps to the extent that the central bank raises its policy rate, and investors will only buy a newly issued bond with the same maturity date if it pays a coupon of 5%. If you want to sell your bond, you will have to do so at a discount that turns its 4% coupon into a 5% yield. When prevailing market interest rates and yields rise, the prices of existing fixed-coupon bonds fall to match them; and when rates and yields fall, the prices of existing bonds rise.

This interest rate sensitivity is referred to as "duration" and it is measured in years because the level of sensitivity is determined by how far into the future a bond's cash flows are due. Longer maturities mean longer duration, as do lower coupons (because they make the repayment of principal at maturity the bond's most significant cash flow). Roughly speaking, the value of a bond with a duration of 10 years will fall/rise about 10% when its yield rises/falls by one percentage point.

In today's environment, where interest rate volatility is migrating from the short end of the yield curve to its longer-dated points, short duration bonds could be attractive: their yields remain relatively high because central bank policy rates remain high, but they may also present lower volatility and a higher likelihood of rising prices.

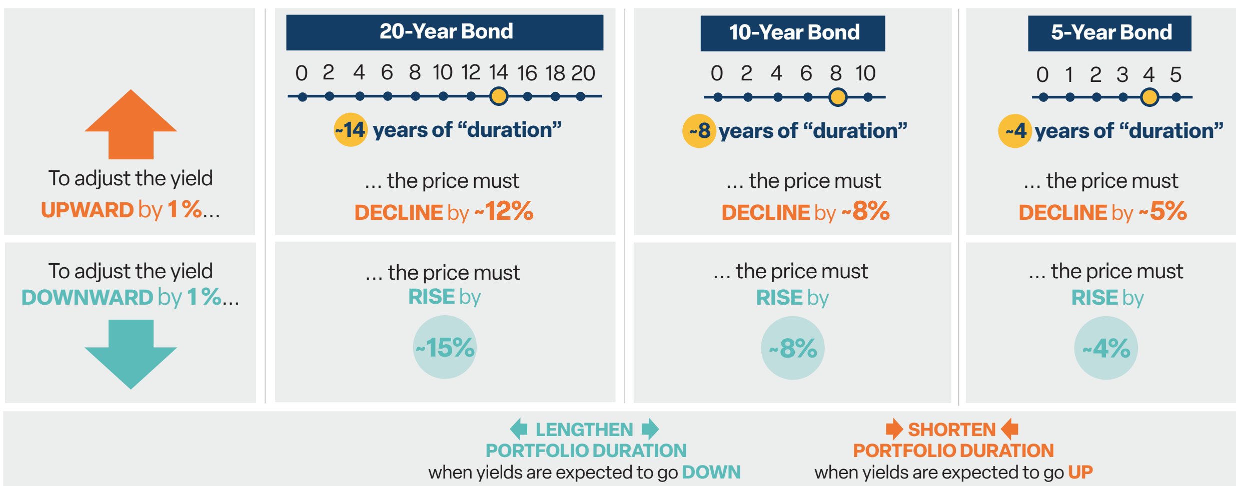
Many sectors in an extended credit universe, such as loans and mortgages, have floating rather than fixed rates. Adding floating rates to a portfolio of fixed-coupon bonds can diversify and mitigate its exposure to interest rate volatility.

More generally, higher volatility in interest rates relative to credit spreads supports the case for a more active approach to managing duration—to mitigate volatility, but also to take advantage of opportunities for incremental return.

We believe the current conditions call for an approach that integrates credit and interest rate risks: flexibility should mean not only expanding the universe of credit sectors you invest in, but expanding the set of risks that are actively managed. In both cases, we think this can be achieved by bringing a range of fixed income sectors together into a single mandate or vehicle rather than taking the more traditional approach of allocating to separate, single-asset class strategies.

TIME AND TIDE—MANAGING BOND PORTFOLIO DURATION

The effect of duration on three illustrative Treasury bonds, all paying a 4% coupon and currently trading at face value



Source: Neuberger Berman. For illustrative purposes only.

