

Bloomberg Europe Developed Markets Top 20 Automotive Decrement Methodology

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Introduction

The Bloomberg Europe DM Top 20 Automotive Decrement Indices are designed to represent the largest twenty companies by float market capitalization classified in the Automotive sector in Europe DM. The Index is weighted by float market capitalization. A company's sector allocation is defined per Bloomberg Industry Classification System (BICS).

The Bloomberg Europe DM Top 20 Automotive Decrement 50 Point Index and the Bloomberg Europe DM Top 20 Automotive Decrement 5% Index are designed to represent the performance of the Bloomberg Europe DM Top 20 Automotive Index from which a predetermined fee is withdrawn on daily basis. The predetermined fee is in the form of index points or index percentage deducted from the underlying Total Return Index and Net Return Index respectively.

Section 1: Overview

Name	Bloomberg Europe DM Top 20 Automotive Decrement 50 Points Index	Bloomberg Europe DM Top 20 Automotive Decrement 5% Index
Ticker	EU20CPT Index	EU20CARP Index
Currency	EURO	
Publication	August 2022	
Base Date	March 30, 2015	
Publication	Weekdays	

The below table shows the parameters applied to calculate the Bloomberg Europe DM Top 20 Automotive Decrement 50 Point Index:

Decrement Index Ticker	Decrement Index Name	Decrement Type	Decrement Point	Index Base Date	Index Base Value	Underlying Index Ticker	Underlying Index	Underlying Index Currency	Day Count Convention
EU20CPT Index	Bloomberg Europe DM Top 20 Automotive Decrement 50 Points Index	Fixed Point	50	30-Mar15	1245.00	EU20CART Index	Bloomberg Europe DM Top 20 Automotive Index Total Return (EUR)	EURO	365

Section 2: Eligibility

The eligible securities for the Indices will be based upon the eligibility criteria of a Parent Index derived from the Bloomberg Global Equity Indices Methodology, which provides the investable universe for a given Index.

Parent Index

In order to be eligible for the Bloomberg Europe DM Top 20 Automotive Index, a security must be a member of the Bloomberg Europe Developed Market Large, Mid & Small Cap Universe.

Section 3: Selection

In order for a security to be included in the Index, it must satisfy the following conditions to have a sector classification of Automotive as defined by our BICS classification data.

The BICS eligible securities are then grouped at their company level and sorted by their security free float market capitalization. The top 20 securities are then selected to represent the basket.

Section 4: Weighting

A security's weight is determined by its Free Float Market Capitalization such that:

$$W_i = \frac{FMC_i}{\sum_1^M FMC_i}$$

Where:

W_i Initial weight of security

M Number of Index Members

FMC_i Free Float Market Capitalization of security i

Section 5: Maintenance

Index calculation

This Methodology should be read in conjunction with the [Bloomberg Decrement Index Calculation Methodology](#) for details on index calculation, input data and exercise of discretion.

Index review

The Indices are reconstituted semi-annually, while index members' weights are rebalanced quarterly in line with the index review schedule of the Bloomberg Global Equity Index Methodology in March and September.

Pro-forma changes will be announced with 10 full business day advance notification.

Selection Date

On the last week of January, April, July and October.

Effective Date

At the close of the second Wednesday of March, June, September and December.

Corporate actions

The following table outlines specific treatment for intra-rebalance corporate action handling. Please refer to the [Bloomberg Non-Market Cap Corporate Action Methodology](#) for more detail on how BISL treats specific corporate actions. The Methodology aims to maintain alignment to a Parent Index with the following specific exceptions.

Event type	Handling
Initial Public Offering ("IPO")	IPO securities are ineligible for inclusion.
Spin-off	A child security created from an Index constituent will be added to the Index, evaluated and retained provided it continues to meet eligibility criteria as set by the Parent Index.
M&A	Proceeds from cash deals will be reinvested across the Index. If an Index constituent makes an acquisition involving shares for another Index constituent there will be an increase in shares proportional to the deal terms. If an Index constituent is acquired by a non-Index constituent in an acquisition involving shares, the target will be removed, but the acquirer shares will not be added to the Index.

Section 7: Stakeholder engagement, risks and limitations

Stakeholder engagement

BISL is in regular and ongoing engagement with its users through various channels, including via help desks, sales personnel, and direct communication with product personnel. To help ensure that the Index remains an accurate representation of Global Equities defined in the methodology, BISL endeavors to meaningfully incorporate these engagements into improvements in processes and service. Prior to any change that might meaningfully impact users, BISL consults more broadly with stakeholders, where appropriate, before a recommendation is presented to the

Product, Risk & Operations Committee (“PROC”) for approval. This concept of shared ownership enables BISL to produce the most relevant Index and helps ensure responsiveness to user needs.

