



# Morningstar Leveraged Loan Indexes v2 File and Delivery Specifications

June 2025



#### **Overview**

This document outlines the v2 index file format and delivery specifications for the Morningstar Leveraged Loan Indexes, which are calculated by Morningstar Indexes' calculation platform. The v2 file format is the enhanced file format which contains additional index level and loan analytics.

## **Implementation Overview**

# **Delivery Channel**

Data is delivered via Secure File Transfer Protocol (SFTP) unless otherwise stated. This documentation provides detailed information on the electronic file names, content format of the index files. Files remain in the SFTP site for 21 days before they are automatically deleted, as per Morningstar network policy.

# **File Delivery Timings**

Files are typically delivered every Monday to Friday (including holidays). European index files are delivered 2 - 3 hours after the UK market close. US and Global index files are delivered 2 - 3 hours after the US market close.

Files for Saturday and Sunday are delivered on Friday.

#### **Index Files Delivered**

Morningstar will deliver two files per index portfolio consisting of an index levels file and a constituent file on a daily basis.

#### Index Levels (IDX) File

A daily snapshot of levels and top level index statistics for an index. It may include multiple return types (TR, PR, IR) and any available currency variants. Each standard file reflects one unique index portfolio.

#### **Constituent (CON) File**

A daily snapshot of the constituents of an index and constituent level reference data and statistics. Each standard file reflects one unique index portfolio.

# Pro forma (PCON) File

A weekly preview (pro forma) of the constituents (membership) of an index for the upcoming rebalanced portfolio, made available on Fridays ahead of the rebalance. Each standard file reflects one unique index portfolio. Currently there are PCON files for the following indexes:

- Morningstar LSTA US Leveraged Loan 100. Clients subscribing to this index will also receive a weekly email
  notification that summarizes the additions and deletions of the index. The email is sent at least 1 business
  day prior to the rebalance effective date.
- Morningstar LSTA US Leveraged Loan Index
- Morningstar European Leveraged Loan Index
- Morningstar Global Leveraged Loan Index



#### **Historical Files**

Morningstar will provide historical index constituent and index levels in aggregated zip files upon request. The data will be aggregated based on the frequency of the requested historical data. For example – for daily index levels, Morningstar will provide one file per calendar year.

## **Restatements**

In the event of a restatement, restated data will be sent out in the index files as of the effective date, after the restatements have been performed. The restated files will have the same file name as the "original" files, however, the PublishDateTime field in the restated file will be updated from the "original" file.

## **File Names and Schedule**

| File      | File Description and Name  | Frequency                              |
|-----------|--|--|
| IDX File  | A daily file that contains index levels as of the effective date yyyymmdd.<br>Each file includes one unique index portfolio.                     | Daily, including weekends and holidays |
|           | MSTAR_Index_FullName_MorningstarPortfolioID_IDX_yyyymmdd.csv   |  |
|           | Example:   |  |
|           | MSTAR_GLOBAL_LEVERAGED_LOAN_2928560_IDX_20230905.csv   |  |
| CON File  | A daily snapshot of constituents as of the effective date yyyymmdd. Each file includes one index.  | Daily, including weekends and holidays |
|           | MSTAR_Index_FullName_MorningstarPortfolioID_CON_yyyymmdd.csv   |  |
|           | Example:   |  |
|           | MSTAR_GLOBAL_LEVERAGED_LOAN_2928560_CON_20230905.csv   |  |
| PCON File | A weekly preview (pro forma) of the constituents of an index for the rebalanced portfolio effective date yyyymmdd. Each file includes one index. | Weekly on Fridays, including holidays  |
|           | MSTAR_Index_FullName_MorningstarPortfolioID_PCON_yyyymmdd.csv  |  |
|           | Example:   |  |
|           | MSTAR_GLOBAL_LEVERAGED_LOAN_2928560_PCON_20230905.csv  |  |

## **File Contents**

This section serves to outline information on the contents of the Levels (IDX), Constituents (CON), and Pro forma (PCON) files.

