



IHS Markit™

Multi-Asset Allocation Indices

1 November 2019

VanEck®

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1 Index Significant Administration Events

The following Index Administration events apply to each index of the **Multi-Asset Allocation Indices**.

Table 1: Index Administration Events

| Date | Index Administration Event |
|------------------|---|
| 1 November 2019 | Legal name ThinkCapital ETF's N.V. changes to VanEck Vectors™ ETFs N.V and the legal name of Think ETF Asset Management B.V. changes to VanEck Asset Management B.V. Index names also change as follows: Think Total Market UCITS ETF Defensief changes to Multi-Asset Conservative Allocation Index; Think Total Market UCITS ETF Neutraal changes to Multi-Asset Balanced Allocation Index; Think Total Market UCITS ETF Offensief changes to Multi-Asset Growth Allocation Index |
| 30 July 2018 | IHS Markit officially commences Index Administration |
| 18 May 2018 | The four Underlying Indices added on 15 December 2017 are removed from Multi-Asset Allocation Indices composition. The weighting strategies revert back to the initial ones which are described in this document |
| 15 December 2017 | Four new Underlying Indices are added into the composition of Multi-Asset Allocation Indices and are following new weighting strategies |
| 25 August 2017 | The Underlying Think Global Equity Index is replaced by Solactive Global Equity Index GTR |
| 18 January 2017 | The Underlying Think Global Real Estate Index is replaced by GPR Global 100 Index |
| 2 September 2015 | Index Commencement Date |
| 14 December 2009 | Index Base Date |

2 Index Overview

Each of the Multi-Asset Allocation Indices (the Indices) tracks four Underlying Indices (the Index Components) based on a selection process developed in collaboration with IHS Markit, allocating a combination of developed equities, property stocks, as well as EUR denominated corporate and government bonds.

Table 2: Multi-Asset Allocation Indices

| Index Name | Currency | Bloomberg Ticker | Reuters RIC | Rounding (d.p.) |
|---|----------|------------------|-------------|-----------------|
| Multi-Asset Conservative Allocation Index | EUR | TTMTIDF | .TTMTIDF | 4 |
| Multi-Asset Balanced Allocation Index | EUR | TTMTINL | .TTMTINL | 4 |
| Multi-Asset Growth Allocation Index | EUR | TTMTIOF | .TTMTIOF | 4 |

3 Index Family and Construction

The Multi-Asset Allocation Indices are composed of four Underlying Indices (tracking corporate bonds, government bonds, equities and property) resulting in three indices differing in strategy.

Table 3: Multi-Asset Allocation Indices Strategies

| Underlying indices | Multi-Asset Conservative Allocation Index Weights | Multi-Asset Balanced Allocation Index Weights | Multi-Asset Growth Allocation Index Weights | Price type | Underlying Level precision |
|---|---|---|---|----------------|----------------------------|
| GPR Global 100 Index | 5% | 10% | 10% | Last price[1] | 4 digits |
| Solactive Global Equity Index GTR | 25% | 40% | 60% | Official Close | 3 digits |
| Markit iBoxx EUR Liquid Sovereigns Diversified 1-10 | 35% | 25% | 15% | Official Close | 4 digits |
| Markit iBoxx EUR Liquid Corporates | 35% | 25% | 15% | Official Close | 4 digits |

[1] Due to its late publishing time, the price of the GPR Global 100 used is the last price at the **Exchange** closing time. All of the other Underlying Levels are Official close prices.

For information on universe selection and index construction for the Underlying Indices, please refer to their respective index rule documents.

4 Index Calculation

4.1 Rebalancing Process

Each of the Multi-Asset Allocation Indices is rebalanced yearly at the close of the **Index Rebalance Day**. The Index Rebalance Day occurs every year on the first Tuesday of September. If the first Tuesday of September is not a **Index Business Day**, then the Index Rebalance Day is the next Index Business Day.

On the Index Rebalance Day the weights of the Underlying Indices are reset to their original fixed values as defined in [Table 3: Multi-Asset Allocation Indices Strategies](#).

