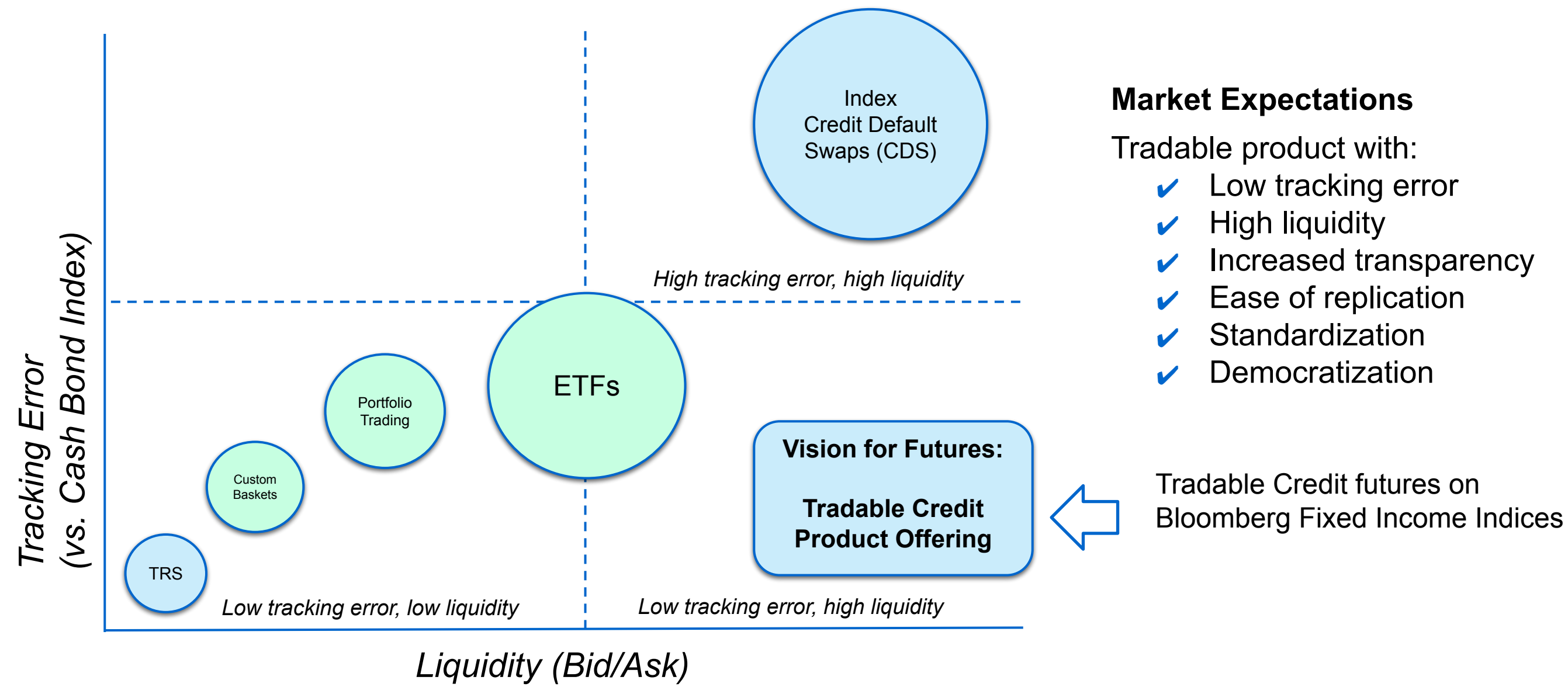


# Credit Futures on Bloomberg U.S. Corporate Bond Indices

# Tradable Credit Product Ecosystem – Liquidity vs. Tracking Error



Source: Bloomberg

# Tradable Credit Product Comparison

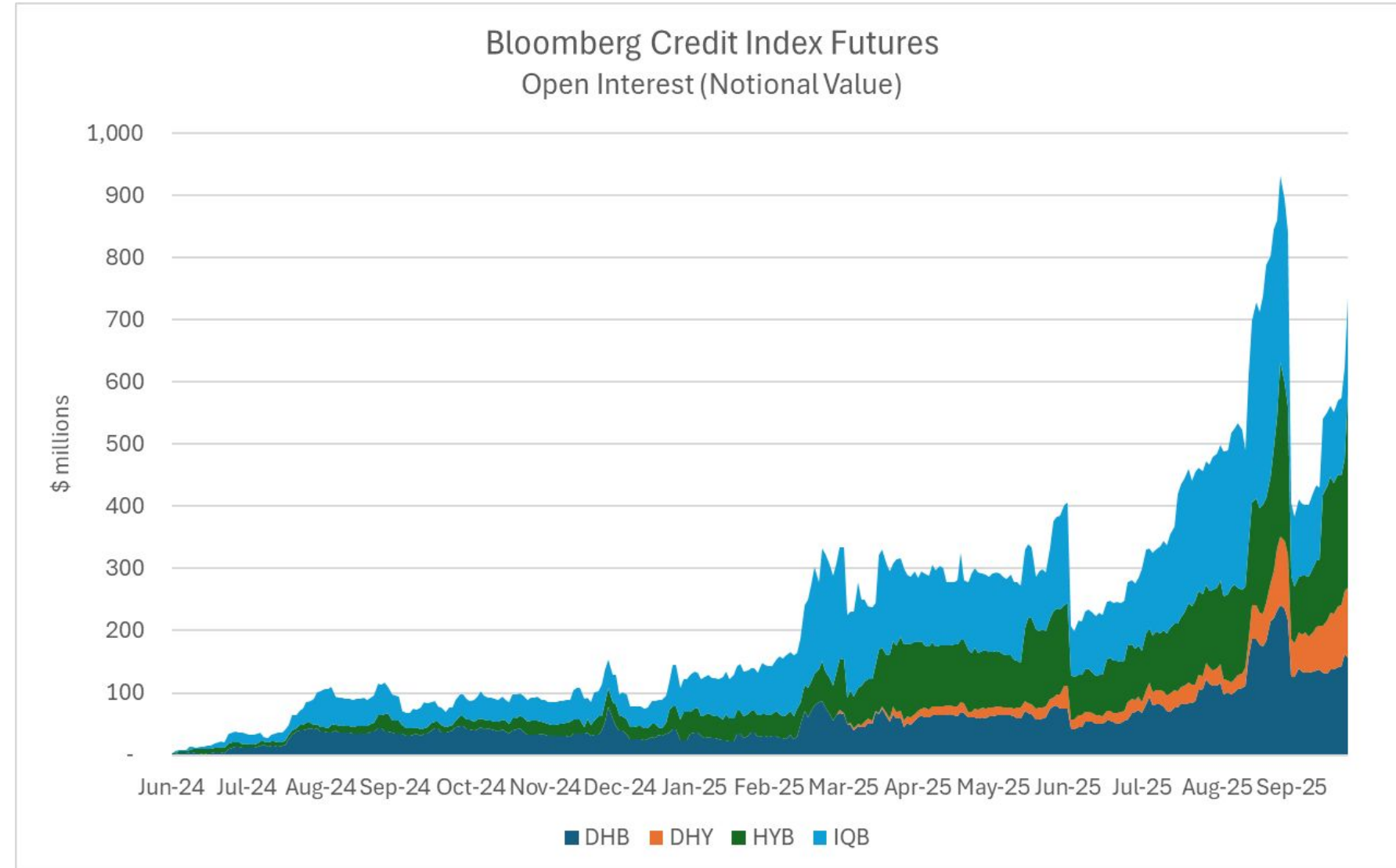
|                           | CME Credit Futures | ETFs                   | TRS   | CDX    |
|---------------------------|--------------------|------------------------|-------|--------|
| <i>Return</i>             | Total or Spread*   | Total                  | Total | Spread |
| <i>Unfunded</i>           | ✓                  | ✗                      | ✓     | ✓      |
| <i>Interest Rate Risk</i> | ✓                  | ✓                      | ✓     |        |
| <i>Can be shorted</i>     | ✓                  | Borrow must be located | ✓     | ✓      |
| <i>Exchange Traded</i>    | ✓                  | ✓                      |       |        |

## Value Propositions of Exchange-Listed Futures

- Leveraged exposure to the total return of the index with coupons reinvested
- Transparent order book with the ability to execute block trades bilaterally
- Centrally cleared with low trading and clearing costs
- Capital efficient margin offsets with significantly correlated products\*\*
- No annual management fees
- No ISDA agreements across numerous counterparties

# Activity Since Launch

- ADV over 2,900 contracts in Q3 2025
- Open interest exceeding 6,800 contracts (over \$730M notional) as of Oct 10, 2025
- Blocks and derived blocks complement best-in-class CLOB liquidity
- Customer segments that have traded:
  - Asset Managers
  - Hedge Funds
  - Banks
  - Non-Bank Broker-Dealers
  - PTFs
- Over 580,000 contracts traded since launch as of Oct 10, 2025



*\*Chart data through October 10, 2025.*

# CME Total Return Credit Futures – Contract Specifications

| Contract Specifications                 | Bloomberg U.S. Corporate Investment Grade Index Futures   | Bloomberg U.S. Corporate High Yield Very Liquid Index Futures  |
|---|---|--|
| Currency                                | USD   | USD  |
| Commodity Code                          | Outright: IQB    BTIC: IQBT   | Outright: HYB    BTIC: HYBT  |
| Underlying Index                        | Bloomberg U.S. Corporate Investment Grade Index   | Bloomberg U.S. Corporate High Yield Very Liquid Index (VLI)  |
| Index Ticker (Bloomberg)                | LUACTRUU Index  | LHVLTRUU Index   |
| Index Description                       | The contracts track the Bloomberg U.S. Corporate Investment Grade Duration Hedged Index, which is a duration-hedged version of the Bloomberg U.S. Corporate Bond Index, a broad benchmark of investment grade, fixed rate, taxable bonds. | A component of the US Corp High Yield Index designed to track a more liquid component of the USD, high yield, fixed-rate corporate bond market. Index uses the same eligibility criteria as the US Corp HY Index but includes only bonds that have a minimum amount outstanding of USD500mn and less than 5 years from issue date. |
| Contract Unit                           | 30 x Index Points   | 150 x Index Points   |
| Approximate Notional                    | ~\$100,000  | ~\$100,000   |
| Minimum Price Increment                 | 1/2 of 1 Index points (0.50 = \$15.00)  | 1/10 of 1 Index points (0.10 = \$15.00)  |
| Price Quotation                         | Index Points  |  |
| Minimum Block Size                      | 50 contracts = ~\$5mm in notional   |  |
| Listing Schedule                        | Nearest 3 March Quarterly Months  |  |
| Last Trading Day / Final Settlement Day | Last trading day is the business day before the third Wednesday of the contract delivery month<br>Final settlement day is the exchange business day immediately following the last trading day  |  |
| Daily Settle (mark-to-market)           | 4:00 ET (note: Rates F&O are settled at 3:00 while cash indexes are marked at 4:00)   |  |
| Final Settlement                        | Cash settled to the closing Index Value   |  |