#### **IDX File**

This file contains index levels data. The contents of the file and their definitions are as follows:



IDX Legend: Y = Available, N = Not provided (null value), F = Future Data point (null value), E = May require entitlement, 0 = May be null

| Field Name        | Format                                  | IDX | Description  |
|-------------------|---|-----|--|
| EffectiveDate     | MM/DD/YYYY                              | Υ   | Effective date.  |
| RebalanceDate     | MM/DD/YYYY                              | Υ   | The date of the last rebalance.  |
| PortfolioName     | Varchar Max<br>Length: 128              | Υ   | Official Name of the index, as represented by the unique basket of securities (portfolio).   |
| PortfoliolD       | Varchar Max<br>Length: 36               | Υ   | Unique Morningstar identifier for every unique basket of securities (portfolio) in alpha numeric format. This is the ID of the index at the portfolio level. |
| MasterPortfolioID | Varchar Max<br>Length: 36               | Υ   | Unique Morningstar identifier for every unique basket of securities (portfolio) in integer format. This is the ID of the index at the portfolio level.       |
| IndexID           | Varchar Max<br>Length: 10               | Υ   | Unique Morningstar identifier for every index (a specific currency and return variant of the given portfolio) also known as a SecID.                         |
| PerformanceID     | Varchar Max<br>Length: 10               | Υ   | Unique Morningstar identifier for every index (a specific currency and return variant of the given portfolio).   |
| IndexCode         | Varchar Max<br>Length: 36               | Υ   | Unique identifier for an index for a specific currency or currency hedged variant of the given portfolio.  |
| IndexName         | Varchar Max<br>Length: 128              | Υ   | Index Name including return and currency variant.  |
| Currency          | Varchar Max<br>Length: 3                | Υ   | Currency of calculation of the index, which may be different than the index's base currency.   |
| HedgedToCurrency  | Varchar Max<br>Length: 3                | Y,0 | Reflects the currency that the variant is hedged to.   |
| BidPrice          | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ   | Weighted average bid price by par value.   |
| IndexLevel        | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ   | Daily value of the index portfolio.  |



| Return                    | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ   | Value of interest, price, or total return as designated by the Return Type.   |
|---------------------------|---|-----|---|
| ReturnType                | Varchar TR IR PR                        | Y   | Applies only to the Close file. Displays return variant as per calculation methodology. Types of return include Price Return (PR), Interest Return (IR), Total Return (TR).   |
| ReturnPeriod              | Varchar Max<br>Length: 10               | Υ   | Frequency of the return publishing, which is daily.   |
| ParAmountOutstanding      | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | Total par amount outstanding at the index level in the currency of the index variant. For LCL variants this will be null.   |
| MarketValueWithCleanPrice | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | Total market value outstanding of the index without including accrued interest (clean market value) in the currency of the index variant. For LCL variants this will be null. |
| MarketValue               | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | Total market value outstanding of the index including accrued interest in the currency of the index variant. For LCL this will be null.                                       |
| FxRate                    | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | FX Rate applicable to the currency variants from the base currency. For LCL this will be null.  |
| FxSource                  | Varchar Max<br>Length: 16               | Y   | Reflects timing of WMR foreign exchange timings, for example – LDN4PM, SYD4PM and SG5PM. For LCL this will be null.   |
| IndexBaseRate             | Numeric Max<br>Length: 64,<br>Scale: 18 | Y   | Weighted average base rate used to calculate the index, calculated as a blended market rate <sup>1</sup> .  |
| NominalSpread             | Numeric Max<br>Length: 64,<br>Scale: 18 | Y   | Weighted average adjusted spread by par value.  |
| AverageCoupon             | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ   | Sum of Index Base Rate and Nominal Spread.  |



<sup>&</sup>lt;sup>1</sup> This field will populate only for indexes in the Morningstar US Leveraged Loan Index series.

