Powering Index Solutions for a Changing Fixed Income Landscape

Structural Shifts Occurring across Bond Markets

Contributor

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There are indications that the era of ultra-low yields may be behind us. Fixed income markets are now operating in a higher-yield environment, marking a structural departure from the decade that followed the 2008 Global Financial Crisis (GFC). The combination of higher bond yields, more persistent inflation dynamics and heightened geopolitical uncertainty has changed how market participants evaluate fixed income categories, compare risk and performance characteristics, and assess the tools used to measure bond markets. Yet amid this transformation, fixed income continues to be one of the largest and most dynamic segments of global capital markets, with innovation across public and private markets broadening the range of index, data and product solutions available to market participants.

In this paper, we examine four structural developments shaping fixed income markets:

- **Income as a key performance driver:** As tighter credit spreads limit opportunities for price appreciation, income has become a leading contributor to bond performance across asset types, which is supported by the highest yields in more than a decade.
- **Redefining core fixed income:** Shifting characteristics of sovereign bonds have elevated investment grade corporate credit's role in core bond universes.

- **Private markets are growing. Liquidity matters more:** As market participants allocate more capital to private credit, liquid fixed income instruments, particularly exchange traded funds (ETFs), are increasingly important for portfolio flexibility and liquidity management.
- **Evolving monetary policy and currency hedging dynamics:** The divergence in global central bank policy is creating a wider spread of outcomes across fixed income markets. Combined with changing currency-hedging economics, this has driven stronger returns in selected local bond markets and renewed investor interest in diversifying away from U.S. assets.

As these trends persist, market participants need tools to define, measure and compare fixed income universes. We also explore the role that transparent and objective indices, including S&P Dow Jones Indices' (S&P DJI's) comprehensive iBoxx® bond and loan indices, which launched 25 years ago, play in helping market participants classify assets, evaluate performance and analyze evolving dynamics.

At S&P DJI, one of our missions is to provide transparent, rules-based fixed income indices designed to measure bond and loan markets. By combining deep market capabilities across data and pricing, we design indices that aim to help market participants understand, track and monitor the trends shaping the global fixed income landscape. As fixed income markets continue to evolve, we convert fixed income market heterogeneity into a transparent, rules-based universe that can be measured, replicated and referenced consistently by every market participant.

Key Fixed Income Developments and How to Track Them with iBoxx Indices

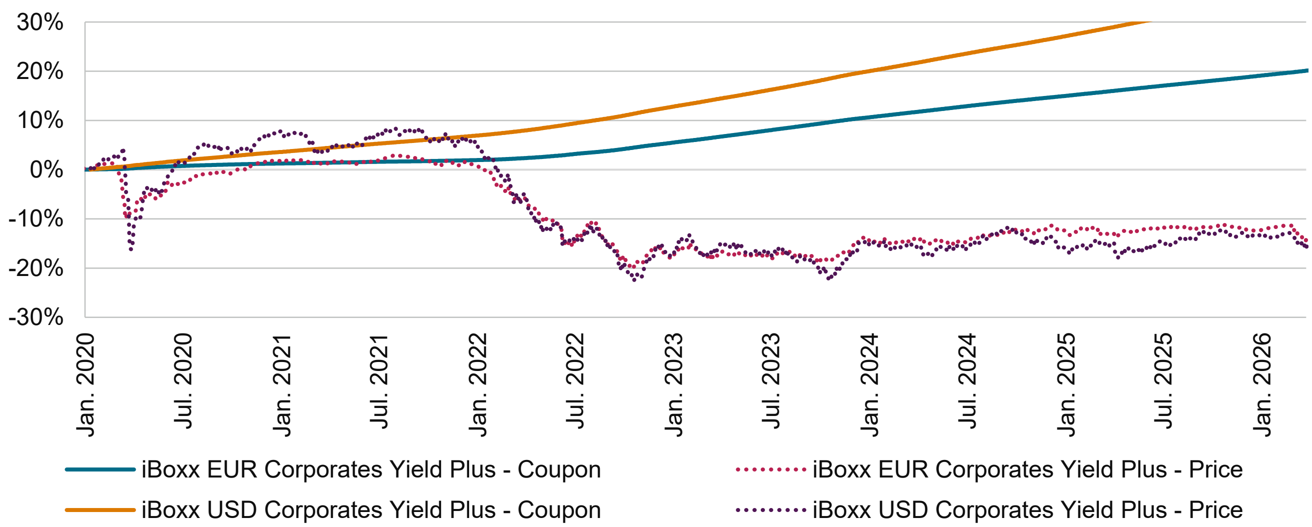
1. Income as a Key Performance Driver

With yields at materially higher levels than much of the post-GFC period and with tighter credit spreads, income has moved back to the center of how market participants evaluate bond and loan markets, making the source and structure of that income more important. In a space where price growth may be less significant and rate volatility can remain elevated, income has become an increasingly important component of performance.

