

## J.P. Morgan ESG Global HY Corporate Custom Maturity Index

### Methodology and Factsheet

#### Highlights

The J.P. Morgan ESG Global HY Corporate Custom Maturity Index tracks corporate fixed and floating-rate debt instruments across developed market and emerging market high yield issuers, including USD, EUR and GBP currencies. The index applies an ESG scoring and screening methodology to tilt toward issuers ranked higher on ESG criteria and green bond issues, and to underweight and exclude issuers that rank lower. Differing from the flagship JESG Global High Yield Corporate Index (JESG GHYCI), this custom index applies a higher amount outstanding threshold of \$300mm, €300mm, and £250mm with a minimum of 3 months till maturity to remain in the index. The returns and statistics are available since December 2012.

#### Baseline Index Criteria

|                                      |  |                           |                               |
|--------------------------------------|--|---------------------------|-------------------------------|
| <b>Instrument Type:</b>              | <b>Include:</b> fixed rate, floating rate, hybrid, step-up, PIK, toggle, amortizers, perpetuals, Sukuk bonds, and all subordinated financial bonds except AT1<br><b>Exclude:</b> structured bonds and credit enhanced bonds including credit linked, collateral trust and equipment trust bonds, dual currency bonds and bonds with non-transparent cash flows or atypical indices used to reset coupons                     |                           |                               |
| <b>Issuer Type:</b>                  | <b>Include:</b> Corporate <b>Exclude:</b> sovereign and quasi-sovereign issuers <sup>1</sup>   |                           |                               |
| <b>Collateral:</b>                   | <b>Exclude:</b> covered, mortgage backed, asset backed, bank guaranteed, government guaranteed   |                           |                               |
| <b>Maturity:</b>                     | <b>Entry:</b> Minimum 24 months till maturity; <b>Exit:</b> minimum 3 months till maturity   |                           |                               |
| <b>Amount Outstanding:</b>           | <b>USD (\$)</b><br>\$300mm   | <b>Euro (€)</b><br>€300mm | <b>Sterling (£)</b><br>£250mm |
| <b>Holiday:</b>                      | SIFMA, EMTA  | SIFMA                     |                               |
| <b>Currency:</b>                     | USD (\$) Euro (€) Sterling (£) denominated bonds are allowed.  |                           |                               |
| <b>Country:</b>                      | All countries across developed and emerging markets  |                           |                               |
| <b>Credit Rating:</b>                | Only HY-rated securities included. Non-rated securities are included if issuer is HY-rated. For index purposes, S&P, Moody's, and Fitch will be considered. Credit rating will be determined based on the following rules:<br>1. The middle rating of the Moody's, S&P, and Fitch ratings<br>2. The lower rating when two ratings are available<br>3. The sole rating when only one rating is provided                       |                           |                               |
| <b>Defaulted Issues:</b>             | Upon default, the issue is removed from the index on the month-end after a grace period  |                           |                               |
| <b>Fallen Angels / Rising Stars:</b> | Bonds will transition between investment grade and high yield at the coming month-end rebalance up to and including T-1 business day of the month. Issuers transitioning between IG and HY with both rating changes that occur after the 15th of the month and bonds outstanding greater than or equal to 1% of the baseline index face value will be subject to a one month delay.  |                           |                               |
| <b>Registration Type:</b>            | SEC-registered Global, Domestic, MTN, and 144A with or without registration rights, Eurobonds, and EMTNs that trade in accordance with ISMA principals. Reg-S bonds and Private Placements are eligible after 40-day seasoning period, provided liquidity requirements are met. Reg-S format for Euro-denominated, Sterling-denominated, and US Dollar-denominated EM bonds. 144A format for US Dollar-denominated DM bonds. |                           |                               |

Source: JPMorgan Chase & Co.

1 – Quasi-sovereign entities are defined as being 100% guaranteed or 100% owned by the national government.