| SpreadtoMaturity     | Numeric Max Y<br>Length: 64,<br>Scale: 18 |     | Weighted average index spread to maturity by market value using a flat curve assumption.  |
|----------------------|---|-----|---|
| Yield                | Numeric Max<br>Length: 64,<br>Scale: 18   | Y   | Weighted average index yield using a simple margin formula.   |
| YieldtoMaturity      | Numeric Max<br>Length: 64,<br>Scale: 18   | Y   | Weighted average index yield to maturity by market value using a flat curve assumption.   |
| YearsToMaturity      | Numeric Max<br>Length: 64,<br>Scale: 18   | Y   | Weighted average time to maturity of the constituents stated in years.  |
| Duration             | Numeric Max<br>Length: 64,<br>Scale: 18   | Y   | Weighted average index sensitivity of price to change in interest rate movements (modified duration) using a flat curve assumption. |
| IndexSector          | Varchar Max<br>Length: 36                 | F   | GICS code associated with the index portfolio (for single sector indexes only).   |
| IndexCompositeRating | Varchar Max<br>Length: 10                 | Y,E | Weighted average composite rating for the index.  |
| ConstituentCount     | Numeric Max<br>Length: 38                 | Υ   | Number of loans in the index.   |
| BloombergTicker      | Varchar Max<br>Length: 36                 | Y,0 | Bloomberg Ticker, where available.  |
| RIC                  | Varchar Max<br>Length: 36                 | Y,0 | RIC, where available.   |
| Spread2Year          | Numeric Max<br>Length: 64,<br>Scale: 18   | Υ   | Weighted average index spread to 2 year by market value using a flat curve assumption.  |
| Spread3Year          | Numeric Max<br>Length: 64,<br>Scale: 18   | Y   | Weighted average index spread to 3 year by market value using a flat curve assumption.  |
| Spread4Year          | Numeric Max<br>Length: 64,<br>Scale: 18   | Y   | Weighted average index spread to 4 year by market value using a flat curve assumption.  |



| Spread5Year         | Numeric Max Y<br>Length: 64,<br>Scale: 18 |   | Weighted average index spread to 5 year by market value using a flat curve assumption.                |
|---------------------|---|---|---|
| SpreadDuration      | Numeric Max<br>Length: 64,<br>Scale: 18   | Υ | Weighted average index sensitivity of price to change in credit spread using a flat curve assumption. |
| DurationTimesSpread | Numeric Max<br>Length: 64,<br>Scale: 18   | Υ | Weighted average product of Spread Duration and Spread to Maturity using a flat curve assumption.     |
| YTM2Year            | Numeric Max<br>Length: 64,<br>Scale: 18   | Υ | Weighted average index yield to 2 year by market value using a flat curve assumption.                 |
| YTM3Year            | Numeric Max<br>Length: 64,<br>Scale: 18   | Y | Weighted average index yield to 3 year by market value using a flat curve assumption.                 |
| YTM4Year            | Numeric Max<br>Length: 64,<br>Scale: 18   | Y | Weighted average index yield to 4 year by market value using a flat curve assumption.                 |
| YTM5Year            | Numeric Max<br>Length: 64,<br>Scale: 18   | Υ | Weighted average index yield to 5 year by market value using a flat curve assumption.                 |
| SpreadtoMaturityFWD | Numeric Max<br>Length: 64,<br>Scale: 18   | F | Weighted average index spread to maturity by market value using a forward curve assumption.           |
| Spread2YearFWD      | Numeric Max<br>Length: 64,<br>Scale: 18   | F | Weighted average index spread to 2 year by market value using a forward curve assumption.             |
| Spread3YearFWD      | Numeric Max<br>Length: 64,<br>Scale: 18   | F | Weighted average index spread to 3 year by market value using a forward curve assumption.             |
| Spread4YearFWD      | Numeric Max<br>Length: 64,<br>Scale: 18   | F | Weighted average index spread to 4 year by market value using a forward curve assumption.             |
| Spread5YearFWD      | Numeric Max<br>Length: 64,<br>Scale: 18   | F | Weighted average index spread to 5 year by market value using a forward curve assumption.             |



| SpreadDurationFWD      | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average index sensitivity of price to change in credit spread using a forward curve assumption.                               |  |  |  |
|------------------------|---|---|--|--|--|--|
| DurationTimesSpreadFWD | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average product of Spread Duration and Spread to Maturity using a forward curve assumption.                                   |  |  |  |
| YieldtoMaturityFWD     | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average index yield to maturity by market value using a forward curve assumption.   |  |  |  |
| YTM2YearFWD            | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average index yield to 2 year by market value using a forward curve assumption.   |  |  |  |
| YTM3YearFWD            | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average index yield to 3 year by market value using a forward curve assumption.   |  |  |  |
| YTM4YearFWD            | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average index yield to 4 year by market value using a forward curve assumption.   |  |  |  |
| YTM5YearFWD            | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average index yield to 5 year by market value using a forward curve assumption.   |  |  |  |
| DurationFWD            | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Weighted average index sensitivity of price to change in interest rate movements (modified duration) using a forward curve assumption. |  |  |  |
| MacaulayDuration       | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ | Weighted average index effective time remaining until the next coupon payment.   |  |  |  |
| PublishDateTime        | timestamp yyyy-<br>mm-<br>ddThh:mm:ss   | Υ | Date and Time when index file is published in UTC.   |  |  |  |
| FileType               | Varchar Max<br>Length: 3                | Υ | Indicates the portfolio file type. Close files = 'CLS'.  |  |  |  |
| LINE COUNT             | Numeric Max<br>Length: 38               | Υ | The number of data rows included in the file, excluding the LINE Count row itself.   |  |  |  |
|                        |   |   |  |  |  |  |