The impact of an income-generating allocation is shaped not only by the level of yield it delivers, but also by how that source of income behaves alongside the rest of the portfolio, including its correlation, volatility and diversification characteristics. For example:

- **Enhanced core income:** Systematic tilted indices can apply rules that emphasize higher-yielding or wider-spread bonds while controlling for duration, credit quality and diversification. In the example shown in Exhibit 1, coupon income contributed positively to cumulative performance while price return detracted.
- **Consistent income:** Target-maturity indices are designed around bonds that mature in a specified year, allowing the income and maturity profile of the index to be measured over a defined horizon.
- **High income**: High yield and Additional Tier 1 bond indices aim to measure market segments with higher yields alongside greater credit and structural risks.
- **Differentiated income:** Collateralized loan obligation (CLO) and leveraged loan indices seek to measure floating-rate credit segments whose duration exposure and other risk characteristics differ from those of traditional fixed-rate bond indices. Transparent benchmarks can make these characteristics observable and comparable as loan-based credit markets develop.

Exhibit 1: Coupon, Not Price, Led Enhanced Core Performance



Source: S&P Dow Jones Indices LLC. Data as of May 31, 2026. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Understanding the drivers of income, and how they interact with portfolio risk, diversification and resilience, can inform a framework for evaluating fixed income opportunities in an increasingly diverse market landscape.

Index-based frameworks are designed to help make the diverse aspects of fixed income markets more observable and measurable, which is especially useful when income can come from different sources with varying risk features. The iBoxx indices aim to provide a comprehensive framework for evaluating fixed income categories across credit quality, maturity, duration, sector and structure. The index offerings span investment grade, high yield, floating-rate instruments, leveraged loans, securitized credit and other key market segments.

In an effort to support these varying use cases, iBoxx indices offer insight into broad fixed income ecosystems, ranging from broad market benchmarks to highly targeted index categories. Through both standard and customized index solutions, iBoxx indices offer data designed to compare categories across sectors, regions and risk factors using transparent, rules-based methodologies.

Featured Indices

iBoxx AUD Corporates Yield Plus Mid Price

- Designed to measure the performance of higher-yielding, AUD-denominated corporate bonds from the Australian domestic market with an iBoxx average rating between AAA and BB, with a minimum amount outstanding of AUD 200 million

iBoxx USD Liquid High Yield Index

- Designed to measure USD-denominated, high yield bonds that meet certain liquidity requirements, representing a broad view of the USD-denominated, high yield corporate bond universe

iBoxx Global Contingent Convertible Liquid Developed Market AT1 Index

- Designed to measure the performance of institutions' AT1 contingent convertible debt denominated in EUR, USD and GBP issued by entities domiciled in developed countries

S&P U.S. CLO Investment Grade Indices

- Designed to measure investment grade, USD-denominated, floating-rate CLO debt tranches from arbitrage CLOs that invest in broadly syndicated USD-denominated loans

2. Redefining Core Fixed Income

Evolving macroeconomic and market dynamics have challenged the traditional concept of core fixed income. Market participants have historically viewed government bonds as stabilizing market anchors, offering liquidity, high credit quality and diversification properties during equity market stress. More recently, high-quality sovereign bonds have experienced elevated volatility as inflation, rate uncertainty and monetary policy shifts have dominated market pricing.[1]