2 Beyond Investment Grade Bonds

Going beyond the "single-lever" approach isn't just about being more active with interest rate risk in investment grade credit. We think most investors can also benefit from expanding their fixed income universe, either by investing in additional sectors or allocating to fully flexible multi-sector strategies.

Those who mainly hold government bonds may benefit from expanding into credit sectors, and those who mainly hold investment grade may benefit from expanding into high yield and other credit markets—especially if their objective is to add income rather than ballast to portfolios. They will receive the same elevated yields with a moderate additional credit spread, but given the current relative debt burdens of the government and corporate sectors, this need not imply greatly increased risk or volatility.

While credit spreads are tight in many corporate bond markets, it is possible to find better value in markets that are less well researched, or a little less liquid, or subject to idiosyncratic dynamics. Navigating the current landscape is all about eking out incremental credit spread as it appears across a complex and diverse set of sectors.

In our view, that requires an integrated approach to assessing relative value between those sectors, and the ability to move nimbly among them. This can be achieved by bringing all these sectors together into a single mandate or vehicle rather than taking the more traditional approach of allocating to separate, single-asset class strategies.

EXTENDING YOUR CREDIT UNIVERSE—THREE OPPORTUNITIES

1. Asset-backed securities (ABS), including collateralized loan obligations (CLOs) and commercial mortgage-backed securities (CMBS)

- Backed by diverse portfolios of loans, ranging from various forms of consumer credit to corporate lending
- Cash flows descend in a waterfall to different "tranches," each presenting progressively higher credit risk
- The tranches of these securities can offer higher yields than bonds with the same credit risk and rating

2. Residential mortgages

- Accessed directly, or via securitizations, including securitizations structured by U.S. government agencies, in the form of (agency) mortgage-backed securities (MBS)
- One of the key risks faced by investors in residential mortgages is that the borrower makes an early repayment of the loan to refinance at a cheaper rate; persistently higher mortgage rates are significantly mitigating that risk

3. Corporate hybrid securities

- "Hybrids" have characteristics of both a bond and an equity share
- These characteristics make them subordinate to a standard, senior bond issued by the same company
- Higher yields compensate for subordination—typically higher than one would expect for the extra risk involved
- Most hybrid issuers are high-quality, investment grade companies
- Hybrids are a way to seek higher yield from a riskier part of a high-quality issuer's capital structure rather than from riskier issuers

3 Beyond Home Markets

Another set of risks that can be expanded and diversified is regional and country risk.

Taking just investment grade corporate bonds as an example, even an investor in the large U.S. market goes from a $7tn to a $13tn universe when they add the rest of the global market. For a European investor, going global quadruples their $2.8tn universe.

Different regions have different issuers, a different balance of sectors, and are often at different points in their economic cycles, resulting in notable dispersion in their calendar-year returns.

On average, since 2015, there were more than seven percentage points of difference between the returns of the top- and bottom-performing markets. The biggest difference was 11.2 percentage points, between the sterling and U.S. dollar markets in 2016. U.S. investors might note that the U.S. dollar market was the most frequent bottom performer, whereas the sterling market was the most frequent top performer and the euro market was never the bottom performer.

REGIONAL CREDIT MARKETS CAN LEAD ONE YEAR AND LAG THE NEXT

Calendar year total returns, in U.S. dollars, for seven individual credit markets, 2015 – 2024

		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CHF	BEST	3.3%	12.8%	5.9%	3.7%	12.8%	10.2%	-0.1%	-7.3%	12.2%	9.8%
CAD		2.7%	6.3%	4.8%	3.4%	11.2%	8.7%	-0.5%	-8.3%	10.8%	7.3%
JPY		1.3%	4.4%	4.4%	1.9%	9.4%	8.3%	-1.0%	-10.1%	10.6%	6.4%
AUD		0.7%	3.3%	4.3%	1.7%	8.5%	6.6%	-1.7%	-11.1%	9.9%	5.0%
GBP		0.0%	2.7%	3.0%	1.5%	7.7%	6.5%	-2.0%	-11.6%	7.9%	5.0%
EURO		-0.2%	2.6%	2.7%	-0.6%	7.3%	4.2%	-2.6%	-17.8%	7.4%	2.0%
USD	WORST	-0.9%	1.6%	2.5%	-5.3%	6.5%	2.6%	-3.1%	-18.1%	5.8%	0.3%