Risks

The following is a summary of certain risks associated with the Index but is not meant to be an exhaustive list of all risks associated with the Index. Although the Index is designed to be representative of the markets it is measuring, it may not be representative of every use case. There is also inherent, though transparent, judgment in its construction, as outlined in this Methodology. The Index is designed for general applicability and not to address the individual circumstances and needs of users. BISL does not advise about the usefulness of the Index to a particular circumstance; users are therefore encouraged to seek their own counsel for such matters. This Methodology is subject to change, which may impact its usefulness to users. Although efforts will be made to alert users of any change, every individual user may not be aware of them. Such changes may also significantly impact the usefulness of the Index. BISL may also decide to cease publication of this Index. BISL maintains internal policies regarding user transitions, but no guarantee is given that an adequate alternative is available generally or for a particular use case. Markets for stocks, as with all markets, can be volatile. As the Index is designed to measure this market, it could be materially impacted by market movements, thus significantly affecting the use or usefulness of the Index for some or all users. Also, certain equity markets are less liquid than others – even the most liquid markets may suffer periods of illiquidity. Illiquidity can have an impact on the quality or amount of data available to BISL for calculation and may cause the Index to produce unpredictable results.

The decrement feature reduces the Index value. Such decrement represents a predetermined reduction relative to the return of the Underlying Index.

Limitations of the index

Though the Index is designed to be representative of the markets it measures or otherwise aligns with its stated objective, it may not be representative in every case or achieve its stated objective in all instances. It is designed and calculated strictly to follow the rules of this Methodology, and any Index level or other output is limited in its usefulness to such design and calculation.

Markets can be volatile, including those market interests that the Index measures or upon which the Index is dependent to achieve its stated objective. For example, illiquidity can have an impact on the quality or amount of data available to the administrator for calculation and may cause the Index to produce unpredictable or unanticipated results.

In addition, market trends and changes to market structure may render the objective of the Index unachievable or to become impractical to replicate by investors.

In particular, the Index measures global equity markets. As with all equity investing, the Index is exposed to market risk. The value of equities fluctuate with the changes in economic forecasts, interest rate policies established by central banks and perceived geo-political risk. The Index does not take into account the cost of replication and as a result a tracking portfolio's returns will underperform the Index with all else equal. As the Index is designed to measure those markets, it could be materially impacted by market movements, thus significantly impacting the use or usefulness of the fixings for some or all users.

In addition, certain sub-indices may be designed to measure smaller subsets of the Index such as specific styles, size, and sector. Some of these sub-indices have very few qualifying constituents and may have none for a period of time. During such period, the sub-index will continue to be published at its last value, effectively reporting a 0% return, until new constituents qualify. If no constituents are expected to qualify (due to changes in market structure and other factors), the sub-index may be discontinued. In such an event, this discontinuation will be announced to index users.

Section 8: Benchmark oversight and governance

Benchmark governance, audit and review structure

BISL uses two primary committees to provide overall governance and effective oversight of its benchmark administration activities:

- The PROC provides direct governance and is responsible for the first line of controls over the creation, design, production and dissemination of benchmark indices, strategy indices and fixings administered by BISL, including the Index. The PROC is composed of the personnel with significant experience or relevant expertise in relation to financial benchmarks. Meetings are attended by Legal & Compliance personnel. Nominations and removals are subject to review by the BOC, discussed below.
- The oversight function is provided by BISL's Benchmark Oversight Committee ("BOC"). The BOC is independent of the PROC and is responsible for reviewing and challenging the activities carried out by the PROC. In carrying out its oversight duties, the BOC receives reports of management information from members of the PROC as well as Legal & Compliance members engaged in second level controls.
- In addition, the BISL board of directors is composed of senior executives a majority of which are independent of BISL and is empowered to set the strategy, objectives, and overall direction of BISL, and oversees and monitors BISL's decision-making.

On a quarterly basis, the PROC reports to the BOC on governance matters, including but not limited to client complaints, the launch of new benchmarks, operational incidents (including errors & restatements), major announcements and material changes concerning the benchmarks, the results of any reviews of the benchmarks (internal or external) and material stakeholder engagements.

Index and data reviews

BISL reviews the Methodology on a periodic basis, and at least annually, to determine whether it continues to:

- (i) be robust and reliable;
- (ii) have clear rules, including regarding discretion;
- (iii) be rigorous, continuous and capable of validation;
- (iv) be resilient and ensures the Index can be calculated in the widest range of possible circumstances, without compromising its integrity; and
- (v) be traceable and verifiable.

In doing so, BISL will assess whether the Index continues to represent the market that it is intended to measure. More frequent reviews may result from extreme market events and/or material changes to the underlying market. Non-exhaustive examples of extreme market events include trading events such as trading interruptions or unexpected market closures, resulting in unusual market illiquidity or market volatility; exchange closures, government interventions, a pandemic or a natural catastrophe resulting in exceptional periods of stress.

Criteria for data inputs include reliable delivery and active underlying markets. Whether an applicable market is active depends on whether there are sufficient numbers of transactions (or other indications of price, such as indicative quotes) in the applicable constituents (or similar underlying constituent elements) that a price (or other value, as applicable) may be supplied for such constituent(s).