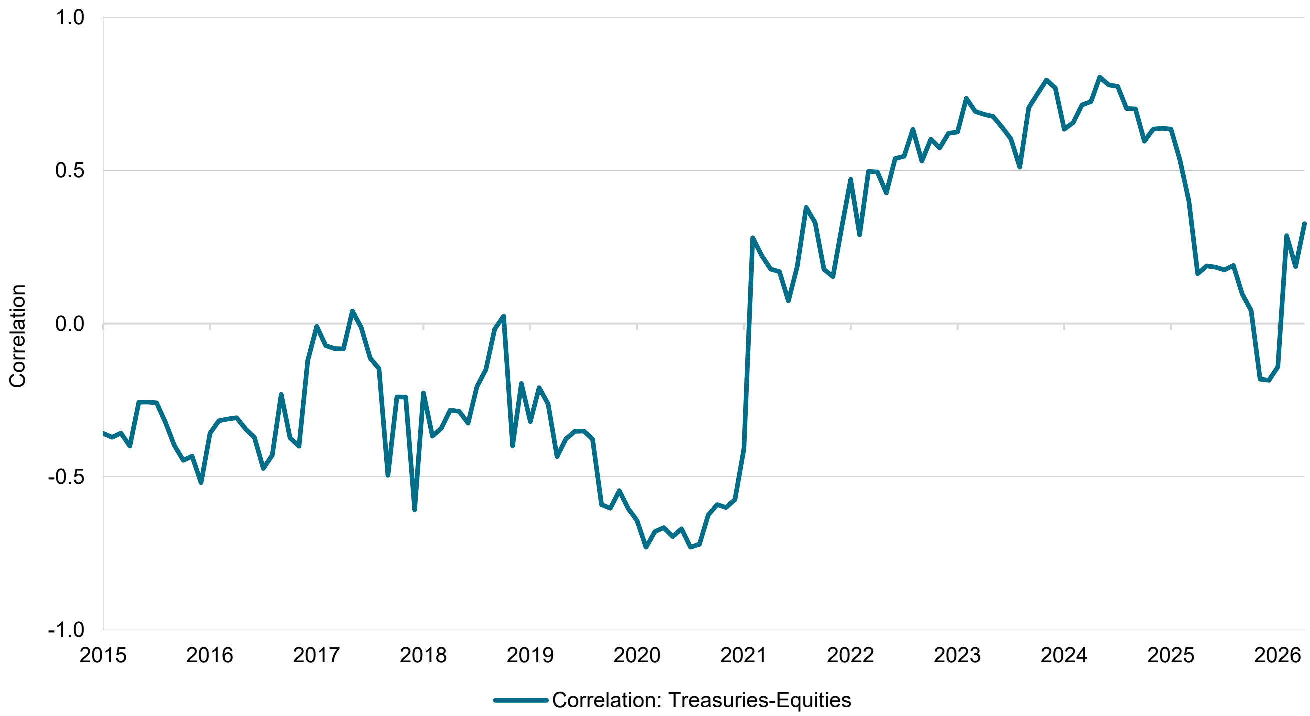
Credit quality and increasing government debt ratios have also come into focus. S&P Global Ratings noted that, while global sovereign credit quality stabilized in 2025, 2026 risks include

[1] S&P Global Ratings, "Global Credit Markets Update Q2 2026: Resilience Despite Pressure Beneath the Surface," April 29, 2026.

geopolitical tensions, domestic political polarization, rising developed market debt and funding costs. In developed Europe, S&P Global Ratings downgraded France to 'A+' from 'AA-' in October 2025, citing steady fiscal deterioration and reduced fiscal flexibility.[2] These developments have prompted market participants to reassess the traditional role of sovereign bonds, challenging the long-held view of government bonds as consistent, low-risk anchors within core fixed income portfolios.

Another important change has been the behavior of sovereign bonds relative to other asset classes. Correlations with equities have remained positive in recent years, weakening the diversification characteristics that many market participants have historically associated with government bonds. Their correlation to stocks rose meaningfully from prior levels—roughly 0.15–0.20 in 2021 to roughly 0.60–0.80 in 2022–2024 and surging again in 2026 (see Exhibit 2).

Exhibit 2: Equity-Government Bond Correlations Have Shifted Higher



Source: S&P Dow Jones Indices LLC. Data as of April 2026. Equities measured by the S&P 500. Treasuries measured by the iBoxx $ Treasuries Index. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

In response, many market participants have increased their focus on investment grade corporate credit, as index data show differences in income and risk characteristics relative to government bonds. Strong corporate fundamentals and low default rates relative to long-term history have supported higher yields, and historically corporate bonds have provided exposure

[2] S&P Global Ratings, "Global Sovereign Rating Trends 2026: Geopolitical Risks Could Destabilize Credit Quality Dynamics," Feb. 2, 2026.

to a broader set of performance drivers than sovereign debt.[3] Whereas government bonds are typically influenced by interest rates, inflation expectations and fiscal conditions, investment grade corporate bonds are also affected by issuer fundamentals and credit spread dynamics, creating distinct risk and performance characteristics.