Source: Aladdin, Bloomberg. Data as of November 29, 2024. Indices used: Bloomberg Sterling Corporate Total Return Index (LC61TRGU); Bloomberg Euro Aggregate Corporate Total Return Index (LECPTREU); Bloomberg U.S. Corporate Total Return Index (LUACTRUU); Bloomberg Global Aggregate Corporate Index (LGCPTRUU). Indexes are unmanaged and are not available for direct investment. Nothing herein constitutes a prediction or projection of future events or future market behavior. Historical trends do not imply, forecast or guarantee future results. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed or any historical results. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

4 Beyond Liquid Markets

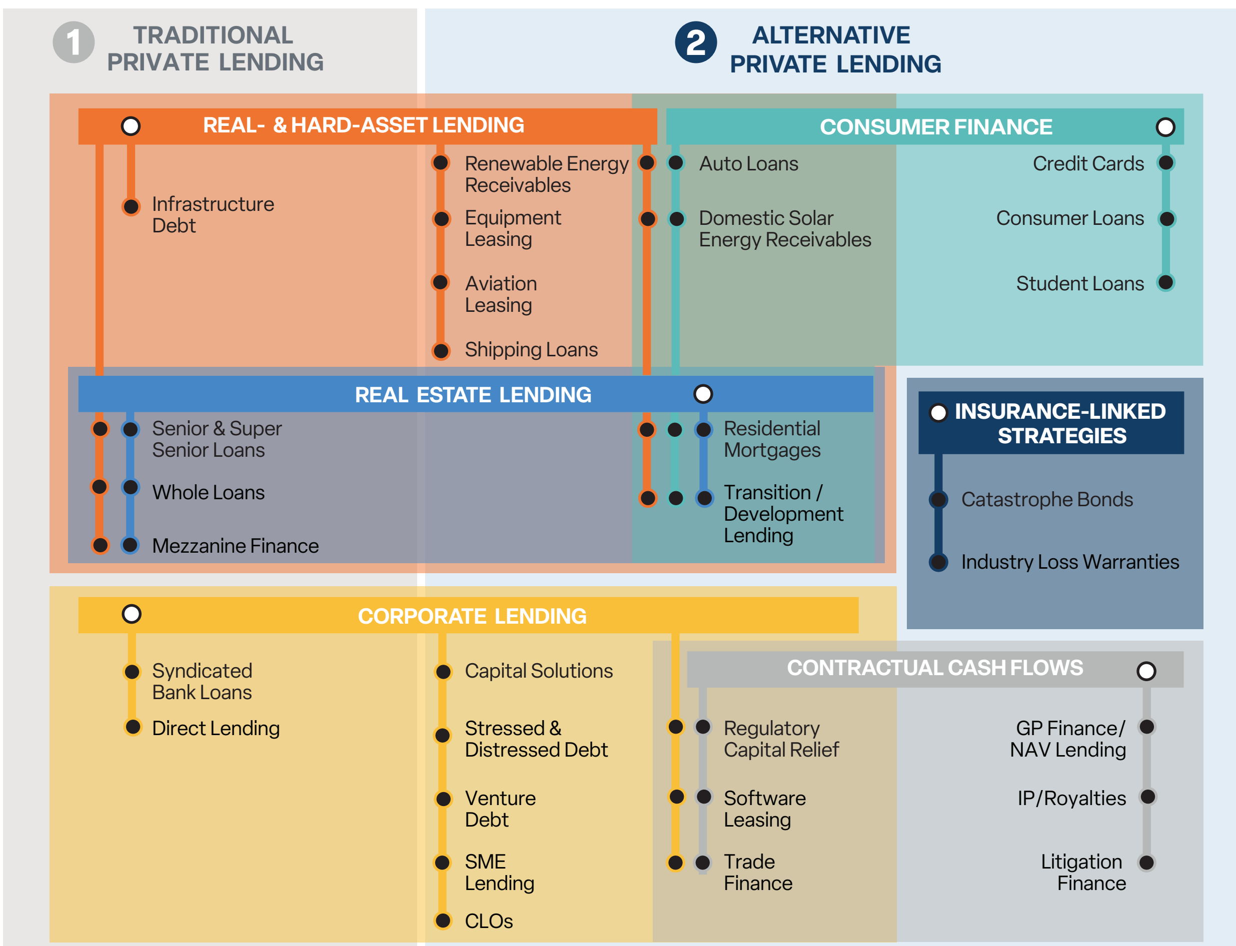
We have already mentioned the potential to find attractive value in markets that are less well researched, or a little less liquid, or subject to idiosyncratic dynamics.