## JESG Overlay Criteria

|  |  |   |  |                          |
|--|--|---|--|--------------------------|
| <b>ESG providers &amp; Green Bond certification authorities:</b> | Sustainalytics (Corporates)<br>RepRisk (Corporates)<br>Climate Bonds Initiative (Green bonds)  |   |  |                          |
| <b>JESG Scoring methodology:</b>                                 | The absolute index scores are a blend of Sustainalytics & RepRisk on an equal weight basis. The scores range from 0 - 100, with 100 classified as the best possible score.   |   |  |                          |
| <b>JESG Integration methodology:</b>                             | Issuers with better overall ESG scores are assigned larger weights compared to the non-ESG baseline index.   |   |  |                          |
| <b>Green bond treatment:</b>                                     | Increased weight allocation compared to a conventional bond from same issuer.  |   |  |                          |
| <b>JESG Ethical exclusions &amp; Negative Screening:</b>         | <p>Issuers are excluded based on the below criteria.</p> <ul style="list-style-type: none"> <li>• Issuers with revenue from the following sectors: <ul style="list-style-type: none"> <li>○ Thermal Coal</li> <li>○ Tobacco</li> <li>○ Weapons</li> <li>○ Oil Sands (Effective Dec 31, 2020 onwards)</li> </ul> </li> <li>• Issuers not in compliance with UN Global Compact principles as identified by both RepRisk and Sustainalytics</li> <li>• Issuers with JESG scores less than 20 are not eligible for index re-inclusion for 12 months</li> </ul> |   |  |                          |
| <b>JESG Categories of Involvement &amp; Exclusion Thresholds</b> | <b>Category</b>  | <b>Category of Involvement</b>  | <b>Description</b>   | <b>Revenue Threshold</b> |
|  | Oil Sands  | Extraction  | The company extracts oil sands.  | 0%                       |
|  | Thermal Coal   | Extraction  | The company extracts thermal coal.   | 0%                       |
|  |  | Power Generation  | The company generates electricity from thermal coal.   | 0%                       |
|  | Tobacco  | Production  | The company manufactures tobacco products.   | 0%                       |
|  | Military Contracting   | Weapons   | The company manufactures military weapon systems and/or integral, tailor-made components or these weapons. | 0%                       |
|  | Small Arms   | Civilian customers (Assault weapons)  | The company manufactures and sells assault weapons to civilian customers.                                  | 0%                       |
|  |  | Military/law enforcement customers  | The company manufactures and sells small arms to military/law enforcement.                                 | 0%                       |
|  |  | Key components  | The company manufactures and sells key components of small arms.   | 0%                       |
|  |  | Civilian customers (Non-assault weapons)  | The company manufactures and sells small arms (Non-assault weapons) to civilian customers.                 | 0%                       |
| Controversial Weapons  | Tailor-made and essential  | The company is involved in the core weapon system, or components/services of the core weapon system that are considered tailor-made and essential for the lethal use of the weapon. | 0%   |                          |

Source: JPMorgan Chase & Co.

Effective January 31st, 2023, Issuers deriving less than 10% of their revenue from military contracting and small arms sales will become eligible for JESG indices.

## Index Characteristics and Methodology

|                          |   |
|--------------------------|---|
| <b>Pricing:</b>          | Mid prices are taken from a third party pricing source, PricingDirect.                                  |
| <b>Aggregate Return:</b> | Index level total return is calculated as a market-weighted average of bond returns using mid prices.   |
| <b>Rebalancing:</b>      | Rebalances on the last US business day of the month.  |
| <b>Coupon Treatment:</b> | All coupons received are immediately reinvested into the index.   |
| <b>FX Rates:</b>         | All FX rates used for hedged/unhedged returns are as of 4pm London time provided by WM/Reuters.         |
| <b>Hedging Strategy:</b> | Assume a 1-month currency forward position that begins on rebalance day and ends on next rebalance day. |
| <b>Weighting:</b>        | Market capitalization based weighting, renormalized based on JESG Band scalar                           |
| <b>Bloomberg Ticker:</b> | JPEIGHYC Index  |

Source: JPMorgan Chase & Co.