Market participants have also increasingly adopted target-duration approaches to gain more precise exposure to specific segments of the yield curve. With the use of defined maturity ranges, these approaches measure the risk, yield and diversification characteristics of different parts of the bond market.[4]

As a result, the traditional definition of core fixed income is evolving. Broad bond categories can no longer be assessed solely through the lens of credit quality or historical diversification relationships. Market participants can now compare sectors based on their income potential, volatility, correlation characteristics, duration exposure and underlying sources of risk to better understand the evolving dynamics of each fixed income universe.

iBoxx indices aim to help market participants navigate this evolution through transparent, rules-based indices across sovereign and corporate bond markets. The iBoxx EUR series, for example, spans key segments including overall, eurozone sovereigns, collateralized, corporates and sub-sovereigns, while allowing further segmentation by rating, maturity and sector. This can enable market participants to analyze and compare the changing characteristics of fixed income markets with greater precision.

Featured Indices

iBoxx EUR Liquid Corporates Index

- Designed to measure the performance of investment grade, EUR-denominated liquid corporate bond universe

iBoxx USD Liquid Investment Grade Index

- Designed to measure the performance of liquid USD-denominated, investment grade bonds

[3] Source: S&P Global Ratings. Data as of March 31, 2026. Global corporate defaults totaled 24 in Q1 2026, which is below the five-year average.

[4] Yahoo Finance, "Target Maturity Bond ETFs Reach $70B as Vanguard Joins In," May 20, 2026.
iShares. "iShares® iBonds® 2026 Term High Yield and Income ETF (IBHF)," accessed Sept. 10, 2026.

3. Private Markets Are Growing. Liquidity Matters More.

Private markets are growing, which makes liquidity more valuable. As a result, market participants are placing greater importance on liquid implementation vehicles, particularly fixed income ETFs, to balance private market exposure with portfolio flexibility.[5]

Over the past decade, private credit has become an increasingly important component of the fixed income opportunity set, attracting capital from market participants seeking differentiated sources of income and diversification. As allocations to private markets have grown, however, portfolio liquidity has become a more important consideration. While private credit may offer additional yield potential, it is typically accompanied by reduced transparency, limited secondary market liquidity, less frequent pricing and longer investment horizons. As a result, market participants are evaluating not only the level of income generated by a portfolio, but also the liquidity profile of the assets that generate it.

This shift has elevated the importance of liquid public fixed income markets as a complement to private credit allocations. Rather than viewing public and private credit as competing exposures, many market participants increasingly view them as serving different portfolio functions: private markets as a source of differentiated return and income, and public markets as a source of liquidity, price discovery and portfolio flexibility.[6]

Within this landscape, fixed income ETFs have become a particularly important tool. Their exchange-traded structure allows market participants to access diversified bond exposures with intraday liquidity, making them increasingly useful for portfolio implementation, tactical asset allocation, cash management and liquidity provision. As private market allocations increase, ETFs can help market participants maintain portfolio flexibility while preserving access to fixed income exposures.[7]

The expanding role of fixed income ETFs has been supported by broader improvements in market infrastructure, including increased use of derivatives and electronic trading. These developments have strengthened the ecosystem surrounding public fixed income markets, enhancing price transparency and supporting secondary market liquidity across a wide range of bond sectors.[8]

Indices play a central role within this ecosystem. Many of the world's largest fixed income ETFs are linked to iBoxx benchmark indices. As public and private credit markets continue to

[5] S&P Dow Jones Indices, "Private Credit Is Evolving, How Are Benchmarks Keeping Pace?" Sept. 9, 2026.
S&P Dow Jones Indices, "How and Why Institutions Are Evolving Their ETF Usage," Aug. 27, 2026.

[6] S&P Dow Jones Indices, "2025 Fixed Income Index Products Report: Credit Overview," Feb. 16, 2026.

[7] S&P Dow Jones Indices, "How and Why Institutions Are Evolving Their ETF Usage," Aug. 27, 2026.