Table 4: Examples of the Index Rebalance Day table

| Annual Rebalance | Rebalance Date |
|------------------|------------------|
| 2017 | 5 September 2017 |
| 2018 | 4 September 2018 |

4.2 Index Level Calculation

For each of the Multi-Asset Allocation Indices and on any Index Business Day t , the **Index Level** is calculated as the **Index Value** divided by the **Index Divisor** :

$$IndexLevel_t = \frac{IndexValue_t}{Divisor_{t-1}}$$

For each of the Multi-Asset Allocation Indices and on any Index Business Day t , the Index Value is calculated as the sum of the **Underlying Index Value** :

$$IndexValue_t = \sum_{i=1}^n UnderlyingIndexValue_{i,t}$$

On any Index Business Day t and for each Underlying Index i of any of the Multi-Asset Allocation Indices, the Underlying Index Value is calculated as the product of the **Underlying Index Level** at close of the Index Business Day times the **Underlying Cap Factor** as of the previous Index Business Day.

$$UnderlyingIndexValue_{i,t} = UnderlyingLevel_{i,t} \cdot CapFactor_{i,t-1}$$

On any Index Rebalance Day and for any of the Multi-Asset Allocation Indices, the Underlying Cap Factors are calculated as the product of the **Underlying Fixed Weight** as defined in the [Section 3](#)

— **Index Family and Construction**, and the proportion of the Underlying Index Level in the sum to the Underlying Index Levels:

$$CapFactor_{i,r} = \frac{Weight_i \cdot UnderlyingLevel_{i,r}}{\sum_{k=1}^n UnderlyingLevel_{k,r}}$$

On the same date and for each of the Multi-Asset Allocation Indices, a new Index Divisor is calculated as the sum product of the Underlying Index Levels and the Underlying Cap Factors, divided by the Index Level:

$$Divisor_r = \frac{\sum_{i=1}^n CapFactor_{i,r} \cdot UnderlyingLevel_{i,r}}{IndexLevel_r}$$

Where:

| | |
|------------------------------|---|
| t | Any Index Business Day |
| $t-1$ | The Index Business Day prior to t |
| r | Any Index Rebalance Day |
| i | 1, 2, 3..., n refers to the Underlying Index i |
| n | The number of Underlying Indices of each of the Multi-Asset Allocation Indices |
| $IndexLevel_t$ | The Index Level as of Index Business Day t |
| $IndexLevel_r$ | The Index Level as of Rebalance Day r |
| $IndexValue_t$ | The Index Value as of Index Business Day t |
| $UnderlyingLevel_{i,t}$ | The Index Level of the Underlying Index i of any of the Multi-Asset Allocation Indices at close of the Index Business Day t |
| $UnderlyingLevel_{i,r}$ | The Index Level of the Underlying Index i of any of the Multi-Asset Allocation Indices at close of the Rebalance Day r |
| $UnderlyingIndexValue_{i,t}$ | The Underlying Index Value of the Underlying Index i on the Index Business Day t |
| $CapFactor_{i,t-1}$ | The value assigned to each Underlying Index i of any of the Multi-Asset Allocation Indices in order to respect the capping rules as of rebalance, applied as of close of date $t-1$ |
| $CapFactor_{i,r}$ | The value assigned to each Underlying Index i of any of the Multi-Asset Allocation Indices in order to respect the capping rules as of rebalance, applied as of close of date $t-1$ |
| $Divisor_{t-1}$ | The fixed value as of index launch used to rebase unadjusted Index Value to the desired launch value as of $t-1$ |
| $Divisor_r$ | The fixed value as of index launch used to rebase unadjusted Index Value to the desired launch value as of the Rebalance Day r |
| $Weight_i$ | The fixed weights as defined in Table 3: Multi-Asset Allocation Indices Strategies |

4.3 Index History

As limited historical performance data exist with respect to the Indices, any notional investment in the Indices may involve greater risk than a notional investment in indices or strategies with a proven track record. Each Index will be first calculated on or around the Index Commencement Date. All such retrospective closing levels are simulated based on quantitative screening only. They must be considered hypothetical and illustrative only.