# CME Duration-Hedged Credit Futures – Contract Specifications

| Contract Specifications                 | Bloomberg U.S. Corporate Investment Grade Duration-Hedged Index Futures  | Bloomberg U.S. Corporate High Yield Very Liquid Duration Hedged Index Futures   |
|---|--|---|
| Currency                                | USD  | USD   |
| Commodity Code                          | Outright: DHB  | Outright: DHY   |
| Underlying Index                        | Bloomberg U.S. Corporate Investment Grade Duration Hedged Index  | Bloomberg U.S. Corporate High Yield Very Liquid Duration Hedged Index   |
| Index Ticker (Bloomberg)                | I30287US   | I39131US  |
| Index Description                       | The index combines the LUACTRUU Index with an index of key rate duration-weighted short positions in Treasury futures across the curve (rebalanced monthly) to hedge duration                  | The index combines the LHVLTRUU Index with an index of key rate duration-weighted short positions in Treasury futures across the curve (rebalanced monthly) to hedge duration |
| Contract Unit                           | 500 x Index Points   | 750 x Index Points  |
| Approximate Notional                    | ~\$100,000   | ~\$100,000  |
| Minimum Price Increment                 | 1/20 of 1 Index points (0.05 = \$25.00)  | 1/50 of 1 Index points (0.02 = \$15.00)   |
| Price Quotation                         | Index Points   |   |
| Minimum Block Size                      | 50 contracts = ~\$5mm in notional  |   |
| Listing Schedule                        | Nearest 3 March Quarterly Months   |   |
| Last Trading Day / Final Settlement Day | Last trading day is the business day before the third Wednesday of the contract delivery month<br>Final settlement day is the exchange business day immediately following the last trading day |   |
| Daily Settle (mark-to-market)           | 4:00 ET (note: Rates F&O are settled at 3:00 while cash indexes are marked at 4:00)  |   |
| Final Settlement                        | Cash settled to the closing Index Value  |   |

# Why timing is right for Credit futures from CME Group and Bloomberg

- **Credit markets continue to expand and trade electronically**

- US Corporate Bonds have \$46 billion daily volume in 2025 alongside growth in ETFs, Portfolio Trading, and other products.
- IG now 48% electronic, up from 20% six years ago at the start of 2019.

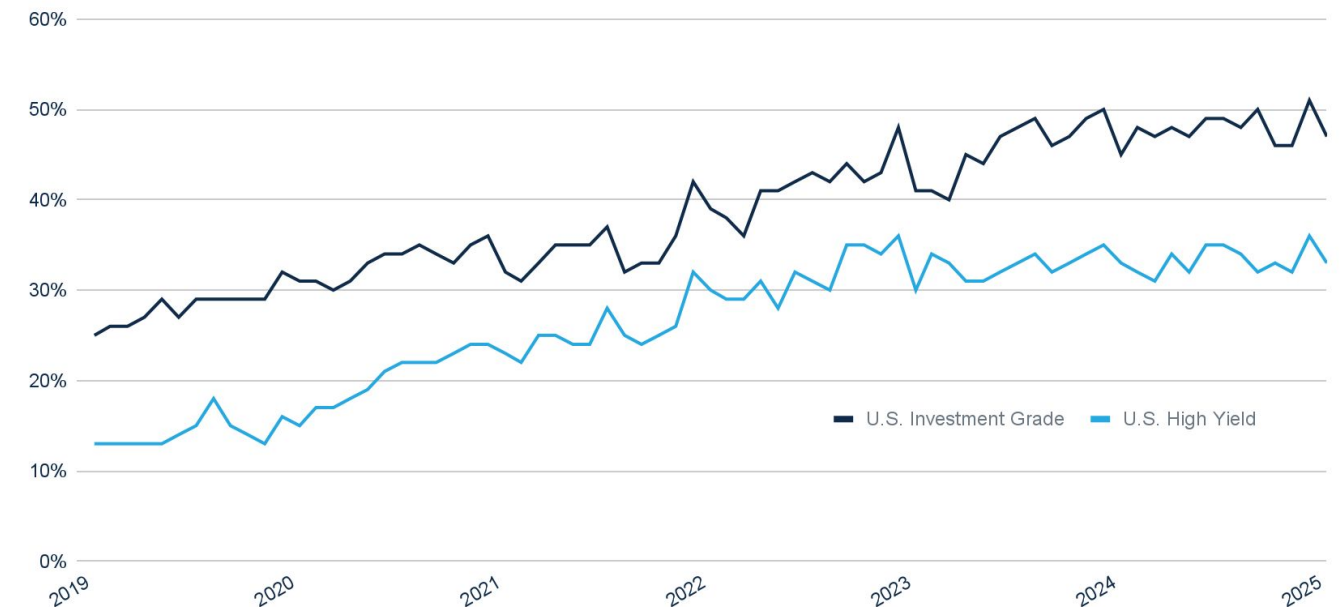
- **CME Group is the world's largest derivatives exchange**

- US Treasury Futures have grown to over \$770 billion in daily volume (larger than the underlying cash Treasury market) with strong participation from institutional investors globally.
- Margin Offsets up to 75% for IG credit futures/Treasury futures and up to 60% for HY futures/S&P futures (subject to revision based on latest available data).

- **Bloomberg is the ideal index provider**

- #1 index provider for Fixed Income ETFs and over \$6 trillion of AUM benchmarked by public funds
- Broad range of capabilities, from market data to distribution
- Unique Terminal analytics to support the execution and portfolio management of Credit Futures
- Real-time pricing of US corporate bonds

E-Trading Over Time - Corporate Bonds





# CME Credit Index Futures – Market Usage

## Potential Users

Pensions /  
Endowments

Insurance  
Companies

CTAs

Prop Trading  
Firms

Banks

Asset Managers

Mutual Funds

## Potential Use Cases



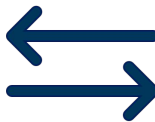
### Liquidity Management

- Quickly gain exposure to advantageous market moves - deploy capital quickly to reduce cash drag / efficiently liquidate holdings to pay portfolio liabilities.
- Use corp bond index futures as a 'liquidity sleeve' for smooth cash management for both mutual funds and ETFs.



### Express Tactical View

- Quickly express short-term views on the market or take advantage of expected changes in market conditions utilizing corp bond index futures.
- Employ tactical portfolio overlays that provide market specific exposures (sectors, target duration).



### Portfolio Hedging

- Manage investment risks (interest rate/credit) by executing hedging transactions with strong negative correlation due to low tracking error.
- Temporarily reduce market exposure or employ a macro-hedge efficiently with derivatives on corp bond indices.



### Relative Value Trading

- Identify and capture arbitrage opportunities through relative value trading across corp bond index derivatives and other index-linked beta products.
- Intraday indicative pricing of liquid, tracker indices can support the identification of mispricing across credit instruments.



# CME Group is the natural home for U.S. Credit Index Futures

- **CME Group is the largest exchange for fixed income derivatives**

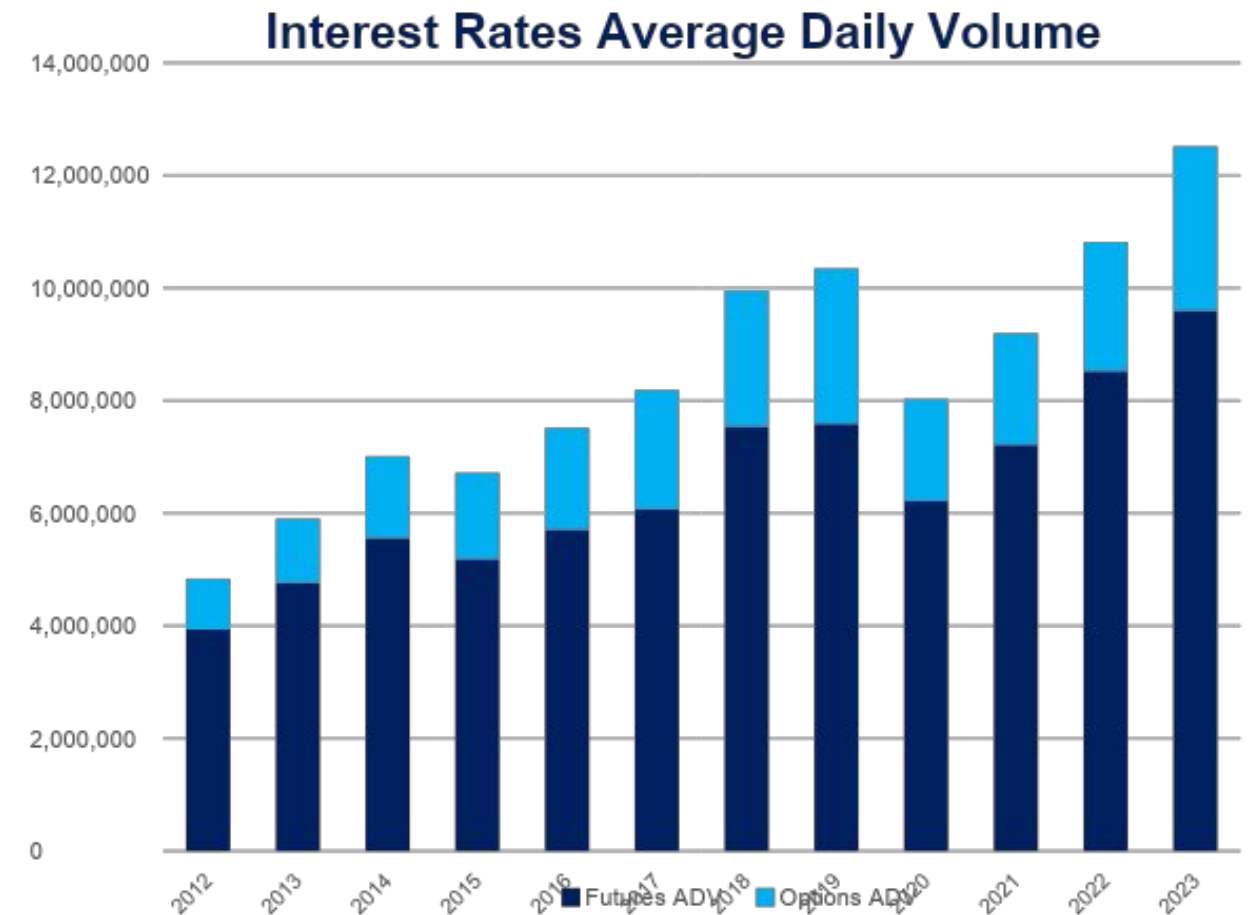
- Offer futures and options across the curve
- 2023 average daily volume of 13 million contracts
- US Treasury Futures open interest equates to \$2 trillion notional; average daily volume equates to \$500 billion notional

- **Strong track record of bringing new products to market:**

- Ultra 10 Treasury futures, TBA futures, and Eris Swap futures
- SOFR futures and options, ESTR futures
- Equity Products including Adjusted Interest Rate Futures, Basis Trade-at-Index Close, Dividend Futures & more

- **Capital efficiencies for Credit Futures with Rates & Equities**

- Margin offsets with other CME-cleared products from day 1 with other Rates products (such as 10-yr futures) and Equity products.\*
- Initial analysis suggests **margin offsets up to 70% for IG credit futures/Treasury futures** and **up to 50% for HY futures/S&P futures** (subject to revision based on latest available data).



