

IHS Markit Consultation on the
Methodology update for 3 iBoxx
EUR Senior Corporates Investment
Grade Factor Weighted Indices

1. IHS Markit's Administration

IHS Markit Benchmark Administration Limited (**IMBA UK**) is the Index Administrator of the iBoxx indices. IMBA UK administers the indices in accordance with the International Organisation of Securities Commissions Principles for Financial Benchmarks (the IOSCO Principles) and the UK Benchmarks Regulation (UK BMR).

2. Background

IMBA UK administers more than 33,000 benchmarks across asset classes, including fixed income, derivatives, economic indicators, equity and commodities, and both proprietary and third-party benchmarks.

The Markit iBoxx EUR index family is designed to reflect the performance of EUR denominated investment-grade debt. The index rules aim to offer broad coverage of the EUR bond universe, whilst upholding minimum standards of investability and liquidity. The Markit iBoxx EUR Senior Corporates ex-EM IG Factor Weighted index, the iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted index, and the iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted (Version 2) index are customized subsets of the Markit iBoxx EUR index family and reflect the performance of EUR denominated senior corporate debt from developed countries. Additionally, the indices consider a ticker exclusion list that is provided on a quarterly basis by MN Services based on internal research.

Index Name	ISIN	Ticker
iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted Index	GB00BGFQKV59	IBXXEIG8
iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted Index (Version 2)	GB00BL08MV59	IBXXFWI1
Markit iBoxx EUR Senior Corporates ex-EM IG Factor Weighted Index	GB00B9N2TJ78	IBXXEIG5

The weight of the constituents in the indices are adjusted according to the 'Issuer Score', which is composed of a rating score, a sector score and a liquidity score. The issuer score is calculated based on below formula:

Issuer Score = 0.4*Score Rating + 0.4*Score Sector + 0.2*Score Liquidity

Weight Issuer = Issuer Score $\div \Sigma$ Issuer Score

The weight of an issuer is calculated as above and is capped at 5 times the weight of the respective issuer in the iBoxx € Corporates Senior index (DE0001457554):

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The rating score is based on the iBoxx rating and defined as below:

Rating	Score Rating
AAA	5.00
AA	5.00
А	2.00
BBB	1.00

The score concerning sector diversification is based on two parts: a score based on systemic and cyclical risk characteristics and an adjustment factor based on the size of a sector. Sectors are defined by the iBoxx classification level 4, with two exceptions. 'General retailers' within the sector 'Retail' and 'Industrial Transportation' within the sector 'Industrial Goods & Services' are scored separately. The exact scores can be found on the iBoxx documentation website here. This score is further adjusted by multiplying it with the 'Sector Diversification Correction Score' outlined below:

Number of issuers (TICKERs) in iBoxx Economic Sectors	Sector Diversification Correction Score
=<15	1.00
15<=<30	0.75
30<=<45	0.50
>45	0.25

The score on liquidity is based on the weight of an issuer in the in iBoxx € Corporates Senior index (DE0001457554). The liquidity scores are defined as below:

Issuer weight in universe	Liquidity Score
=<0.20%	0.00
0.20%<=<0.40%	1.00
0.40%<=<0.60%	2.00
0.60%<=<0.80%	3.00
0.80%<=<1.00%	4.00
>1.00%	5.00

3. Proposal

Markit iBoxx EUR Senior Corporates ex-EM IG Factor Weighted index

IMBA UK proposes to update the methodology of the Markit iBoxx EUR Senior Corporates ex-EM IG Factor Weighted index to apply ESG screening in response to stakeholder feedback and incorporate a robust ESG framework that applies MSCI ESG research data. The proposed changes to this index are:

 Include MSCI ESG Business Involvement Screening (exclusion driven by exposure to the following activities):

Adult Entertainment Producers

All companies involved in production of adult entertainment materials

Fur Producers

 All companies that produce fur pelt and products containing fur or fur trim. This factor also includes companies that hunt, raise, or trap animals for their fur

Firearms Producers

 All companies that manufacture firearms and small arms ammunitions for civilian markets

Nuclear Weapons

- All companies that manufacture key nuclear weapons components
- All companies that manufacture nuclear weapons, including nuclear warheads, intercontinental ballistic missiles, and ballistic missile submarines, which are capable of the delivery of nuclear warheads
- All companies that manufacture nuclear warheads and/or whole nuclear missiles including assembly and integration of warhead and missile body. This also includes companies with contracts to operate/manage government-owned facilities that manufacture nuclear warheads and missiles

Tobacco Producers

 All companies that manufacture tobacco products, such as cigars, blunts, cigarettes, e-cigarettes, inhalers, beedis, kreteks, smokeless tobacco, snuff, snus, dissolvable and chewing tobacco. This also includes companies that grow or process raw tobacco leaves

Other Controversial Weapons

- All companies that manufacture cluster munitions whole weapons systems, components, or delivery platforms
- All companies that manufacture landmines whole systems or components