# **CON and PCON**

This CON and PCON files contain constituent data and use the same column format. However, data availability for each column will differ depending on the file type. Identifiers are provided on a best effort basis. The contents of the file and their definitions are as follows:

CON/PCON Legend: Y = Available, N = Not provided (null value), F = Future Data point (null value), E = May require entitlement, 0 = May be null

| Field Name        | Format                     | PCON | CON | Description   |
|-------------------|----------------------------|------|-----|---|
| EffectiveDate     | YYYY-MM-DD                 | Υ    | Υ   | Effective date.   |
| RebalanceDate     | YYYY-MM-DD                 | Υ    | Y   | Date of the last rebalance for the CON file, date of the current rebalance for the PCON file.         |
| PortfolioName     | Varchar Max<br>Length: 128 | Υ    | Υ   | Official name of the index, as represented by the unique basket of securities (portfolio).            |
| PortfoliolD       | Varchar Max<br>Length: 36  | Υ    | Υ   | Unique Morningstar identifier for every unique basket of securities (portfolio) in alphanumeric form. |
| MasterPortfolioID | Varchar Max<br>Length: 36  | Υ    | Y   | Unique Morningstar identifier for every unique basket of securities (portfolio) in integer form.      |
| IndexCode         | Varchar Max<br>Length: 36  | Υ    | Υ   | Index Code.   |
| IssuerName        | Varchar Max<br>Length: 128 | Υ    | Υ   | Issuer name.  |
| IssuerID          | Varchar Max<br>Length: 36  | Υ    | Υ   | Unique LCD identifier at the issuer level.  |
| IssuerID2         | Varchar Max<br>Length: 36  | F    | F,0 | Unique Morningstar identifier at the issuer level.  |
| PerformanceID     | Varchar Max<br>Length: 10  | F    | F,0 | Unique Morningstar identifier for security.   |



| AccountID            | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ | Y | Unique identifier for each loan.   |
|----------------------|---|---|---|--|
| TransactionID        | Numeric Max<br>Length: 64,<br>Scale: 18 | Y | Y | Unique LCD identifier for each transaction, which may include more than one facility.  |
| FacilityName         | Varchar Max<br>Length: 128              | Υ | Υ | Facility/tranche name (e.g. Term Loan, Term<br>Loan B).  |
| FacilityID           | Numeric Max<br>Length: 64,<br>Scale: 18 | Y | Y | Unique LCD identifier for each loan which includes identification of the facility category (e.g. Term Loan A or Term Loan B).  |
| Region               | Varchar Max<br>Length: 5                | Υ | Υ | This field defines the region of syndication for<br>the specific loan e.g, US for loans within the<br>US parent index, EUR for loans within the<br>European parent index). |
| IssuerDomicile       | Varchar Max<br>Length: 2                | Υ | Υ | Country of issuer domicile (ISO two character code).   |
| EntryDate            | YYYY-MM-DD                              | F | F | Original date of entry into the index.   |
| ReEntryDate          | YYYY-MM-DD                              | F | F | Most recent date of entry into the index, if applicable.   |
| CreditDate           | YYYY-MM-DD                              | Υ | Υ | Credit date reflects the date of issue of loan.  |
| MaturityDate         | YYYY-MM-DD                              | Υ | Υ | Maturity date of the loan.   |
| YearsToMaturity      | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Y | Remaining time to stated maturity as measured in years.  |
| CurrencyOflssue      | Varchar Max<br>Length: 3                | Υ | Υ | Currency of issue.   |
| InitialAmountLCL     | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ | Υ | Initial loan amount at time of issue, as reflected in the local currency of issue.   |
| AmountOutstandingLCL | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Υ | Current amount outstanding, which reflects any partial and amortization payments, as reflected in the local currency of issue.   |