Source: CME Group

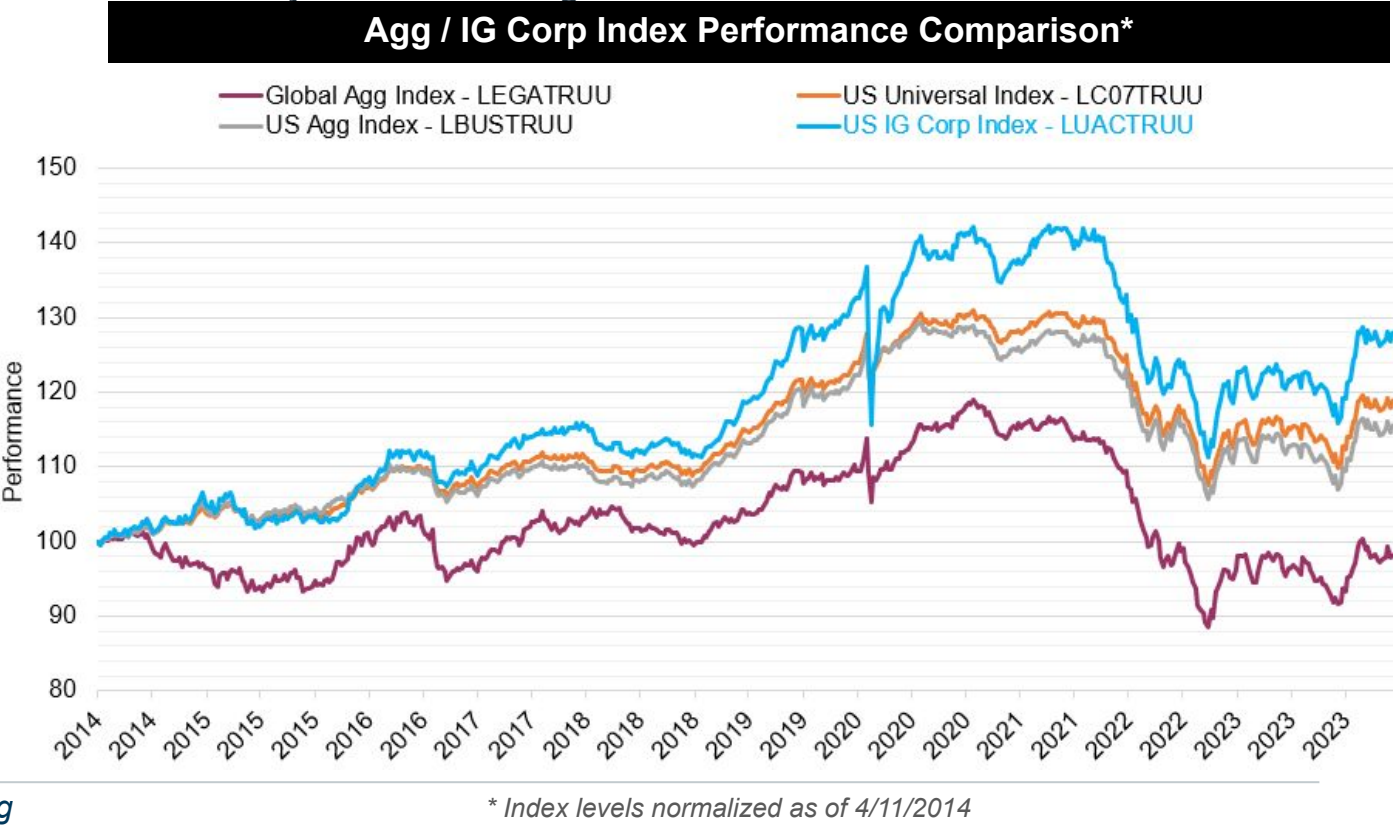
# Bloomberg U.S. Corporate Investment Grade Index

|                              | Bloomberg US Corp IG TR Index        |
|------------------------------|--------------------------------------|
| Index Ticker                 | LUACTRUU                             |
| Inception Date               | January 1, 1973                      |
| Currency                     | USD                                  |
| Global Representation        | Yes                                  |
| Market Representation        | Broad investment grade bond market   |
| Credit Rating                | (Baa3/BBB-/BBB- or higher)           |
| Minimum Amount Outstanding   | USD 300mn                            |
| Minimum Issuer Size          | n/a                                  |
| Coupon                       | Fixed                                |
| Issuers                      | 879                                  |
| Members / Reference Entities | 7,957                                |
| Weighting                    | Market value weighted                |
| Issuer Cap                   | n/a                                  |
| Maturity                     | At least 1 year until final maturity |
| Rebalance Frequency          | Monthly                              |
| Rebalance Date               | The last business day of the month   |

Data as of April 25, 2025

Source: Bloomberg

- ✓ Bloomberg total return indices provide market exposure similar to that of the corporate bond market, including debt issuance by US and non-US industrial, utility and financial issuers
- ✓ Currency minimums are based on market-specific issuance, issue sizes and a comparison of thresholds across markets
- ✓ Market value weighting reflects liquidity and market capacity for the asset class, aiding in replicability for investors
- ✓ Monthly rebalancing better suits the more frequent issuance and the more dynamic borrowing needs of fixed income issuers

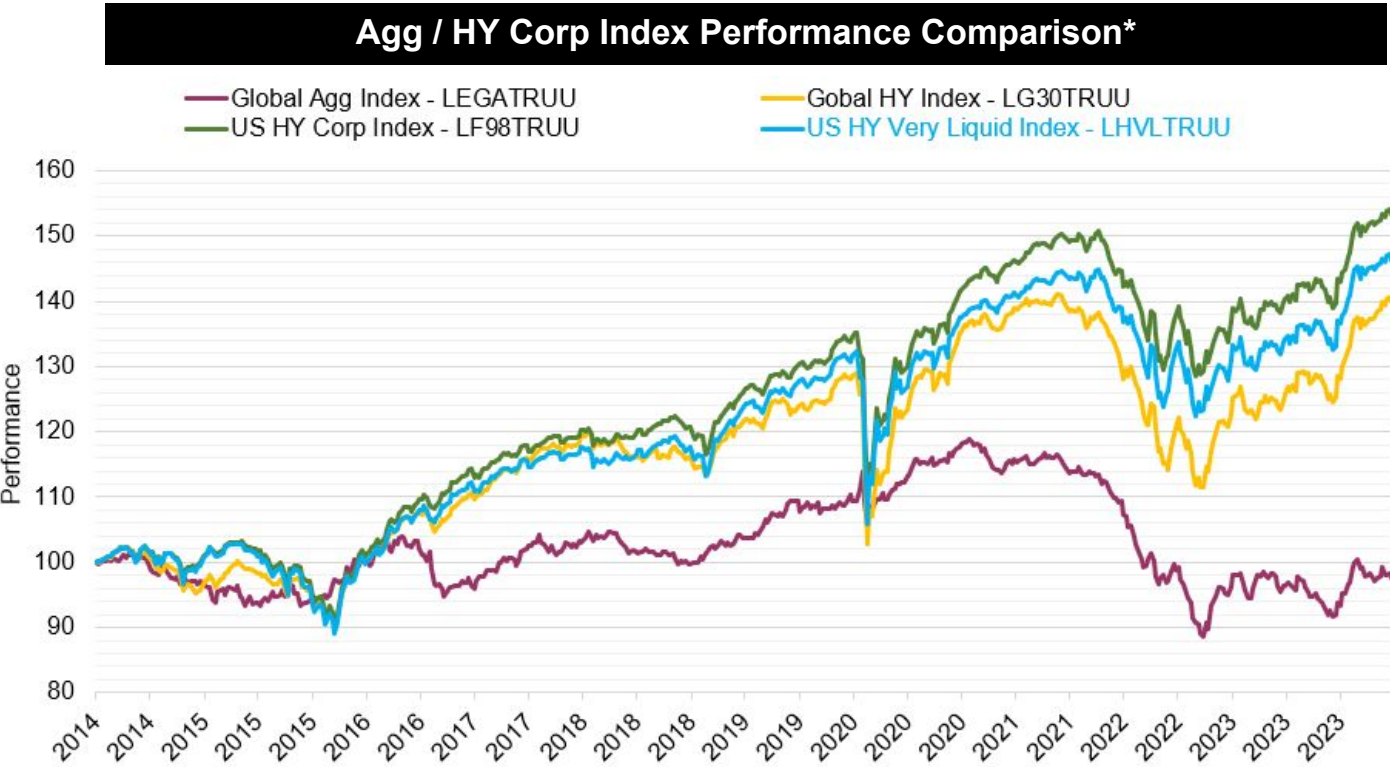


# Bloomberg U.S. Corporate High Yield Very Liquid Index (VLI)

|                              | Bloomberg US Corp HY VLI TR Index              |
|------------------------------|--|
| Index Ticker                 | LHVLTRUU                                       |
| Inception Date               | January 1, 1994                                |
| Currency                     | USD  |
| Global Representation        | Yes  |
| Market Representation        | Broad high yield bond market                   |
| Credit Rating                | (Ba1/BB+/BB+ or below)                         |
| Minimum Amount Outstanding   | USD 500mn                                      |
| Minimum Issuer Size          | n/a  |
| Coupon                       | Fixed  |
| Issuers                      | 581  |
| Members / Reference Entities | 1,089  |
| Weighting                    | Market value weighted                          |
| Issuer Cap                   | 2%   |
| Maturity                     | Between 1 and up to, but not including, 15 yrs |
| Rebalance Frequency          | Monthly  |
| Rebalance Date               | The last business day of the month             |