The actual performance of the Indices may be materially different from the results presented in any simulated history relating to such Indices. Past performance should not be considered indicative of future performance.

4.4 Rounding and Calculated Values

Each Index Level published by the **Index Administrator** shall be rounded as defined in [Table 2: Multi-Asset Allocation Indices](#).

The rounding convention applied is **Half Away from Zero**.

4.5 Calendar

The Index Level will be calculated on each Index Business Day; subsequent target publication time will be 11:30 pm London Time time on the same Index Business Day.

5 Index Governance

5.1 Index Committees

IHS Markit has established two governance committees that are responsible for ensuring oversight of the IHS Markit's Independent Index Administration Service.

The Index Administration Committee ("IAC") reviews and challenges any aspects of the Index determination process at the preliminary level and further ensures effective control over the Index Administrator. The Board also operates as an approval gateway to the Benchmark Oversight Committee ("BOC").

Refer to www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation for this Committee's terms of reference.

Chaired by IHS Markit's Head of Information Division and including representatives from Legal, Compliance, Regulatory Affairs and Operations, the BOC has responsibility for effective scrutiny of the Index Administrator. It considers, and may challenge, any aspect of the index administration service.

The BOC will also recommend changes to new or existing products as a result of legal and regulatory developments. The BOC members are not directly involved in day-to-day Index Administration activities.

Refer to www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation for the BOC's terms of reference.

5.2 IHS Markit Administrator Code of Conduct

IHS Markit implements the **IOSCO Principles** in a manner proportionate to the size of, and risks posed by, each **Benchmark** administered by IHS Markit. IHS Markit has developed policies and procedures based on the IOSCO Principles to develop, administer, calculate and disseminate products and services classified as “Benchmarks” in accordance with the IOSCO Principles. These are set forth in **IHS Markit Administrator Code of Conduct** which is available on the **IHS Markit Website**: www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation.

5.3 Conflicts of Interest

IHS Markit administers Benchmarks in a manner that is reasonably designed to protect the integrity and independence of the Benchmark administration process.

IHS Markit policy and procedures around Conflicts of Interest are available on the IHS Markit Website in the IHS Markit Administrator Code of Conduct on www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation and in the Conflicts of Interest Policy.

6 Risk Factors

IHS Markit operates as Index Administrator and is independent of the **Index Owner**. IHS Markit does not act as an investment adviser nor provides advice of any nature and therefore does not assume any fiduciary obligation to any **Index Product Investors** buying, selling, entering into or holding products linked to the Index.

For any further information about risk factors, contact the Index Owner.

7 Index Market Disruption Events, Force Majeure Events and Potential Adjustment Events

In the event of market stress and disruption, the Index Administrator applies the relevant Index Rules and IHS Markit's Disruption Events Policy. The Index Administrator also promptly publishes information about the disruption event and the consequences, if any.

More information around disruption events can be found in the Disruption Events Policy on the IHS Markit Website: www.markit.com/Documentation/Product/VanEckAssetManagementBV/DisruptionEventsPolicy.

8 Expert Judgment

In the event that Expert Judgment is required in the Benchmark determination process, IHS Markit shall do so in line with the policy and procedures outlined in the IHS Markit Administrator Code of Conduct: www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation.

9 Change in Methodology of the Index and Termination

The Index Administrator publishes or makes available the rationale of any proposed material change to a Benchmark or its **Methodology**, along with the proposed process and procedure for making such a change. The publication should clearly define the proposed material change and the method and timing for consultation on, or notification of, changes to **Stakeholders**. In addition, the Index Administrator has developed Stakeholder consultation procedures in relation to changes to the Methodology that are deemed material by the oversight function.

Further information about Benchmark Methodology changes and termination can be found on the IHS Markit Website in the IHS Markit Administrator Code of Conduct: www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation.

10 Errors and Adjustments

In the event that the Index Administrator identifies, or is made aware of, any errors in previously published information relating to an Index or a Benchmark, analysis of the affected index values or the Benchmark is undertaken and the Benchmark Oversight Committee will be informed. If IHS Markit decides to revise the Index values, the reason for the revision together with revised material is published.