| MarketValueCleanPriceLCL | Numeric Max<br>Length: 64,<br>Scale: 18 | F,E | Y,E | Initial loan amount at time of issue, as reflected in the local currency of issue.  |
|--------------------------|---|-----|-----|---|
| MarketValueLCL           | Numeric Max<br>Length: 64,<br>Scale: 18 | F,E | Y,E | Current amount outstanding, which reflects any partial and amortization payments, as reflected in the local currency of issue.  |
| Currency                 | Varchar Max<br>Length: 10               | F   | Υ   | Calculation currency of the index/security, which may be different than the security's currency of issue.   |
| FXRate                   | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Υ   | Foreign currency exchange rate.   |
| InitialAmount            | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y   | Initial loan amount at time of issue, as reflected in the calculation currency.   |
| AmountOutstanding        | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y   | Current amount outstanding, which reflects any partial and amortization payments, as reflected in the calculation currency. For loans where a weight capping has been applied, the figure reflects the adjusted amount outstanding.         |
| MarketValueCleanPrice    | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y,E | Market Value of the loan without including accrued interest, as reflected in the calculation currency. For loans where a weight capping has been applied, the figure reflects the adjusted market value without including accrued interest. |
| MarketValue              | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y,E | Market Value of the loan including accrued interest, as reflected in the calculation currency. For loans where a weight capping has been applied, the figure reflects the adjusted market value.  |
| AccruedInterest          | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Υ   | Interest calculated from last coupon payment until the t-day.   |
| CapFactor                | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Υ   | Reflects the level of capping applied to a security in the index, if applicable.  |



| OpenWeight     | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Υ   | Market Value, including accrued interest, weight of the loan in the index (t-1 weight).  |
|----------------|---|-----|-----|--|
| CloseWeight    | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y   | Market Value weight, including accrued interest, of the loan in the index (t weight).  |
| OriginalSpread | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ   | Υ   | Spread at the time of issuance.  |
| CurrentSpread  | Numeric Max<br>Length: 64,<br>Scale: 18 | Υ   | Υ   | Current stated spread over base rate.  |
| AdjustedSpread | Numeric Max<br>Length: 64,<br>Scale: 18 | Y   | Y   | Reflects adjustments to the current spread if<br>the base rate falls below the base rate floor<br>and/or for Credit Spread Adjustments, if<br>applicable.                    |
| FloorRate      | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | Y,0 | Base rate floor of the loan, if applicable.  |
| 1MCSA          | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | Y,0 | One month credit spread adjustment, if applicable. Blank CSAs are due to no credit spread adjustments. Decreasing availability of the data is due to new deals or repricing. |
| BMCSA          | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | Y,0 | One month credit spread adjustment, if applicable.   |
| 6MCSA          | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,0 | Y,0 | One month credit spread adjustment, if applicable.   |
| BaseRate       | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y   | Blended market rate applied, based on currency of the loan <sup>2</sup> .  |
| Coupon         | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Υ   | Coupon rate, reflected as the all-in rate (base rate + current spread).  |

 $<sup>^{\</sup>rm 2}\,\mbox{This}$  field will populate only for US loans.



| SpreadtoMaturity    | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y   | Constituent spread of Yield to Maturity over base rate using a flat curve assumption.                                   |
|---------------------|---|-----|-----|---|
| Yield               | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Υ   | Constituent yield calculated using a simple margin formula.   |
| YieldtoMaturity     | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y   | Constituent yield earned by loan if held to maturity using a flat curve assumption.                                     |
| Duration            | Numeric Max<br>Length: 64,<br>Scale: 18 | F   | Y   | Sensitivity of price to change in interest rate movements (modified duration) using a flat curve assumption.            |
| PriceReturn         | Numeric Max<br>Length: 64,<br>Scale: 18 | N   | Y   | One day price return for the loan in the local currency of the security. Not weighted.                                  |
| InterestReturn      | Numeric Max<br>Length: 64,<br>Scale: 18 | N   | Υ   | One day interest return for the loan in the local currency of the security. Not weighted.                               |
| TotalReturn         | Numeric Max<br>Length: 64,<br>Scale: 18 | N   | Y   | One day total return for the loan (price return + interest return) in the local currency of the security. Not weighted. |
| TotalWeightedReturn | Numeric Max<br>Length: 64,<br>Scale: 18 | N   | Y   | Weighted total contribution of the loan to Index returns in calculation currency (price + interest) x open weight).     |
| SectorLevel1        | Varchar Max<br>Length: 128              | F,E | F,E | GICS Level I industry description.  |
| SectorLevel2        | Varchar Max<br>Length: 128              | Y,E | Y,E | GICS Level II industry description.   |
| SectorLevel3        | Varchar Max<br>Length: 128              | Y,E | Y,E | GICS Level III industry description.  |
| SectorLevel4        | Varchar Max<br>Length: 128              | F,E | F,E | GICS Level IV industry description.   |
| Seniority           | Varchar Max<br>Length: 2                | Υ   | Υ   | First Lien (FL) /Second Lien (SL).  |