[8] S&P Dow Jones Indices. Data from Jan. 1, 2016, to Dec. 31, 2025. Based on iBoxx USD Liquid High Yield Index traded volumes, year-end open interest, and total return swap volumes. Past performance is no guarantee of future results.

evolve, liquidity-aware index frameworks can help market participants identify, measure and compare tradable fixed income segments.

iBoxx indices support the measurement of different fixed income segments through objective eligibility criteria related to liquidity, amount outstanding, maturity and bond characteristics, underpinned by robust pricing and data standards. These capabilities seek to allow market participants to analyze liquid fixed income segments consistently while tailoring views to specific investment, liquidity or regulatory requirements.

At the same time, iBoxx indices can be complemented by the S&P Lincoln Senior Debt Index Series, which is designed to measure private senior debt markets in the U.S. and Europe. Together, these index series may provide a more holistic framework for analyzing both public and private credit markets, as well as enable the evaluation of the trade-offs among income, risk and liquidity across the full fixed income universe.

Featured Indices

S&P Lincoln U.S. Senior Debt Index and S&P Lincoln Europe Senior Debt Index

- Designed to measure the total return of illiquid senior debt facilities, defined as a first lien loan, second lien loan and Unitranche loan, issued primarily to sponsored companies (i.e., private equity owned) in the U.S. and Europe

iBoxx EUR Overall

- Designed to measure the performance of investment grade, EUR-denominated bonds from sovereign, sub-sovereign, corporate and collateralized issuers, without restrictions on issuer domicile

iBoxx USD Overall

- Designed to measure the performance of investment grade, USD-denominated bonds, with broad coverage of the USD bond universe while upholding minimum standards of investability and liquidity

4. Evolving Monetary Policy and Currency-Hedged Dynamics

Historically, the U.S. Federal Reserve set the precedent for global central banks to follow. That U.S.-led alignment, however, has deteriorated over the past several years. Diverging economic paths across the U.S., Europe, Japan and the U.K. have created notable differences in yield curves, currency exchange rates and local bond market behavior.[9] While market participants have traditionally looked to hedged currency universes to account for currency

[9] S&P Global Market Intelligence, “Monthly Macro Monitor,” June 16, 2026.

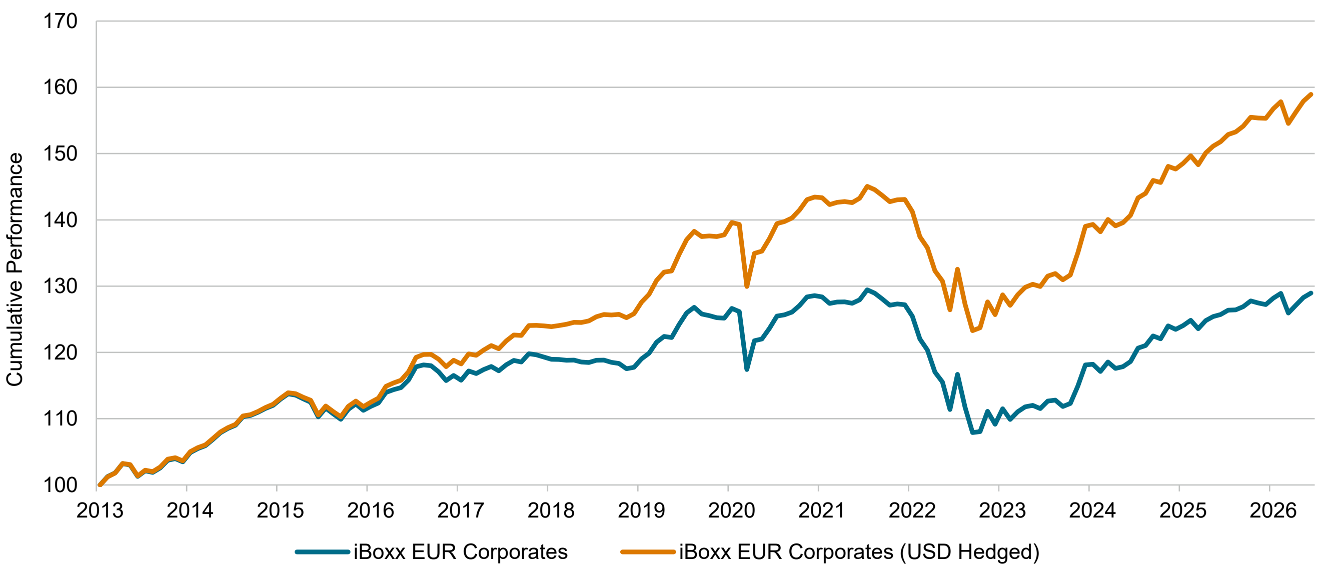
risk, this dynamic is changing. Evolving global monetary policy has increased the relevance of evaluating currency risk as a performance driver.