The Index Administrator Restatement Policy is available on the IHS Markit Website and also in the IHS Markit Administrator Code of Conduct: www.markit.com/Documentation/Product/VanEckAssetManagementBV/Restatement/Policy.

11 Complaints Procedure

IHS Markit provides a dedicated system for Stakeholders to lodge complaints via email or post. All complaints are duly investigated and responses provided to the complaint within a reasonable

timeframe in accordance with our IHS Markit Complaints Policy, which is available on the IHS Markit Website: www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation.

12 Whistleblowing

Misconduct in any activity performed by the Index Administration is expected to be reported in compliance with the IHS Markit Whistleblowing Policy.

13 Annual Review

The Index Administrator reviews on an annual basis the index documentation and design of Benchmarks to ensure that they are representative of the Benchmark's objective. Decisions made following the review are published on the IHS Markit Website shortly after both the Index Administration and the Benchmark Oversight Committee have deliberated.

Refer to the [Section 5.2 — IHS Markit Administrator Code of Conduct](#) available on the IHS Markit website – www.markit.com/Documentation/Product/VanEckAssetManagementBV/Regulation – for more details.

14 Construction of this Index Manual

The **Index Manual** is published by the Index Administrator. In the event of any inconsistency between the English language version of this Index Manual and that translated into any other language, this English version shall prevail.

15 Disclaimer, Licensing and Trademark

15.1 Disclaimers

No legal relationship (whether in contract, tort, or otherwise) exists between any Index Product Investors and the Index Administrator or the Index Owner and neither the Index Administrator nor the Index Owner owes any duties (whether in contract, tort, or otherwise) to any Index Product Investor. No claims, actions or legal proceedings may therefore be brought against the Index Administrator or the Index Owner in any manner whatsoever by an Index Product Investor or any other person. Neither the Index Administrator nor the Index Owner makes any representation, warranty or guarantee whatsoever, express or implied, either as to the results to be obtained as to the use of the Index or the figures or levels at which the Index stands at any particular day or otherwise. In addition, neither the Index Administrator nor the Index Owner gives any assurance regarding any modification or

change in any Methodology used in calculating the Index and is under no obligation to continue the calculation, publication and dissemination of the Index. Neither the Index Administrator nor the Index Owner warrants or represents or guarantees to any person the accuracy or completeness of the Index and its computation or any information related thereto and makes no warranty or representation or guarantee of any kind whatsoever relating to the Index is given or may be implied. The process and basis of computation and compilation of the Index and the related formulae, constituent Benchmarks and factors may at any time be changed or altered by the Index Administrator. No responsibility or liability is accepted by either the Index Administrator or the Index Owner (whether for negligence or otherwise) in respect of the use of and/or reference to the Index by us or any other person in connection with securities, or for any inaccuracies, omissions, mistakes or errors in the computation of the Index (and neither the Index Administrator nor the Index Owner shall be obliged to advise any person or any Index Product Investor of any error therein) or for any economic or other loss which may be directly or indirectly sustained by any Index Product Investor or any other persons dealing with securities as a result. Any Index Product Investor or other person dealing with securities does so, therefore, in full knowledge of this disclaimer and can place no reliance whatsoever on the Index Administrator or the Index Owner. This document contains data derived as a result of back-testing of data and is provided by the Index Administrator or the Index Owner in good faith using its standard Methodology for information of this kind. The Methodology relies on proprietary models, empirical data, assumptions and such other information that the Index Administrator or the Index Owner believes to be accurate and reasonable. Neither the Index Administrator nor the Index Owner makes, however, any representation, warranty or guarantee as to the accuracy, completeness or appropriateness of such Methodology and neither the Index Administrator nor the Index Owner accepts any liability for the use of such information. Specifically, there is no assurance that other banks or brokers would derive the same results for the back-test period. Nothing in the disclaimers in this section shall exclude or limit liability to the extent such exclusion or limitation is not permitted by law or regulations to which the Index Administrator or the Index Owner is subject.