Other than as set forth in this Methodology (read in conjunction with the [Bloomberg Global Equity Index Methodology](#)), there are no minimum liquidity requirement for Index constituents and/or minimum requirements or standards for the quantity or quality of the input data. The review will be conducted by product managers of the Index in connection with the periodic rebalancing of the Index or as otherwise appropriate. Please see the [Bloomberg Global Equity Index Methodology](#) for further information on calculation of the Index in the event of market disruption.

Any resulting change to this Methodology will be subject to the review of the PROC under the oversight of the BOC, each of which committees shall be provided all relevant information and materials it requests relating to the change. Details regarding the PROC and BOC are described above. Any relevant changes will be reflected and tracked in updated versions of this Methodology.

BISL will consult with users of the Index on changes to the Methodology and seek user input. The stakeholder engagement will set forth the rationale for any proposed changes (including whether the representativeness of the Index or its appropriateness as a reference for financial instruments or contracts would be at risk if the proposed changes are not made), the key elements of the Methodology that would, in BISL's view, be affected by the proposed

change, as well as the timeframe and process for responses. BISL will provide at least two weeks' notice prior to any change going into effect. In the event of exigent market circumstances or if required by law or regulation, this period may be shorter. Subject to requests for confidentiality, stakeholder feedback and BISL's responses will be made accessible upon request.

Internal and external reviews

BISL's Index administration is also subject to its Legal & Compliance function, which periodically reviews various aspects of its businesses to determine whether it is adhering to applicable policies and procedures, and assess whether applicable controls are functioning properly. In addition, BISL may from time to time appoint an independent external auditor with appropriate experience and capability to review adherence to benchmark regulation and the IOSCO Principles. The frequency of such external reviews depends on the size and complexity of the operations and the breadth and depth of Index use by stakeholders. For the Indices, BISL anticipates an external review to be conducted every two years.

Expert judgement

The Index is rules-based, and its construction is designed to consistently produce values without the exercise of expert judgment or discretion. Nevertheless, BISL may use expert judgment or discretion with regards to the following:

- Index restatements
- Extraordinary circumstances during a market emergency
- Data interruptions, issues, and closures
- Significant acquisitions involving a non-Index company

When expert judgment or discretion is required, BISL undertakes to be consistent in its application, with recourse to written procedures outlined in this Methodology and internal procedures manuals. In certain circumstances exercises of expert judgment or discretion are reviewed by senior members of BISL management and Legal & Compliance teams, and are reported to the PROC, BISL's governance committee, which operates under the supervision of BISL's oversight function, the BOC. BISL also maintains and enforces a code of ethics to prevent conflicts of interest from inappropriately influencing index construction, production, and distribution, including the use of expert judgment or discretion.

Data providers and data extrapolation

The Index is rules-based, and its construction is designed to consistently produce Index levels without the exercise of discretion. The Index is produced without the interpolation or extrapolation of input data.

In addition, BISL seeks to avoid contributions of input data that may be subject to the discretion of the source of such data and instead seeks to use input data that is readily available and/or distributed for a number of non-index or benchmark creation purposes. Accordingly, the index requires no 'contributors' to produce and no codes of conduct with any such sources are required.

Conflicts of interest

The Index confers on BISL discretion in making certain determinations, calculations and corrections from time to time. In making those determinations, calculations and corrections, BISL has no obligation to take the needs of any product investor or any other party into consideration. BISL is committed to avoiding and, where necessary, managing actual or potential conflicts of interest in the BISL decision-making process and has established a Conflicts of Interest Policy to minimize or resolve actual or potential conflicts of interest. BISL does not create, trade or market products.

Restatement policy

BISL strives to provide accurate calculation of its indices. However, to the extent a material error in index levels is uncovered following publication and dissemination, a public notification will be made alerting of such error and the expected date of a revised publication, if warranted.

An error to an equity Index in excess of 3 basis point over one day will automatically be reviewed for restatement. If the Index in error is a Primary Index (listed below) and has occurred in the last 2 business days, a restatement will be made for all impacted indices. Errors occurring beyond the last 2 business days will be evaluated on a case-by-case basis.

Real-time indices are not considered for restatement, all real-time dissemination is considered indicative.

The following factors will be reviewed to determine whether to restate. Not all conditions need to be present to warrant a restatement, and certain factors may be more determinative than others depending on the circumstances of the given error.

- The relative importance of the data field impacted by the error;
- When the error occurred and when it was discovered;
- The number of indices and sub-indices affected;
- Whether the impacted indices are linked to tradable products;
- The magnitude of the error;
- The burden of restatement on client re-processing relative to the impact of the error;
- The impact of the restatement on analytical tools.

Event	Action (If discovered within 2 business days)
Missed corporate action	
Spin-off	Restate indices and reissue file
Regular cash dividend	
Special cash dividend	
Stock split	
Stock dividend, bonus	
Mergers & acquisition	Update made the next business day; no restatement and no reissuance of files
Delisting	
Reclassification	
Change in listing	
IPO incorrectly added	Update made at next rebalance
Rebalance	
Incorrect add	Unless the error is discovered during pro-forma period, update will be made at next rebalance
Incorrect removal	
Share changes	

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