Where suitable, investors who can expand further into illiquid private credit markets could benefit not only from additional illiquidity premia, but from meaningful additional diversification.

Traditional private lending to corporations can be complemented with different sectors (by lending against real estate or infrastructure, by leasing anything from office equipment to ships, or by assuming natural catastrophe reinsurance risk); different borrowers (by providing finance to homeowners, auto buyers, credit card holders, buy-now-pay-later consumers, students or litigators); and different structures (such as standard CLOs or the bespoke "asset-based lending" and "specialty finance" structures that are increasingly used to provide liquidity to niche lending markets). The liquidity profiles are also diverse: traditional private credit might require capital to be committed for several years, albeit with regular interest payments, but many asset-based lending structures are backed by "self-liquidating," short-term financing that amortizes within months or a couple of years.

UNLOCKING THE DIVERSITY OF PRIVATE LENDING

A growing and diverse universe of borrowers, collateral and lending structures



Source: Neuberger Berman. For illustrative purposes only.

Flexible Fixed Income for the Post-Inflation World

Many investors are returning to meaningful fixed income allocations, some for the first time in years. They do so in a transformed and dynamic environment, characterized by fluctuating risks and opportunities.

Whether the aim is to add diversifying ballast to exposures with core investment grade bonds, or to seek income from an expanded credit allocation, we believe there are advantages to expanding the set of risks that are actively managed.

In our view, all investors can benefit from actively managing the volatile interest rate risk embedded in credit portfolios. For those seeking income, we see a strong case for moving beyond investment grade into high yield and other credit markets; moving beyond home markets into global markets; and moving beyond liquid corporate credit into illiquid markets with a more diverse universe of borrowers.

Index Definitions

The **BofA Global Corporate Index** measures the market capitalization-weighted performance of public debt of investment-grade corporate issuers, issued and denominated in their own domestic market and currency.

The **BofA Global High Yield Index** tracks the performance of of USD, CAD, GBP and EUR denominated below investment grade, but not in default, corporate debt publicly issued in the major domestic or Eurobond markets, and includes issues with a credit rating of BBB or below, as rated by Moody's and S&P.

The **Bloomberg Sterling Corporate Total Return Index** is a broad-based benchmark that measures the investment grade, sterling-denominated, fixed-rate corporate bond market.

The **Bloomberg Euro Aggregate Corporate Total Return Index** is a broad-based benchmark that measures the investment grade, euro-denominated, fixed-rate corporate bond market.

The **Bloomberg U.S. Corporate Total Return Index** is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate corporate bond market.

The **Bloomberg Global Aggregate Corporate Index** measures the performance of corporate bonds from the Bloomberg Global Aggregate Bond Index, a broad-based, market capitalization-weighted bond market index representing intermediate term investment grade bonds traded worldwide.

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