Data as of April 25, 2025

- ✓ Setting the minimum issue size of 500mn for High Yield represents more than a 3x increase over the broad US HY Corp minimum issue size
- ✓ Sector MV weighting % difference between the US HY index and the very liquid (component) index is less than 1.5%
- ✓ Issuer cap helps maintain diversification and safeguards the index's risk/return profile by preventing idiosyncratic risk



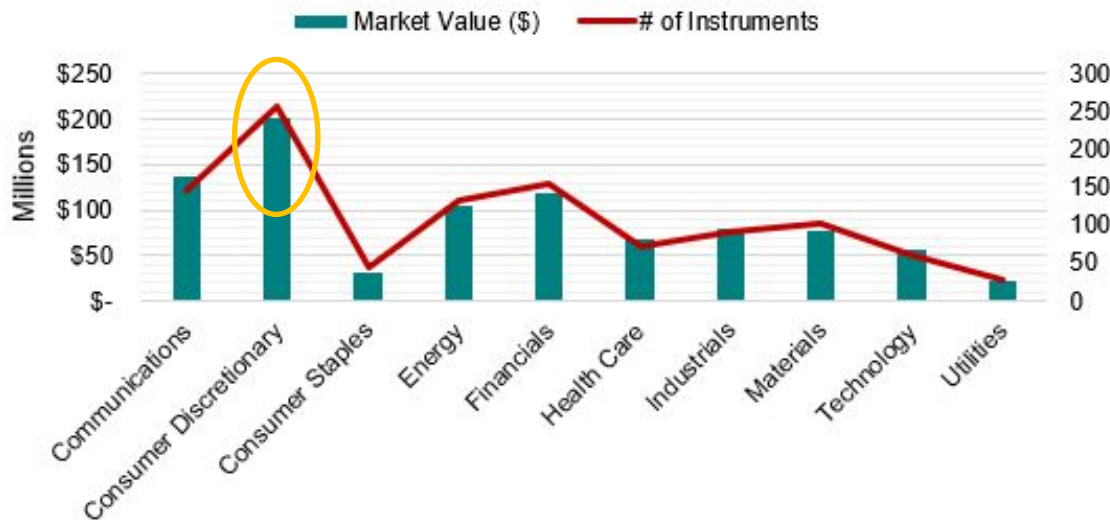
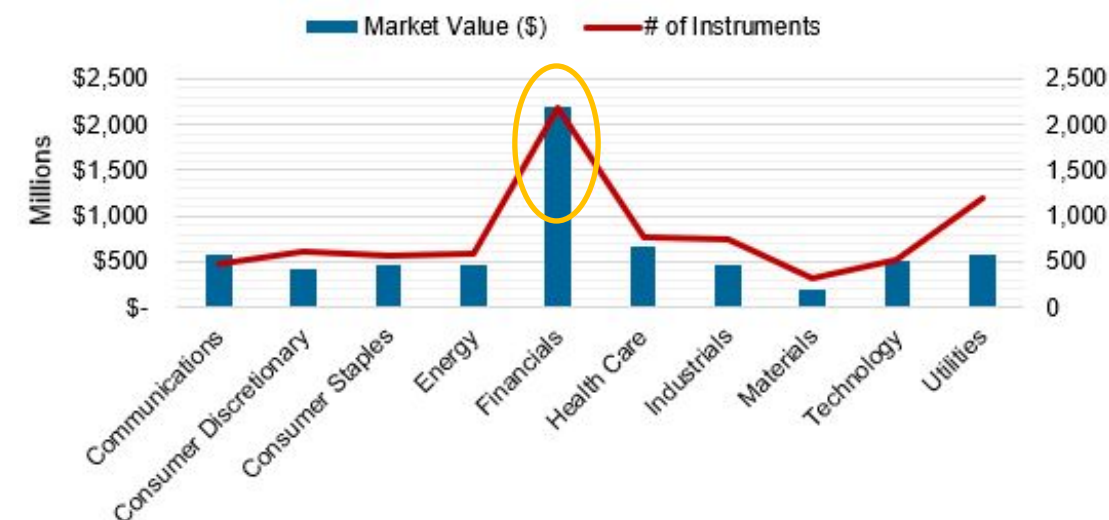
\* Index levels normalized as of 4/11/2014

# Index Holdings and Allocation

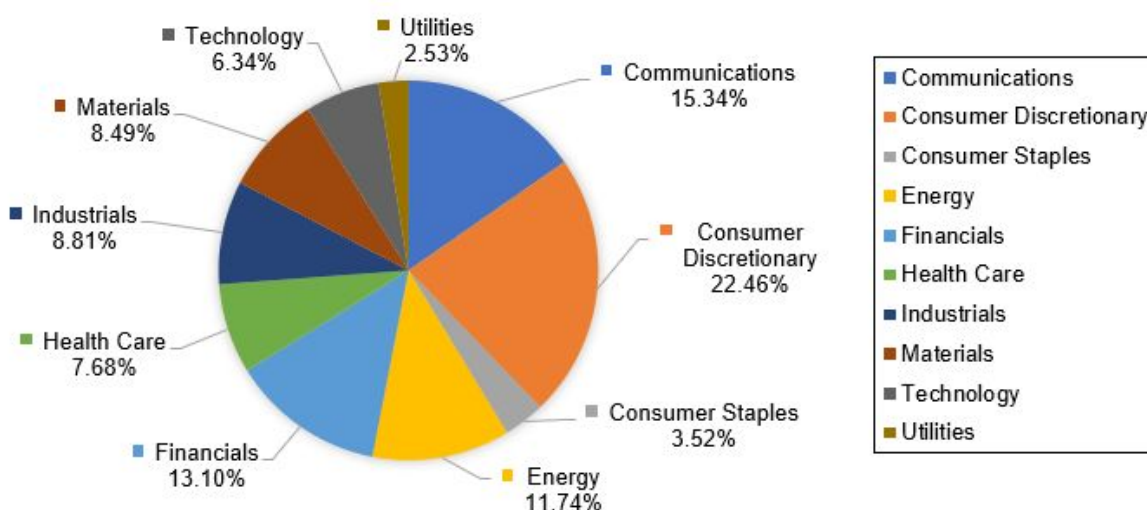
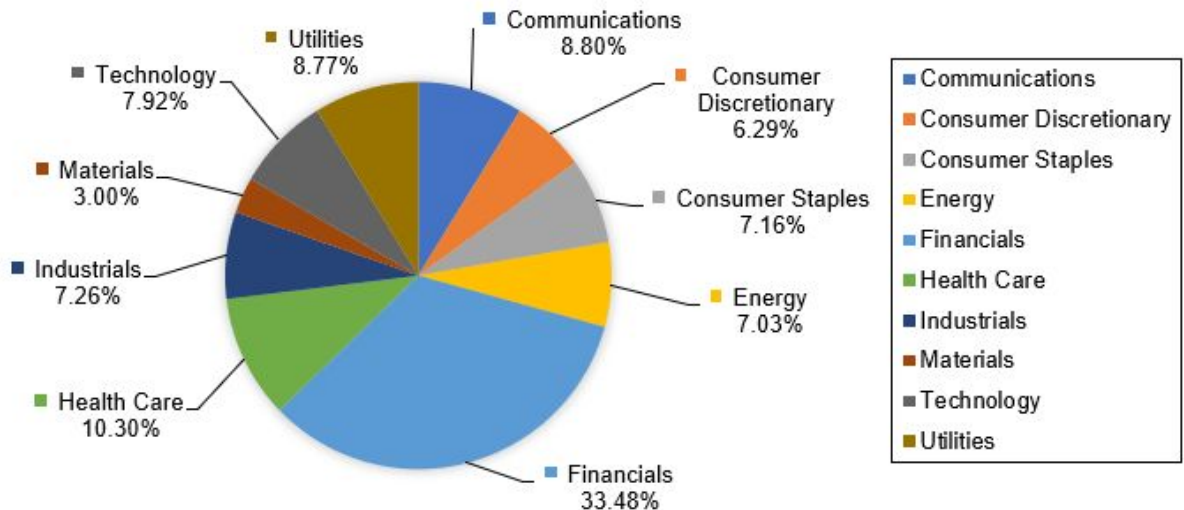
Bloomberg US Corp Bond IG Index

Bloomberg US Corp Bond HY Very Liquid Index

Market Value & Holdings by Sector (BICS)



Portfolio Allocation (% Weight)



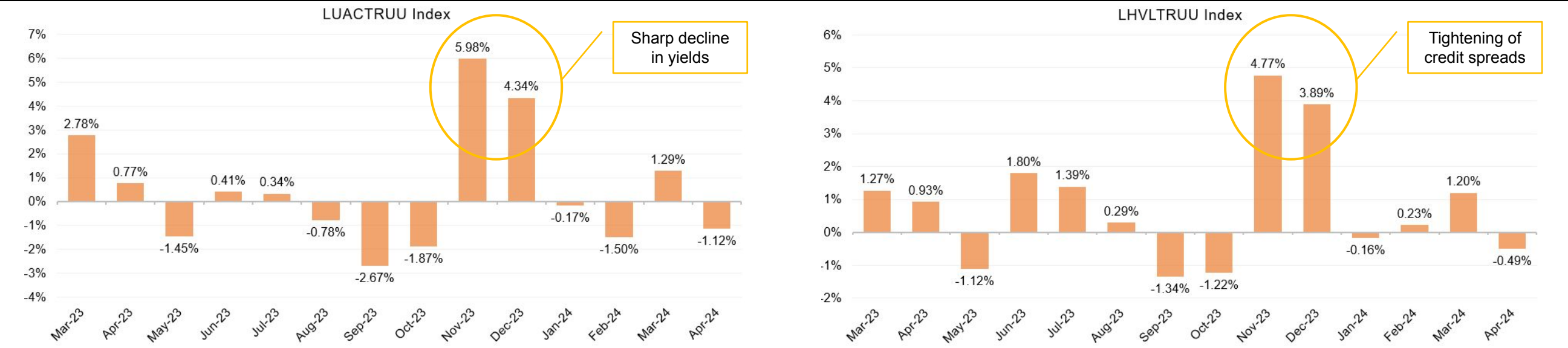
Source: Bloomberg



# Index Profile & Key Statistics

|                   |                     |                | # of Constituents | Market Value (\$US B) | Avg Coupon | Avg Maturity | Yield to Worst (%) | OAD (yr) | OAS (%) | YTD          | 1 Yr   | 5 Yr   |
|-------------------|---------------------|----------------|-------------------|-----------------------|------------|--------------|--------------------|----------|---------|--------------|--------|--------|
|                   |                     |                |                   |                       |            |              |                    |          |         | Total Return |        |        |
| Global Aggregate  |                     | LEGATRUU Index | 30,085            | 63,835                | 2.72       | 8.48         | 4.02               | 6.50     | 0.386   | -4.56%       | -2.47% | -7.67% |
|                   | US Universal        | LC07TRUU Index | 20,270            | 30,909                | 3.47       | 8.23         | 5.52               | 5.82     | 0.665   | -2.97%       | -0.39% | 0.75%  |
|                   | US Aggregate        | LBUSTRUU Index | 13,530            | 26,355                | 3.23       | 8.45         | 5.25               | 6.07     | 0.397   | -3.44%       | -1.51% | -0.94% |
|                   | US Corporate IG     | LUACTRUU Index | 7,957             | 6,504                 | 4.15       | 10.65        | 5.70               | 6.75     | 0.889   | -3.22%       | 0.90%  | 4.24%  |
| Global High Yield |                     | LG30TRUU Index | 3,492             | 2,464                 | 5.82       | 5.87         | 8.45               | 3.61     | 3.83    | 0.95%        | 11.32% | 14.30% |
|                   | US Corporate HY     | LF98TRUU Index | 1,957             | 1,267                 | 6.21       | 4.84         | 8.11               | 3.18     | 3.06    | 0.17%        | 9.11%  | 19.73% |
|                   | US Corporate HY VLI | LHVLTRUU Index | 1,089             | 899                   | 6.18       | 4.97         | 7.96               | 3.28     | 2.93    | -0.09%       | 9.03%  | 16.67% |