| Sponsored             | Varchar Max<br>Length: 1                | Υ     | Υ     | Identifies if the issuer is backed by a private equity sponsor (Y/N).   |
|-----------------------|---|-------|-------|---|
| CovenantLight         | Varchar Max<br>Length: 1                | Υ     | Υ     | Covenant Light (Y/N).   |
| LeadAgent             | Varchar Max<br>Length: 128              | Y,0   | Y,0   | Loan lead agent.  |
| FacilityRating        | Varchar Max<br>Length: 10               | Y,E   | Y,E   | Current facility level rating according to<br>Morningstar Indexes Methodology (only S&P<br>ratings are considered). |
| DefaultStatus         | Varchar Max<br>Length: 3                | F     | Υ     | (Y) Loan in Default / (N) Loan not in default.  |
| DefaultDate           | YYYY-MM-DD                              | F,0   | Y,0   | Date of default, if applicable.   |
| InitialFacilityRating | Varchar Max<br>Length: 10               | Y,E   | Y,E,0 | Initial facility level rating according to<br>Morningstar Indexes Methodology (only S&P<br>ratings are considered). |
| IssuerRating          | Varchar Max<br>Length: 10               | Y,E   | Y,E,0 | Current issuer level rating according to<br>Morningstar Indexes Methodology (only S&P<br>ratings are considered).   |
| PricingID             | Varchar Max<br>Length: 128              | Y,E   | Y,E   | US facilities reflect LPC/Refinitiv LIN ID.<br>European facilities reflect Markit LoanX ID.                         |
| BidPrice              | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Y,E   | Bid price for loan facility.  |
| AskPrice              | Numeric Max<br>Length: 64,<br>Scale: 18 | F,E   | F,E   | Ask price for loan facility.  |
| IndexPrice            | Numeric Max<br>Length: 64,<br>Scale: 18 | Y,E   | Y,E   | Loan facility price used for index calculation.   |
| CUSIP                 | Varchar Max<br>Length: 10               | Y,E,0 | Y,E,0 | CUSIP identifier for loan.  |
| LINID                 | Varchar Max<br>Length: 10               | Y,0   | Y,0   | LSEG identifier for loan.   |



| LoanXID             | Varchar Max<br>Length: 10               | Y,E,0 | Y,E,0 | IHS Markit identifier for loan.  |
|---------------------|---|-------|-------|--|
| FIGI                | Varchar Max<br>Length: 12               | Y,0   | Y,0   | Bloomberg identifier for loan.   |
| LoanStatus          | Varchar Max<br>Length: 12               | F     | F     | Status of whether a loan is active.  |
| DBRSRating          | Varchar Max<br>Length: 10               | F,E   | F,E   | Current DBRS Rating - Ioan level.  |
| S&PRating           | Varchar Max<br>Length: 10               | F,E   | F,E   | Current S&P Rating – loan level.   |
| MoodysRating        | Varchar Max<br>Length: 10               | F,E   | F,E   | Current Moodys Rating - Ioan level.  |
| FitchRating         | Varchar Max<br>Length: 10               | F,E   | F,E   | Current Fitch Rating – Ioan level.   |
| Spread2Year         | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Υ     | Constituent spread of Yield to Maturity 2 Year over base rate using a flat curve assumption.             |
| Spread3Year         | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Y     | Constituent spread of Yield to Maturity 3 Year over base rate using a flat curve assumption.             |
| Spread4Year         | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Υ     | Constituent spread of Yield to Maturity 4 Year over base rate using a flat curve assumption.             |
| Spread5Year         | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Υ     | Constituent level spread of Yield to Maturity 5<br>Year over base rate using a flat curve<br>assumption. |
| SpreadDuration      | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Y     | Sensitivity of price to change in credit spread using a flat curve assumption.                           |
| DurationTimesSpread | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Υ     | Product of Spread Duration and Spread to Maturity using a flat curve assumption.                         |
| YTM2Year            | Numeric Max<br>Length: 64,<br>Scale: 18 | F     | Y     | Constituent yield earned by loan if held for 2 years using a flat curve assumption.                      |