## Appendix

### Defining the Index Universe

Eligibility for the index will be determined on a continuous basis by monitoring the index criteria. Any changes to the composition or eligibility will be announced prior to rebalance with an estimated schedule to provide full transparency to the investor base.

Countries of risk for the instruments in the index will be determined based upon the below considerations:

1. The country with the largest source of revenue. Guarantees by other entities including subsidiaries or holding companies in other countries will also be considered.
2. The headquarters or the location of the issuer's majority assets will also be considered.

### New Issue Timing

A new issue that meets the index admission requirements is added to the index on the month-end business date after its issuance, provided its settle date falls five business days before month-end. A new issue whose settlement date falls on or after month-end minus five is not eligible for inclusion until the following month-end rebalancing.

The exception to the timing of new issuance is for Reg-S securities. Instruments issued purely in reliance on Regulation S or "Reg-S" (without an accompanying 144A or registered tranche) or private placements (not registered instruments) are eligible for inclusion only after a 40 calendar day seasoning period provided they meet all other index criteria. The date at which the seasoning restriction is lifted will effectively be the new "settlement" date.

### Fallen angels and rising stars

Fallen angels (issuers with an index rating transitioning from IG to HY) which meet all other index eligibility rules are added to the index on the last business day of the month-end following the credit rating bucket change from investment grade to high yield. Fallen angel issuers downgraded after the 15th of the month and with aggregate index eligible bonds outstanding equivalent to 1% or more of the total face value of the baseline index, will be subject to a one month delay for index inclusion.

All rising stars (issuers transitioning from HY to IG) will exit the index at the coming month-end rebalance following the credit rating bucket change up to and including T-1 business day of the month. Rising star issuers upgraded after the 15th of the month and with aggregate index eligible bonds outstanding equivalent to 1% or more of the total face value of the baseline index, will be subject to a one month delay for index exclusion.

### ESG Methodology

The index applies J.P. Morgan ESG (JESG) issuer scores to adjust the market value of index constituents from the global high yield corporate baseline index. JESG issuer scores are a 0-100 percentile rank calculated based on normalized raw ESG scores from third-party research providers Sustainalytics and RepRisk. An issuer's finalized JESG score incorporates a 3-month rolling average. Corporate issuers with no coverage by either third-party research provider default to their region-sector JESG score. The JESG scores are divided into five bands that are used to scale each issue's baseline index market value, with the band rebalance occurring with a one-month lag.

| JESG Score Bands         | Scalar |
|--------------------------|--------|
| Band 1: Score > 80       | 1.00   |
| Band 2: 60 < Score <= 80 | 0.80   |
| Band 2: 40 < Score <= 60 | 0.60   |
| Band 2: 20 < Score <= 40 | 0.40   |
| Band 2: Score <= 20      | 0.00   |

Issuers in Band 5 will be excluded from the index and will not be eligible for twelve months. If an instrument is categorized as

a “green bond” by the Climate Bonds Initiative, the security will receive a one-band upgrade. Green bonds by issuers already in Band 1 will not receive any further upgrades.

### **Weighting Methodology**

While the weight of the instruments in the baseline global high yield corporate index are market-weighted, the weight of each instrument in the JESG Global HY Corporate Custom Maturity Index is determined by taking the issue’s market value in USD, weighting by the ESG scalar, and then dividing by the total JESG market value of all JESG-eligible instruments in the index (US\$). The result represents the weight of the issue expressed as a percentage of the JESG Global HY Corporate Custom Maturity Index. The market value of each issue is calculated by multiplying its face amount outstanding by the dirty price. Face amount outstanding for each issue is updated at each month-end in order to reflect market events (such as re-openings or buybacks) that have increased or decreased the issue's available supply.

For any questions or for additional information, please contact [index.research@jpmorgan.com](mailto:index.research@jpmorgan.com).

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