Trailing 12 Month Total Return %



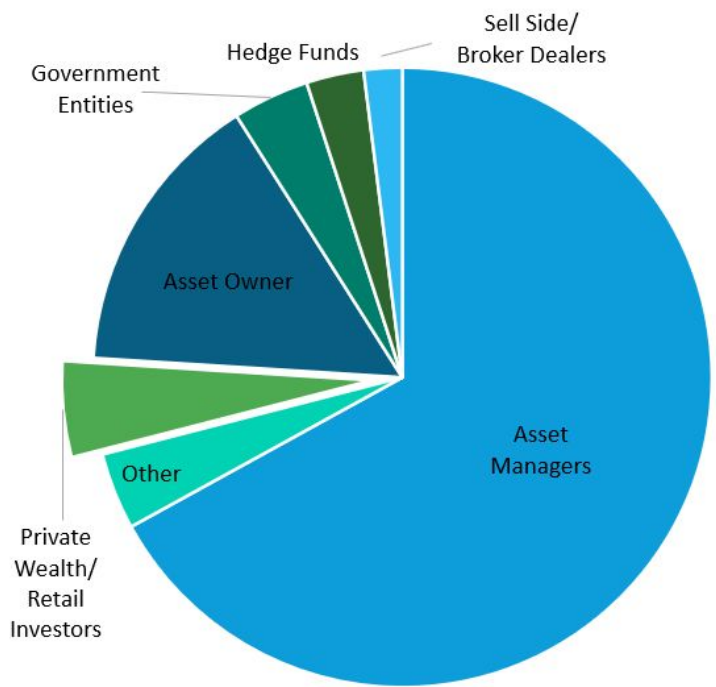
# Bloomberg Fixed Income Indices – Benchmark of Choice

## Global Coverage

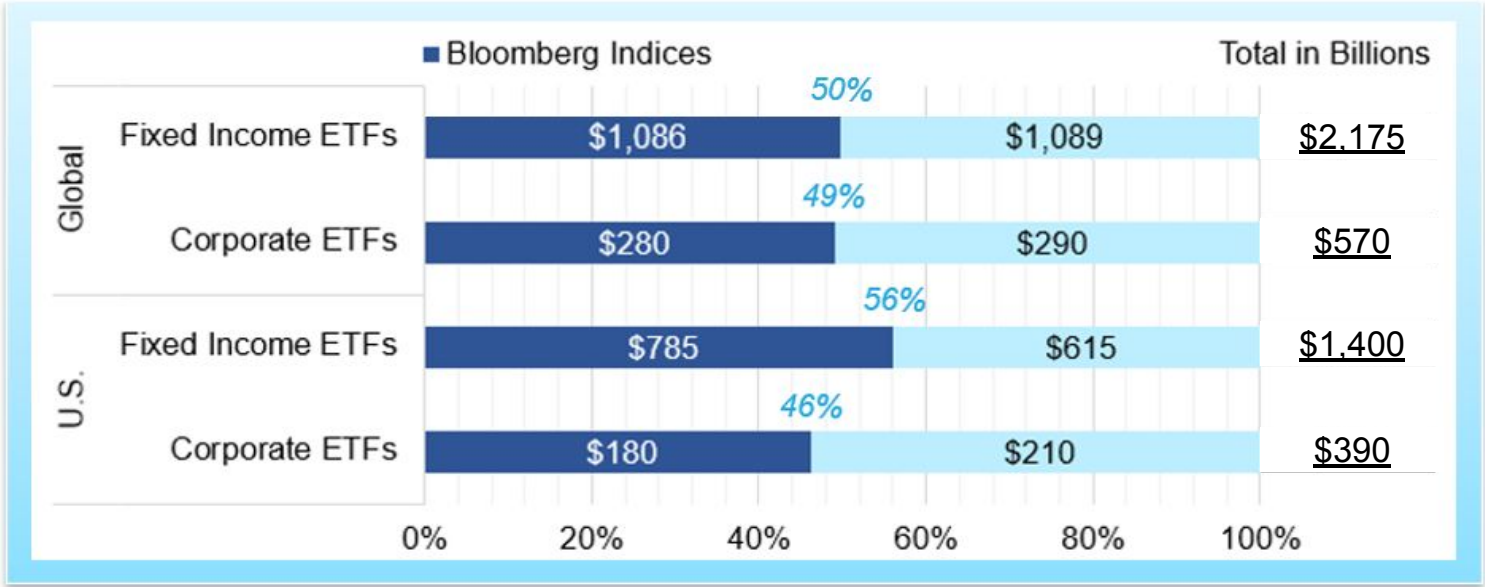
- ✓ Bloomberg offers a global suite of fixed income benchmarks and custom index capabilities.
- ✓ Over 50 years as a market pioneer and leader in fixed income benchmarks.
- ✓ Bloomberg publishes more than 55,000 standard and custom indices daily, covering more than 90,000 securities with over \$50 trillion in market value, representing 120 countries and 42 local currency debt markets.
- ✓ Over \$6 trillion in AUM benchmarked by public funds (and significant additional AUM by funds not required to report).
- ✓ Over 100 ETFs (totaling over \$750 billion in AUM) based in the US.

## Who uses Bloomberg Fixed Income Indices?

|                                 |
|---------------------------------|
| Asset Managers                  |
| Insurance Companies             |
| Pension Funds                   |
| Commercial Banks/Trust Banks    |
| Central Banks                   |
| Sovereign Wealth Funds          |
| Investment Consultants          |
| Hedge Funds                     |
| ETF Providers                   |
| Private Wealth/Retail investors |
| Sell Side/Broker Dealers        |
| Custodians/Fund Administrators  |



## #1 Provider of Benchmarks for Fixed Income ETFs\*

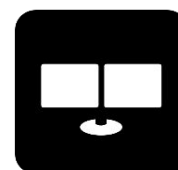
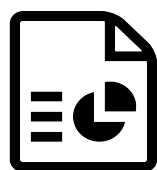


\*Estimates as of April 25, 2025

Source: Bloomberg

# Bloomberg Fixed Income Indices – Capabilities

Bloomberg is uniquely positioned as a benchmark provider who can self-source all fundamental pillars to support a sound index maintenance and production process.



| DATA   | PRICE – BVAL  | ANALYTICS   | DISTRIBUTION   | RESEARCH  |
|--|---|---|--|---|
| <ul style="list-style-type: none"><li>• Benchmarks widely accessible via market data redistributors</li><li>• Seamless integration with BVAL</li><li>• Access to 35 million instruments across all asset classes</li><li>• Rapid, real-time market data and key reference data</li></ul> | <ul style="list-style-type: none"><li>• Transparent, defensible pricing at current and historical snapshots using sophisticated, asset class-specific relative value models</li><li>• Over 2.5M securities priced daily using 9 snapshots and 3,600 different curves</li><li>• Over 1.3K clients globally</li></ul> | <ul style="list-style-type: none"><li>• Portfolio &amp; Risk Analytics PORT&lt;GO&gt;</li><li>• Portfolio Report Editor PREP&lt;GO&gt;</li><li>• Custom Index Builder IQ&lt;GO&gt;</li><li>• Fixed Income Fair Value Monitor FAIR&lt;GO&gt;</li></ul> | <ul style="list-style-type: none"><li>• Over 375,000 Bloomberg Terminals users globally</li><li>• BBA clients have automatic access to these indices on the terminal</li><li>• Integration with PORT and multiple 3<sup>rd</sup> party vendors</li></ul> | <ul style="list-style-type: none"><li>• PORT and Index Research</li><li>• Bloomberg Intelligence BI&lt;GO&gt;</li></ul> |

Source: Bloomberg



# Gain Direct Excess Return – Bloomberg Duration Hedged Index

A Duration Hedged Index (DHI) is an index whose return reflects the return on the underlying cash index, with its OAD exposure hedged with a basket of Treasury futures. These indices are used by investors seeking to remove the duration of their fixed income benchmarks while preserving the broad coverage and diversification of their existing fixed income investment set.

- The **Bloomberg US Corporate Duration Hedged Index** is a funded benchmark constructed to reflect the difference between the total return of the [Bloomberg US Corporate Index](#) and its associated Mirror Future Index ([MFI](#)).