| YTM3Year               | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Υ | Constituent yield earned by loan if held for 3 years using a flat curve assumption.             |
|------------------------|---|---|---|---|
| YTM4Year               | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Y | Constituent yield earned by loan if held for 4 years using a flat curve assumption.             |
| YTM5Year               | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Y | Constituent yield earned by loan if held for 5 years using a flat curve assumption.             |
| SpreadtoMaturityFWD    | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent spread of Yield to Maturity over base rate using a forward curve assumption.        |
| Spread2YearFWD         | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent spread of Yield to Maturity 2 Year over base rate using a forward curve assumption. |
| Spread3YearFWD         | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent spread of Yield to Maturity 3 Year over base rate using a forward curve assumption. |
| Spread4YearFWD         | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent spread of Yield to Maturity 4 Year over base rate using a forward curve assumption. |
| Spread5YearFWD         | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent spread of Yield to Maturity 5 Year over base rate using a forward curve assumption. |
| SpreadDurationFWD      | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Sensitivity of price to change in credit spread using a forward curve assumption.               |
| DurationTimesSpreadFWD | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Product of Spread Duration and Spread to Maturity using a forward curve assumption.             |
| YieldtoMaturityFWD     | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent yield earned by loan if held to maturity using a forward curve assumption.          |
| YTM2YearFWD            | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent yield earned by loan if held for 2 years using a forward curve assumption.          |



| YTM3YearFWD      | Numeric Max                             |   | F | Constituent yield earned by loan if held for 3   |
|------------------|---|---|---|--|
|                  | Length: 64,<br>Scale: 18                |   |   | years using a forward curve assumption.  |
| YTM4YearFWD      | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent yield earned by loan if held for 4 years using a forward curve assumption.   |
| YTM5YearFWD      | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Constituent yield earned by loan if held for 5 years using a forward curve assumption.   |
| DurationFWD      | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Sensitivity of price to change in interest rate movements using a forward curve. assumption.                                     |
| MacaulayDuration | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Y | Effective time remaining until the next coupon payment.  |
| CouponCash       | Numeric Max<br>Length: 64,<br>Scale: 18 | F | F | Nominal value of coupon payment as reflected in the local currency of issue.   |
| CouponPayment    | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Υ | Coupon payment (%) on t-day. Coupon payment is the cumulative accrued interest (per 100 par) since the last coupon payment date. |
| RedemptionPrice  | Numeric Max<br>Length: 64,<br>Scale: 18 | F | Y | Price at which a loan is bought back by the issuer.  |
| PublishDateTime  | timestamp yyyy-<br>mm-<br>ddThh:mm:ss   | Y | Y | Date and Time when index file is published in UTC.   |
| FileType         | Varchar Max<br>Length: 3                | F | Υ | Indicates the portfolio file type. Close files = 'CLS'.  |
| LINE COUNT       | Numeric Max<br>Length: 38               | Υ | Υ | Number of rows in the file.  |
|                  |   |   |   |  |



# **File and Delivery Specifications Version History**

| Date           | Description   |  |  |  |
|----------------|---|--|--|--|
| September 2023 | Initial version   |  |  |  |
| October 2023   | Updated with new data points and introductory content   |  |  |  |
| March 2024     | Added PCON file information   |  |  |  |
| April 2024     | Added LoanStatus data point   |  |  |  |
| October 2024   | Clarified capping application for amount outstanding field  |  |  |  |
| March 2025     | Changed IndexBaseRate and BaseRate fields from future data points to available in the IDX and CON files |  |  |  |
| April 2025     | Added new index level and constituent level analytics   |  |  |  |
| May 2025       | Update to LeadAgent in PCON   |  |  |  |
| June 2025      | New data point availability   |  |  |  |
|                |   |  |  |  |

# **About Morningstar Indexes**

Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers and advisors in navigating investment opportunities across major asset classes, styles and strategies. From traditional benchmarks and unique IP-driven indexes, to index design, calculation and distribution services, our solutions span an investment landscape as diverse as investors themselves.

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## **Contact Us**

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Morningstar Leveraged Loan Indexes File and Delivery Specifications