15.2 Licensing and Trademark

The use of the mark and name of the Index is licensed to VanEck Vectors™ ETFs N.V.. The Multi-Asset Allocation Indices, and all intellectual property rights therein, are owned by or licensed to VanEck Vectors™ ETFs N.V. and have been licensed for use by VanEck Vectors™ ETFs N.V. in connection with the calculation of the Index Level.

16 Further Information

Formal complaints can be sent electronically to a specifically dedicated email address – complaints_indices@markit.com. Note complaints_indices@markit.com should only be used to log formal complaints.

For any general index enquiries, contact the Markit Index Administration support group at support@ihsmarkit.com.

Ownership: The Index Owner is VanEck Asset Management B.V. (or any successor thereto).

A Glossary

| Term | Definition |
|--|---|
| Benchmark | has the meaning specified in the IOSCO Principles. |
| Disrupted Day | is determined by the Index Administrator as a day that affects the Index, any or all of the Index Components or the methodology in respect of the Index, as a result of an Index Market Disruption Event or a Force Majeure Event that occurs on one or more Index Business Days. |
| Exchange | means, in respect of each Index Component, the exchange or quotation system on which such Index Component is principally traded. |
| Exchange Business Day | means any day (other than a Saturday or Sunday) that is (i) a day on which Euronext Amsterdam is scheduled to be open for trading during their regular trading sessions, and (ii) not a Disrupted Day. |
| Half Away from Zero | means the rounding method whereby the decimal to be omitted is rounded as follows: away from zero when it is equal or greater than 5 (e.g. 7.55 rounds to 7.6, -7.55 rounds to -7.6) and towards zero when it is less than 5 (e.g. 7.54 rounds to 7.5 and -7.54 rounds to -7.5). |
| IHS Markit Administrator Code of Conduct | Refer to Section 5.2 — IHS Markit Administrator Code of Conduct . |
| IHS Markit Website | means the following website: www.markit.com/Product/VanEckAssetManagementBV . |
| Index Administrator | means IHS Markit. |
| Index Base Date | means the date of the initial level of the Index (Index Base Level) as defined in Section 2 — Index Overview . |
| Index Business Day | means any day that is an Exchange Business Day . |
| Index Commencement Date | means the date the Multi-Asset Allocation Indices went live as outlined in Table 1: Index Administration Events . |
| Index Component | and together Index Components, means each Underlying Index that comprises the Multi-Asset Allocation Indices. |
| Index Divisor | means the fixed value as of Index launch used to rebase unadjusted Index Value to the desired launch value. |
| Index Level | means the level of the Index determined in accordance with the Section 4.2 — Index Level Calculation on each Index Business Day. |
| Index Manual | means this document, as amended, replaced or substituted, where necessary. |
| Index Owner | means VanEck Asset Management B.V. (or any successor thereto). |
| Index Product Investors | means the persons or entities who own contracts or financial instruments that reference a Benchmark in the Index. |
| Index Rebalance Day | means the Index Business Day when the rebalancing process occurs. |
| Index Value | means the sum of the Underlying Index Value on the same Index Business Day |
| IOSCO Principles | means the IOSCO Principles for Financial Benchmarks, dated July 2013. |
| Methodology | has the meaning specified in the IOSCO Principles. |
| Stakeholders | means Index Product Investors, relevant public sector entities and any other entity or person with a reasonable interest in the Index. |

| Term | Definition |
|-------------------------|---|
| Underlying Cap Factor | means the value assigned to each Underlying Index in order to respect the capping rules as of rebalance. |
| Underlying Index | and together Underlying Indices, means the indices listed in Table XXX. |
| Underlying Index Level | means the level of the Underlying Index on each Index Business Day. |
| Underlying Index Value | means the product of the Underlying Index Level at close of the Index Business Day and the Underlying Cap Factor as of the previous Index Business Day. |
| Underlying Fixed Weight | means the fixed weight of the Underlying Index within the Index as defined by the Index strategy. |

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