Performance and risk profiles can differ significantly when local bond markets are measured in local, unhedged or hedged terms. Currency-hedged fixed income indices can help distinguish between local bond market performance and currency movements, particularly when interest rate differentials and foreign exchange changes are important contributors to results.

For example, in European investment grade corporate bond indices, USD-hedged versions have outperformed the unhedged local versions. The key driver of the performance gap has been currency movements rather than the underlying corporate bonds (see Exhibit 3).

This illustrates a broader shift away from the more synchronized monetary policy environment that followed the GFC. As central banks responded to varying inflation and growth conditions, interest rates diverged across regions and became a more important driver of fixed income performance.[10]

Exhibit 3: Local Versus Currency-Hedged Corporate Bond Performance



Source: S&P Dow Jones Indices LLC. Data as of June 2026. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Index Solutions for Brazil

Brazil highlights why index methodologies may help market participants distinguish between bond and currency effects. While local markets may offer different yields, USD-denominated corporate bond indices provide a separate measure from local bond markets. Currency

[10] S&P Global Market Intelligence, "Monthly Macro Monitor," June 16, 2026.

hedging can have a significant impact on measured performance and volatility. This has led to the emergence of more sophisticated market-tracking approaches that combine local cash positions, USD credit and BRL-USD derivatives, allowing credit, duration and currency risk to be measured separately, and allowing for isolation of specific asset and currency dynamics. These considerations are increasingly being reflected in index construction, where methodologies can be tailored to isolate or combine duration, credit and currency exposures to reflect specified index objectives and risk characteristics.[11]

The iBoxx framework supports these comparisons through its comprehensive global and regional fixed income index suite, including currency-hedged and unhedged variants that help market participants separate local market performance from foreign exchange effects. In recent years, cross-region fixed income comparisons have become more relevant, particularly when local market performance and currency effects produce different results. As monetary policy paths have diverged across major economies, with markets such as Japan following a markedly different trajectory than the U.S. and Europe, local yield curves, currency markets and hedged performance profiles have become more differentiated.[12]

The breadth of the iBoxx indices can enable market participants to measure and compare fixed income categories across geographies, sectors and currencies, providing transparency into how local bond markets behave both before and after hedging effects are considered. This supports more consistent cross-market analysis in an increasingly global and differentiated fixed income landscape.

Featured Indices

iBoxx USD Liquid High Yield Interest Rate Hedged Index

- Designed to measure the duration hedged performance of USD denominated high yield corporate debt

iBoxx Asian Local Bond Index (ALBI) (USD Unhedged)

- Designed to measure Asia's local currency bond markets and regional fixed income opportunities beyond traditional USD and EUR markets

iBoxx USD Liquid High Yield BRL Hedge Carry Index

- Designed to measure the performance of a 30/70/-70 cash/bond/futures strategy between the CETIP interbank rate (DIAR), the iBoxx USD High Yield Liquid Grade Index (BRL) TR and the S&P/B3 BRL-USD Mini Futures Index (BRL) ER

iBoxx USD Liquid Investment Grade BRL Hedge Carry Index

[11] S&P Dow Jones Indices, "Navigating Brazil's Currency Volatility with USD Credit," Sept. 24, 2025.

[12] S&P Global Market Intelligence, "Monthly Macro Monitor," June 16, 2026.

- Designed to measure the performance of a 70/30/-30 cash/bond/futures strategy between the CETIP interbank rate (DIAR), the iBoxx USD Liquid Investment Grade Index (BRL) and the S&P/B3 BRL-USD Mini Futures Index (BRL)

From Pivotal Market Shifts to Established Index Frameworks

Fixed income markets are evolving in ways that are both structural and immediate. Higher yields, more volatile interest rate regimes, changing correlation patterns, diverging monetary policies, the growing importance of income and increasing attention on liquidity are reshaping how market participants evaluate fixed income opportunities.[13]

These developments reinforce the importance of looking beyond traditional asset class labels and historical assumptions. As fixed income opportunity sets expand, market participants are increasingly focused on understanding the sources of income, the drivers of risk and the role different segments can play within a broader fixed income universe. Measuring these characteristics consistently requires transparent, rules-based frameworks that can define markets, facilitate comparison and provide a common language for evaluating an increasingly diverse fixed income landscape.