## Duration Hedged Index Construction Example

### Step 1

Sort TR index bonds into OAD buckets



### Step 2

Match each bucket's contribution OAD by a treasury futures contract and compute weights and returns



### Step 3

Add T-bill returns to arrive at "funded" MFI and compute DHI

| US Corporate TR Index     | US Corporate TR Index |       |       |              |          | US Treasury Futures |           |                | Funding (T-bills)           |                |
|---------------------------|-----------------------|-------|-------|--------------|----------|---------------------|-----------|----------------|-----------------------------|----------------|
| # of Bonds per OAD Bucket | OAD Bucket            | MV%   | OAD   | Cont. to OAD | Contract | OAD                 | Weight    | MTD Return (%) | Weight                      | MTD Return (%) |
|                           |                       | A     | B     | A x B        |          | C                   | A x B / C |                |                             |                |
| 1,785                     | 0 - 3y                | 23.45 | 1.96  | 0.46         | TUU3     | 1.95                | 23.6%     | 0.047          | 42.01%                      | 0.156          |
| 1,431                     | 3 - 5y                | 19.78 | 3.91  | 0.77         | FVU3     | 4.07                | 18.99%    | 0.046          | 23.84%                      | 0.156          |
| 1,771                     | 5 - 7.5y              | 21.69 | 6.42  | 1.39         | TYU3     | 5.96                | 23.35%    | -0.012         | 12.77%                      | 0.156          |
| 2,511                     | 7.5 - 15y             | 27.88 | 11.99 | 3.34         | USU3     | 11.78               | 28.38%    | -0.578         | 8.62%                       | 0.156          |
| 459                       | 15y+                  | 7.20  | 16.25 | 1.17         | WNU3     | 16.62               | 7.04%     | -1.124         | 10.99%                      | 0.156          |
|                           | Stub Position         |       |       |              |          |                     |           |                | 1.78%                       | 0.156          |
|                           |                       |       |       |              |          |                     |           |                | MTD MFI Total Return        | 0.012          |
|                           |                       |       |       |              |          |                     |           |                | Cash Index MTD Total Return | 0.301          |
|                           |                       |       |       |              |          |                     |           |                | DHI MTD Total Return*       | 0.445          |

\* Duration Hedged Index (DHI) = Cash Index Return (0.301) – MFI Return (0.012) + T-bills Funding (0.156)

Source: Bloomberg

# Capturing Excess Return Exposure

Two methods for those clients seeking to trade only the credit component

**A** Gain Direct Excess Return via Duration-Hedged Futures (DHB)

- Utilizing Bloomberg’s unique US Corporate ‘Duration Hedged Index’ (DHI) to create an excess (spread) return future, clients can capture the spread carry and change component of returns
- Duration hedged index created by utilizing a funded strip of Treasury futures weighted to closely match/offset the OAD profile of the total return index

**B** Offset Interest Rate Duration via Treasury Hedge

- A buy/sell combination of (a) future on the total return index and (b) Treasury Futures
- Specific component weights will be available from CME Group & Bloomberg to match/offset the key rate duration buckets of the total return index

| Contract Specifications            | Bloomberg U.S. Corporate Investment Grade Duration Hedged Index Futures |
|------------------------------------|---|
| Commodity Code                     | DHB   |
| Underlying Index                   | Bloomberg U.S. Corporate Duration Hedged Index*                         |
| Index Ticker                       | I30287US Index  |
| Contract Multiplier                | 500 x Index Points<br>(current index level ~200)                        |
| Approximate Notional               | ~\$100,000  |
| Minimum Price Increment            | 1/20 of 1 Index points (0.05 = \$25.00)                                 |
| Minimum Block Size                 | 100 contracts = ~\$10mm in notional                                     |
| Listing Schedule, Final Settlement | Aligned to IG and HY Futures  |

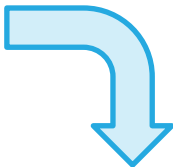
|                | IG with simple TY hedge | \$1MM IG with UST hedge              | \$10MM IG with UST hedge                 |
|----------------|-------------------------|--------------------------------------|--|
| IG Futures     | 1 contract              | 10 contracts                         | 100 contracts                            |
| Notional       | ~\$100k                 | ~\$1M                                | ~\$10M                                   |
| Duration Hedge | 1 TY                    | 1 TU<br>2 FV<br>2 TY<br>2 US<br>1 WN | 13 TU<br>17 FV<br>22 TY<br>23 US<br>5 WN |

\* For further details, please reference: <https://assets.bbhub.io/professional/sites/27/Bloomberg-Index-Publications-US-Corp-DHI.pdf>

# Bloomberg Terminal Analytics – Fixed Income Indices

Bloomberg Indices at your fingertips, fully integrated on the Terminal.

LUACTRUU Index DES <GO>



LUACTRUU Index MEMB <GO>

| Alert      |         | Export ▾     |        | Member Weightings |           |                  |
|------------|---------|--------------|--------|-------------------|-----------|------------------|
| hedged USD |         | 7957 Members |        | Currency USD ▾    |           |                  |
| ▾          |         | Returns      |        | Projected         |           | As of 04/29/2024 |
|            |         |              |        |                   |           |                  |
| Ccy        | Price   | YTW          | OAD    | Par Val           | MV        | Weight           |
|            |         |              |        |                   |           |                  |
| USD        | 90.695  | 5.648        | 12.703 | 9,518,964         | 8,748,559 | 0.13317          |
| USD        | 86.141  | 6.165        | 12.886 | 8,000,000         | 6,930,582 | 0.10550          |
| USD        | 91.865  | 5.494        | 5.120  | 7,000,000         | 6,577,501 | 0.10012          |
| USD        | 106.028 | 6.086        | 8.848  | 5,476,069         | 5,835,943 | 0.08883          |
| USD        | 94.259  | 5.707        | 13.877 | 6,000,000         | 5,797,732 | 0.08825          |
| USD        | 92.876  | 5.609        | 3.298  | 5,989,208         | 5,636,490 | 0.08580          |
| USD        | 77.842  | 6.950        | 12.821 | 6,997,530         | 5,492,001 | 0.08360          |
| USD        | 91.831  | 5.688        | 2.133  | 5,750,000         | 5,307,448 | 0.08079          |
| USD        | 93.284  | 6.281        | 1.673  | 5,500,000         | 5,159,459 | 0.07854          |
| USD        | 89.497  | 5.801        | 13.713 | 5,500,000         | 5,080,115 | 0.07733          |
| USD        | 89.218  | 6.685        | 12.172 | 5,500,000         | 5,065,724 | 0.07711          |
| USD        | 93.656  | 5.437        | 8.554  | 5,341,555         | 5,064,742 | 0.07710          |
| USD        | 66.420  | 5.926        | 15.268 | 7,496,266         | 5,011,797 | 0.07629          |
| USD        | 90.501  | 5.189        | 4.841  | 5,437,485         | 4,997,804 | 0.07608          |
| USD        | 96.825  | 5.745        | 7.005  | 5,000,000         | 4,977,130 | 0.07576          |
| USD        | 65.899  | 5.966        | 15.465 | 7,495,129         | 4,972,438 | 0.07569          |
| USD        | 97.861  | 5.757        | 7.301  | 5,000,000         | 4,966,738 | 0.07560          |
| USD        | 95.781  | 5.343        | 6.975  | 5,000,000         | 4,895,266 | 0.07452          |
| USD        | 95.929  | 5.639        | 6.512  | 5,000,000         | 4,864,695 | 0.07405          |
| USD        | 93.517  | 5.536        | 14.036 | 5,745,050         | 4,840,403 | 0.07300          |



Source: Bloomberg

Pull up a Bloomberg Index and locate:

- Index Description
- Membership
- Key Characteristics
- Comparative returns
- Related ETFs



# Bloomberg Terminal Analytics – Fair Value Monitor (FAIR<GO>)

The Fair Value Monitor (**FAIR <GO>**) allows you to calculate the future fair value price, implied funding cost, and premium or discount of select **fixed income credit futures** or Bloomberg fixed income indices, so that you can compare them against other credit products in real-time.

## Process Steps

**Step 1:** From the command line, run FAIR with a credit future loaded (e.g., *IQBU4 Index, FAIR <GO>*).

**Step 2:** In the 1D % Chg column, enter a percentage change for the index to generate an intraday index value (iNAV).

**Step 3:** At the bottom left of the screen, in the Mid Px and Fund Rate columns, enter execution prices and funding rates for each contract.

☐ The table updates based on the values you entered.

**Step 4:** View the futures fair value spread to see if the contract is trading **Rich**/**Cheap** vs. the price as well as implied funding and lending costs.

1

| Fixed Income Futures Fair Value |  |          |                     |           |               |            |                |       |            |         |
|---------------------------------|--|----------|---------------------|-----------|---------------|------------|----------------|-------|------------|---------|
| LUACTRUU Index                  |  | Refresh  | Exchange: EUREX CME |           |               |            |                |       |            |         |
| Ticker                          | Index                                    | Indx Val | 1D % Chg            | iNAV      | iYield        | iOAS       | OAD            | OASD  |            |         |
| LUACTRUU                        | U.S. Corporate Investment Grade          | 3529.693 | 0.0000              | 3529.692  | 4.778         | 78.8       | 6.89           | 6.84  |            |         |
| I36357US                        | Tradable Tracker US Corporate Bond Index | 105.911  | 0.0000              | 105.911   | 4.745         | 79.3       | 6.82           | 6.78  |            |         |
| Ticker                          | Exp                                      | Bid      | Mid A               | Last Px   | Vol           | Open Int   | Notional Value | DV01  | CR01       |         |
| IQBZ5                           | DEC 25                                   | 3545.50  | 3545.753            | 3546.00   | 493           | 1437       | 106,372.50     | 73.30 | 72.76      |         |
| IQBH6                           | MAR 26                                   | 3576.50  | 0.000               | 3587.00   | 0             | 0          | 107,610.00     | 74.15 | 73.60      |         |
| IQBM6                           | JUN 26                                   | 0.00     | 0.000               | 3628.50   | 0             | 0          | 108,855.00     | 75.01 | 74.46      |         |
| Calculator                      |  |          |                     |           |               |            |                |       |            |         |
|                                 | Price                                    | Days     | Fund Rate           | Fair Px   | Impld Fund    | Impld Lend | iYield         | iOAS  |            |         |
| IQBZ5                           | 3545.75                                  | 64       | 3.96                | 3554.17   | 2.586         | 1.379      | 4.779          | 78.8  |            |         |
| IQBH6                           | 3587.00                                  | 155      | 3.78                | 3586.46   | 3.812         | -0.037     | 4.778          | 78.8  |            |         |
| IQBM6                           | 3628.50                                  | 246      | 3.65                | 3617.28   | 4.123         | -0.471     | 4.778          | 78.8  |            |         |
| Roll Analysis                   |  |          |                     |           |               |            |                |       |            |         |
| From                            | To                                       | Spread   | Fair Roll           | Fair Sprd |               |            |                |       |            |         |
| IQBZ5                           | IQBH6                                    | 41.25    | 32.28               | 8.97      |               |            |                |       |            |         |
| IQBZ5                           | IQBM6                                    | 82.75    | 63.10               | 19.65     |               |            |                |       |            |         |
| IQBH6                           | IQBM6                                    | 41.50    | 30.82               | 10.68     |               |            |                |       |            |         |
| ETF                             | Last Px                                  | 1D % Chg | iNAV                | Fd % Prem | Avg Fd % Prem | NAV        | iNAV Prem      | Yield | Sprd to BM | Mod Dur |
| LQD US                          | 111.3500                                 | -0.0006  | 111.37              | -0.0198   | 0.0437        | 111.4244   | -0.0470        | 5.225 | 119.1      | 8.46    |