Against this backdrop, indexing provides tools through which market participants may analyze and compare evolving fixed income trends.

Over its 25-year history, the iBoxx index suite reflects both the history and ongoing transformation of global bond markets. From traditional benchmark construction to supporting ETFs, derivatives and customized index solutions, the iBoxx indices provide a comprehensive framework designed to measure fixed income markets across regions, sectors, maturities and risk profiles. As the asset class continues to evolve, these tools may help understand and respond to the market dynamics shaping the future of fixed income investing.

The iBoxx index methodology framework is designed to evolve as markets change. Through its Annual Index Review process, S&P DJI assesses whether index rules, eligibility criteria and classification frameworks remain aligned with market conditions and participant needs. The review is informed by client engagement, advisory panels, market interactions and formal consultations where appropriate, with focus areas including eligibility criteria, classification frameworks, rating treatment, bond-type inclusion rules, liquidity thresholds and broader market structure developments. Approved changes are communicated to the market and implemented through updates to index rules and files. This process helps support the

[13] S&P Global Ratings, "Global Credit Markets Update Q2 2026: Resilience Despite Pressure Beneath the Surface, April 29, 2026. S&P Global Market Intelligence, "Monthly Macro Monitor," June 16, 2026.

continued evolution of the iBoxx indices, which have adapted alongside fixed income markets since their launch 25 years ago.

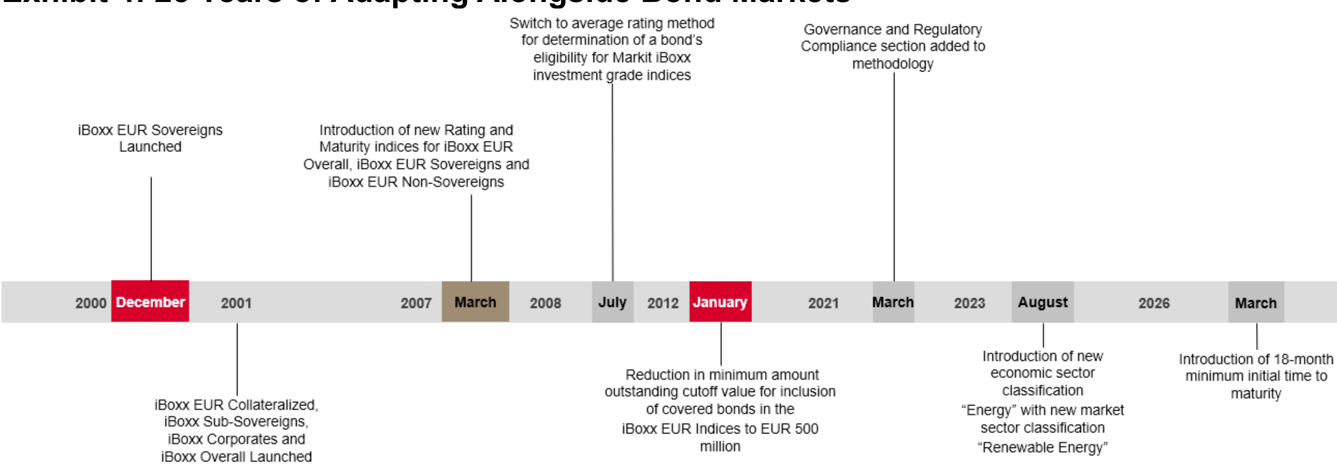
The importance of adaptable measurement frameworks is not new. Over the past 25 years, the iBoxx platform has evolved alongside the fixed income markets it was designed to measure.

iBoxx: 25 Years of Evolving with Fixed Income Markets

For over 25 years, iBoxx indices have adapted to structural changes in the fixed income markets they were built to define and measure. At a time when the eurozone bond market was still coming together, this index platform was launched in 2000 with the introduction of the iBoxx EUR Sovereign Indices. In 2001, additional building blocks followed, including iBoxx EUR Collateralized, iBoxx Sub-Sovereigns, iBoxx Corporates and iBoxx Overall. These indices continue to provide clarity and insight into underlying eurozone bond dynamics.