4

3

3

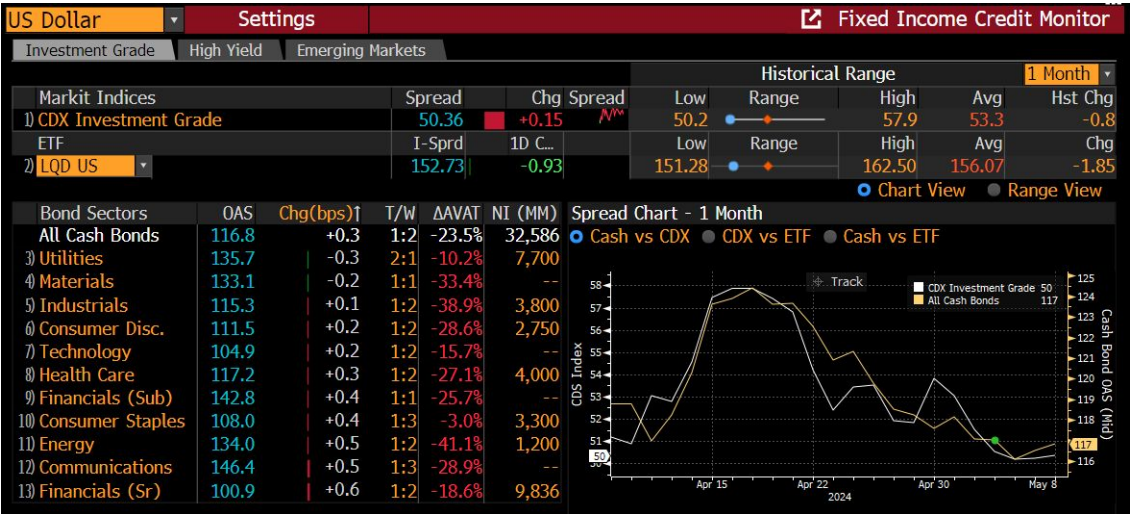
Source: Bloomberg



# Bloomberg Terminal Analytics – Relative Value (PORT, FICM, IDRIV)

- **PORT<GO>** provides a streamlined workflow that includes performance results, fundamental characteristics, historical performance, tracking error, scenario analysis, and portfolio optimization.
- **FICM <GO>** provides a high-level overview of the intraday, real-time performance of credit products (cash bonds, ETFs and CDX) and spreads allowing you to identify relative value opportunities.
- **IDRV <GO>** allows you to compare an instrument's current credit spread to historical levels, as well as those of comparable macro credit products, to determine the best vehicle for adding risk to or hedging your portfolio.

## FICM<GO>



## PORT<GO>

| PORT<GO> Bloomberg US C...   |                      |                |                  |                  |               |             |              |                |                  |        |          |       |        |        |       |           |          |        |        |
|------------------------------|----------------------|----------------|------------------|------------------|---------------|-------------|--------------|----------------|------------------|--------|----------|-------|--------|--------|-------|-----------|----------|--------|--------|
| Name                         | Cusip (8 Crncy Char) | Maturity Years | Market Value (%) | Holdings (face)  | Mkt Val       | Clean Price | Price (Full) | Yield to Worst | Mod Dur to Worst | OAS    | G Spread | OASD  | S-OAS  | T-Spl  | DTS   | W/O (Yrs) | Avg Life | KRD 6M | KRD 2Y |
| (LUACTRUU) Bloomberg US C... |                      | 10.95          | 100.00           | 7,175,325,357.60 | 6,614,487,735 | 91.1632     | 92.1871      | 5.491          | 6.93             | 85.60  | 85.60    | 6.97  | 93.43  | 127.92 | 8.28  | 10.67     | 10.67    | 0.05   | 0.49   |
| Banking                      |                      | 6.83           | 23.06            | 1,593,874,600.00 | 1,525,413,699 | 94.492      | 95.7047      | 5.523          | 4.72             | 86.98  | 86.98    | 4.81  | 84.29  | 117.47 | 5.17  | 6.15      | 6.15     | 0.07   | 0.76   |
| Basic Industry               |                      | 11.71          | 2.71             | 189,629,104.00   | 178,976,860   | 93.0891     | 94.3826      | 5.588          | 7.57             | 97.12  | 97.12    | 7.58  | 108.37 | 141.74 | 9.79  | 11.68     | 11.68    | 0.03   | 0.36   |
| Brokerage Assetmanager...    |                      | 9.30           | 1.48             | 105,976,458.00   | 98,166,185    | 91.5219     | 92.6302      | 5.446          | 6.72             | 83.73  | 83.73    | 6.75  | 88.32  | 122.11 | 7.01  | 9.21      | 9.21     | 0.05   | 0.49   |
| Capital Goods                |                      | 10.53          | 5.42             | 387,515,007.00   | 358,554,054   | 91.6364     | 92.5265      | 5.442          | 6.82             | 80.88  | 80.88    | 6.84  | 88.05  | 122.34 | 7.93  | 10.50     | 10.50    | 0.05   | 0.47   |
| Communications               |                      | 14.01          | 8.19             | 615,277,358.00   | 541,857,658   | 87.1194     | 88.1108      | 5.667          | 8.40             | 105.12 | 105.12   | 8.43  | 120.05 | 155.32 | 12.38 | 13.99     | 13.99    | 0.03   | 0.34   |
| Consumer Cyclical            |                      | 9.04           | 7.19             | 513,699,498.00   | 475,677,818   | 91.6279     | 92.5985      | 5.390          | 6.14             | 74.21  | 74.21    | 6.15  | 78.03  | 112.27 | 6.40  | 9.02      | 9.02     | 0.07   | 0.58   |
| Consumer Non-Cyclical        |                      | 12.73          | 15.49            | 1,120,739,892.00 | 1,024,274,036 | 90.3139     | 91.3927      | 5.379          | 7.99             | 74.65  | 74.65    | 8.01  | 87.46  | 122.52 | 9.03  | 12.70     | 12.70    | 0.04   | 0.38   |
| Electric                     |                      | 13.96          | 8.21             | 602,391,992.02   | 542,780,568   | 89.0083     | 90.1042      | 5.571          | 8.41             | 94.60  | 94.60    | 8.46  | 109.68 | 144.49 | 11.02 | 13.48     | 13.48    | 0.03   | 0.34   |
| Energy                       |                      | 12.27          | 7.03             | 490,929,977.00   | 464,981,636   | 91.5350     | 94.7144      | 5.573          | 7.58             | 92.87  | 92.87    | 7.59  | 103.96 | 140.36 | 9.90  | 12.00     | 12.00    | 0.05   | 0.38   |
| Finance Companies            |                      | 4.26           | 1.19             | 82,629,891.00    | 78,540,960    | 94.0122     | 95.0515      | 5.948          | 3.58             | 127.60 | 127.60   | 3.57  | 119.61 | 153.11 | 4.67  | 4.24      | 4.24     | 0.07   | 0.99   |
| Insurance                    |                      | 14.40          | 4.63             | 332,899,235.00   | 305,963,730   | 90.7934     | 91.9088      | 5.551          | 8.38             | 93.41  | 93.41    | 8.42  | 108.54 | 144.35 | 10.51 | 13.55     | 13.54    | 0.03   | 0.31   |
| Natural Gas                  |                      | 13.71          | 0.68             | 49,659,598.00    | 44,964,442    | 89.5039     | 90.5453      | 5.613          | 8.14             | 98.23  | 98.23    | 8.17  | 112.84 | 147.96 | 10.90 | 12.82     | 12.81    | 0.02   | 0.37   |
| Other Financial              |                      | 5.63           | 0.04             | 2,800,000.00     | 2,628,713     | 93.2597     | 93.8826      | 5.231          | 4.83             | 69.28  | 69.28    | 4.84  | 67.95  | 99.68  | 3.56  | 5.63      | 5.62     | -0.01  | 0.78   |
| Other Industrial             |                      | 30.27          | 0.46             | 36,719,960.00    | 30,103,829    | 81.2630     | 81.9822      | 5.262          | 12.70            | 66.77  | 66.77    | 13.18 | 102.32 | 135.68 | 14.59 | 29.66     | 29.63    | 0.01   | 0.10   |
| Other Utility                |                      | 14.96          | 0.18             | 13,750,000.00    | 12,201,446    | 87.8599     | 88.7378      | 5.460          | 9.37             | 88.23  | 88.23    | 9.39  | 107.86 | 142.21 | 11.35 | 14.96     | 14.96    | 0.00   | 0.16   |
| REITs                        |                      | 7.61           | 2.64             | 192,984,479.00   | 174,507,344   | 89.4635     | 90.4256      | 5.584          | 5.66             | 98.86  | 98.86    | 5.64  | 100.88 | 135.08 | 6.78  | 7.60      | 7.60     | 0.03   | 0.49   |
| Technology                   |                      | 11.30          | 9.31             | 687,868,325.00   | 616,136,411   | 88.5987     | 89.5719      | 5.305          | 7.30             | 66.70  | 66.70    | 7.33  | 75.65  | 109.87 | 7.50  | 11.27     | 11.27    | 0.05   | 0.48   |
| Transportation               |                      | 16.41          | 2.10             | 156,029,983.58   | 138,758,334   | 87.9367     | 88.9306      | 5.427          | 9.21             | 79.39  | 79.39    | 9.30  | 98.55  | 132.76 | 11.02 | 16.14     | 16.15    | 0.04   | 0.34   |

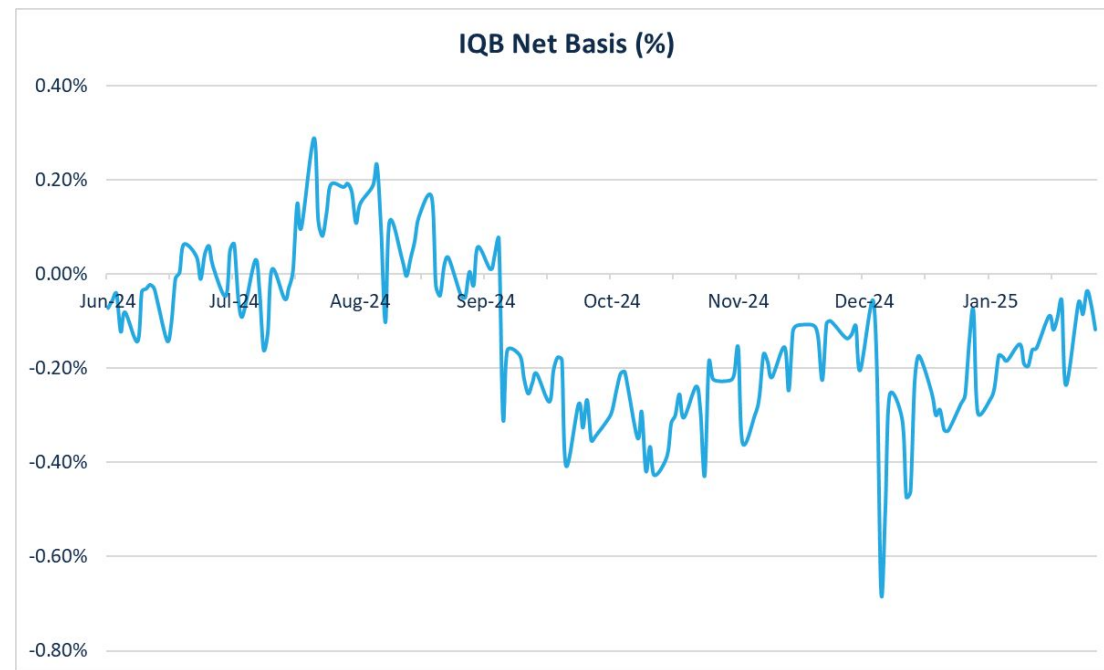
## IDRV<GO>



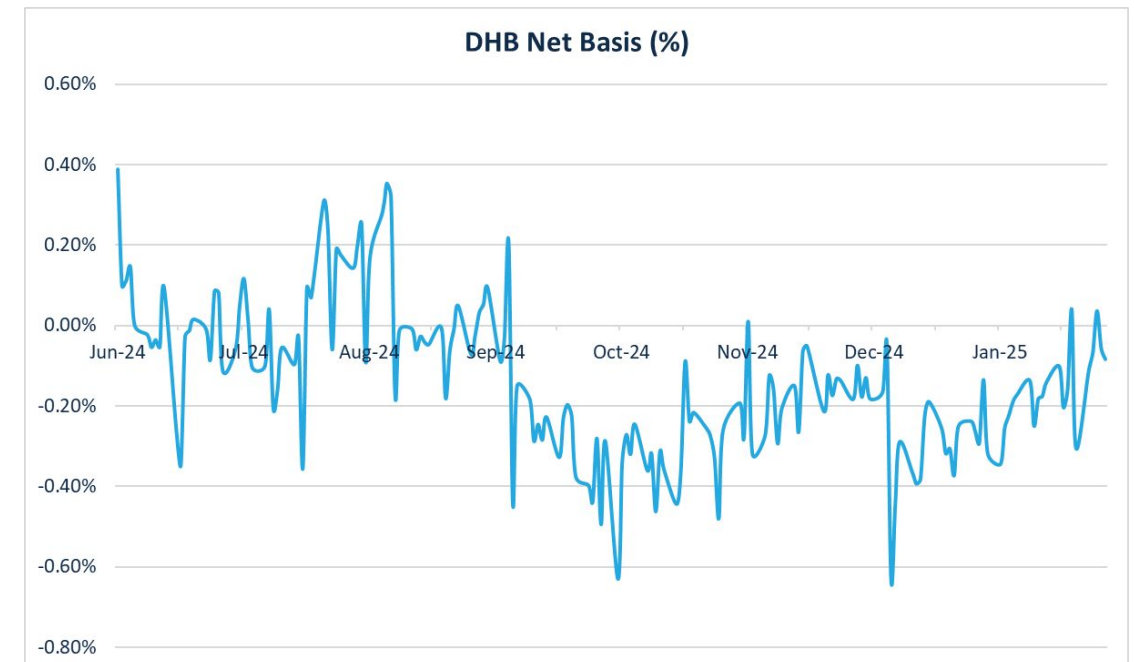
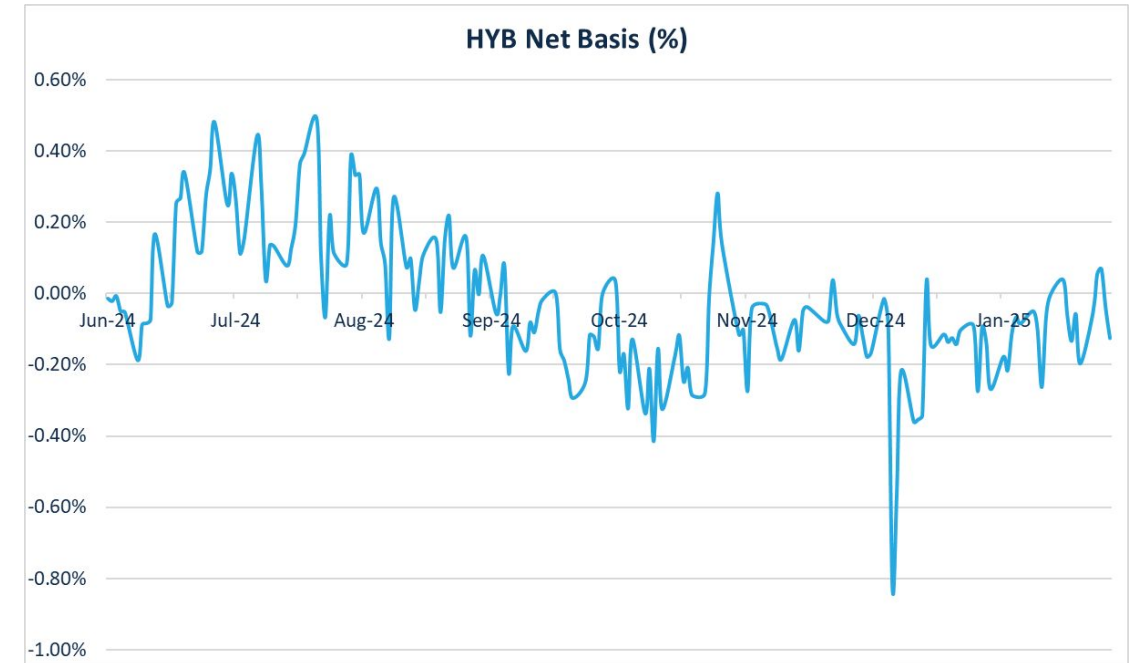
Source: Bloomberg

# Credit Futures Net Basis

Measured as the difference between the futures price and the estimated fair value futures price, the net basis allows traders to evaluate futures pricing relative to the underlying index.



- **Net Basis = 0** → futures are fairly priced relative to the spot price of the underlying index and prevailing financing rates
- **Net Basis < 0** → future is trading at a discount to the fair value, and is considered “cheap”
- **Net Basis > 0** → future is trading at a premium to the fair value, and is considered “rich”





# Blocks and Derived Blocks

- ✓ Blocks and derived blocks can be executed for trades of 100 contracts or more (~\$10MM notional)
  - [Block Market Maker Directory](#)
- ✓ Derived blocks provide greater liquidity and execution flexibility by allowing liquidity to be sourced from related ETFs
  - See Section 14 of [Rule 526 MRAN](#) for more information
  - [FAQ: Derived Blocks](#)
  - [How to enter a derived block in CME Direct](#)

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## Derived Block Example

Participants agree on a futures reference of 3470 against LQD reference of 100. Participants also agree on a hedge ratio of  $0.81 = 6.8 / 8.4$ , reflecting the duration difference between IQB futures (6.8 years) and LQD (8.4 years).

Participants agree on a hedging method and window for the reference hedge: a TWAP from 11:00 a.m. - 12:00 p.m. ET.

A liquidity provider conducts their hedging transactions in the related market and determines the TWAP to be 101.

Because the TWAP is 1% higher than the reference price, the futures price will be adjusted by that amount, multiplied by the agreed hedge ratio.

**Result:**  
$$\begin{aligned} &\text{FuturesRef} \times [1 + ((\text{TWAP}/\text{Ref} - 1) \times \text{AdjustmentFactor})] \\ &= 3470 \times [1 + (101/100 - 1) \times 0.81] \\ &= 3470 \times 1.0081 \\ &= 3,498.11 \text{ (rounded to the nearest 0.01 Index Points)} \end{aligned}$$



# Margin Offsets

## Credit Futures Margin Offsets

|                           | IG CREDIT<br>IQB | HY CREDIT<br>HYB | IG DURATION-<br>HEDGED<br>DHB | HY DURATION-<br>HEDGED<br>DHY |
|---------------------------|------------------|------------------|-------------------------------|-------------------------------|
| 2-YEAR NOTE (ZT)          | 60%              | 50%              | -                             | -                             |
| 3-YEAR NOTE (Z3N)         | 60%              | 55%              | -                             | -                             |
| 5-YEAR NOTE (ZF)          | 65%              | 60%              | -                             | -                             |
| 10-YEAR NOTE (ZN)         | 75%              | 60%              | -                             | -                             |
| ULTRA 10-YEAR (TN)        | 70%              | 60%              | -                             | -                             |
| TREASURY BOND (ZB)        | 70%              | 60%              | -                             | -                             |
| ULTRA TREASURY BOND (UB)  | 65%              | 60%              | -                             | -                             |
| E-MINI S&P 500 (ES)       | 31%              | 45%              | 35%                           | 23%                           |
| E-MINI DOW (YM)           | 35%              | 53%              | 27%                           | 28%                           |
| E-MINI RUSSELL 2000 (RTY) | 37%              | 53%              | 38%                           | 41%                           |
| S&P AIR TRF (ASR)         | 28%              | 47%              | 24%                           | 21%                           |
| E-MINI NASDAQ 100 (NQ)    | 32%              | 33%              | 31%                           | 15%                           |
| IG CREDIT (IQB)           | -                | 70%              | 50%                           | 40%                           |
| HY CREDIT (HYB)           | 70%              | -                | 70%                           | 75%                           |
| IG DURATION-HEDGED (DHB)  | 50%              | 70%              | -                             | 70%                           |



\* Last Updated 9/26/25

## Example

The initial margin (IM) requirement for a portfolio that is long 3 contracts of HYB and short 2 contracts of ZN is:

$$\text{Total IM} = (3 \times \$1,320 + 1 \times \$2,805) \times (1 - 60\%) + \$2,805$$
$$= \$5,511$$

*Note: Margin offsets can only be applied in specific ratios. Excess positions are not offset.*

| Leg  | Leg Qty | Direction | IM (\$) Per Contract | Total IM (\$) |
|--|---------|-----------|----------------------|---------------|
| HYB  | 3       | Long      | \$1,320              | \$3,960       |
| ZN   | 1       | Short     | \$2,805              | \$2,805       |
| Total IM for Margin Offsets Eligible Positions |         |           |                      | \$2,706       |
| ZN   | 1       | Short     | \$2,805              | \$2,805       |
| Total IM with Excess Position                  |         |           |                      | \$5,511       |

Margin offsets and example as of June 2025. Offsets vs. Equity Index futures calculated via CME Core. For the latest margin levels and offsets, see [Product Margins](#).

# Disclaimers

Any implementation of the proposal and points discussed in this document are subject to regulatory review and to any necessary internal and external approvals.

Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract’s value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade.

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