Since then, the index methodology has been changed in an effort to help address market participants' challenges, evolving through market cycles. For example, during the eurozone sovereign crisis of 2012, the iBoxx investment grade methodology changed from using the lowest credit agency rating to using an average rating method for determining bond eligibility at a time when disagreements between agencies created volatility and liquidity concerns. In 2023, S&P DJI introduced a dedicated renewable energy sector classification as a distinct market segment—a key focus for many market participants as projects continue to expand in the space (see Exhibit 4).

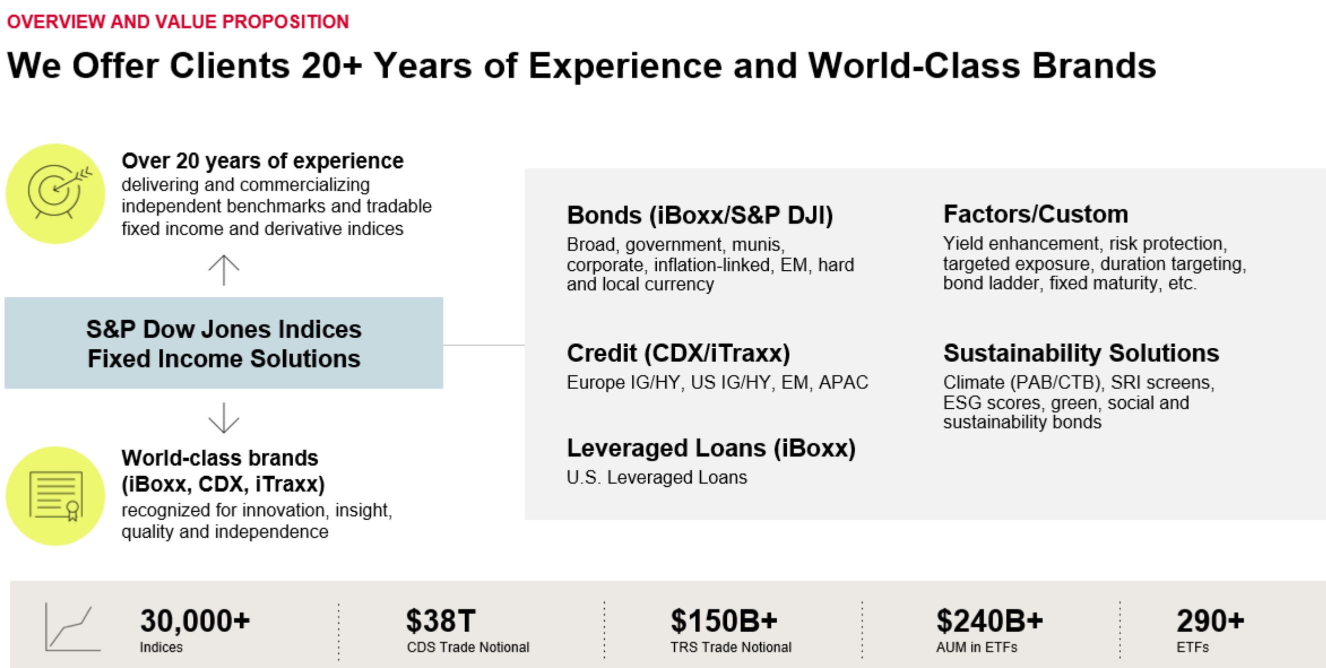
Exhibit 4: 25 Years of Adapting Alongside Bond Markets



Source: S&P Dow Jones Indices LLC. Data as of March 31, 2026. Chart is provided for illustrative purposes.

An understanding of this history is relevant because fixed income indexing is not static, and market measurement tools need to evolve as bond markets evolve. An index methodology can adapt as issuance patterns, sectors, regulation, liquidity and market participant needs change. The iBoxx bond and loan index ecosystem extends beyond individual indices, bringing together pricing and reference data, analytics and customization capabilities. As fixed income markets become more complex over the next 25 years and beyond, market participants need consistent tools to measure and compare fixed income categories with precision, transparency and methodological discipline.

To learn more about the iBoxx indices, visit spglobal.com/spdji.



Source: S&P Dow Jones Indices LLC. Data as of July 31, 2026. Chart is provided for illustrative purposes.

Supporting Fixed Income Clients with Indexing Capabilities

S&P DJI's fixed income product management team has decades of regional market and indexing knowledge across global bond and loan markets. The team provides information about S&P DJI's transparent, rules-based fixed income indices and methodologies.

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