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- All companies that manufacture key biological and chemical weapons components
- All companies that manufacture biological and chemical weapons, including weapons that use pathogens such as viruses, bacteria, and disease-causing biological agents, toxins, or chemical substances that have toxic properties to kill, injure, or incapacitate
- All companies that manufacture weapons utilizing laser technology that causes permanent blindness to the target
- All companies involved in the production of depleted uranium (DU)
 weapons, ammunition, and armour, including companies that
 manufacture armour piercing, fin stabilized, discarding sabot tracing
 rounds (APFSDS-T); Kinetic Energy Missiles made with DU
 penetrators; and DU-enhanced armour, including composite tank
 armour
- All companies that manufacture weapons that use non-detectable fragments to inflict injury to targets
- All companies that manufacture incendiary weapons using white phosphorus

iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted index

IMBA UK proposes to update the methodology of the iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted index to further extend the ESG screening in response to stakeholder feedback and incorporate a robust ESG framework that applies MSCI ESG research data. As well as all the above-mentioned changes, additional proposed changes to this index are:

• MSCI Climate Change Metrics

- Thermal Coal
 - All companies deriving more than 30% of their total revenue from thermal coal-based power generation are excluded
- Oil & Gas energy production
 - All companies deriving 10% or more of their total revenue from unconventional oil and gas mining energy production are excluded

MSCI ESG Ratings

All issuers with an MSCI ESG rating of BB and below are excluded

 Issuers without MSCI ESG Ratings coverage as of two business days before the end of the month are excluded

Total Sector Diversification

• Sector Diversification Score updated as per below

Economic Sector	Score	New Score
Financial Services	1	2
Insurance	1	2
General Retailers	3	5
Utilities	2	3
Real Estate	N/A	2

Sector Diversification Correction Score

Current		<u>New</u>	
Number of issuers (TICKERs) in iBoxx Economic Sectors	Sector Diversification Correction Score	% of no. of Issuers (TICKERs) in iBoxx Economic Sectors, based on custom universe	Sector Diversification Correction Score
=<15	1.00	=<5%	0.00
15<=<30	0.75	5%<=<10%	1.00
30<=<45	0.50	> 10%	1.50
>45	0.25		

- The new total sector diversification score is calculated as the sector score minus the sector diversification correction score. The total sector diversification score will always be equal to 0 or higher
 - Previously the total sector diversification score was adjusted by multiplying it with the 'Sector Diversification Correction Score'

Liquidity

Issuer weight in universe	New Issuer weight in universe	Liquidity Score
=<0.20%	=<0.05%	0.00
0.20%<=<0.40%	0.05%<=<0.10%	1.00
0.40%<=<0.60%	0.10%<=0.15%	2.00
0.60%<=<0.80%	0.15%<=0.20%	3.00
0.80%<=<1.00%	0.20%<=0.40%	4.00
>1.00%	>0.40%	5.00

Maximum Weight

 The maximum weight of an issuer is capped at 5 times the weight of the issuer in the custom universe i.e., iBoxx € Corporates Senior index (DE0001457554) and considering all exclusions IHS Markit Consultation on the Methodology update for 3 iBoxx EUR Senior Corporates Investment Grade Factor Weighted Indices

iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted (Version 2) index

IMBA UK proposes to update the methodology of the iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted (Version 2) index to further extend the ESG screening in response to stakeholder feedback and incorporate a robust ESG framework that applies MSCI ESG research data. As well as all the above-mentioned changes, additional proposed changes to this index are:

- Bonds with iBoxx Economic Sector as 'Oil & Gas' are excluded from the index
- Sector Diversification Score
 - Oil & Gas: From 3 to 0
- MSCI ESG Business Involvement Screening (exclusion driven by exposure to the following activities):
 - Firearms Producers
 - All companies that derive annual revenues from the distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use
- The following MSCI ESG Business Involvement Screenings are not applied to the iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted (Version 2) index:
 - Oil & Gas energy production
 - Other Controversial Weapons

Index names change

IMBA UK also proposes to change the index names according to below table. There will be no change to the existing index identifiers.

Old Index Name	New Index Name	ISIN	Ticker
iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted Index	iBoxx MSCI EUR Senior Corporates Investment Grade ESG Factor Weighted Index	GB00BGFQKV59	IBXXEIG8
iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted Index (Version 2)	iBoxx MSCI EUR Senior Corporates Investment Grade ESG Factor Weighted Index (Version 2)	GB00BL08MV59	IBXXFWI1
Markit iBoxx EUR Senior Corporates ex-EM IG Factor Weighted Index	iBoxx MSCI EUR Senior Corporates Investment Grade ESG Factor Weighted Index (Version 3)	GB00B9N2TJ78	IBXXEIG5

4. Impact Analysis

IMBA UK has investigated the potential impact of the updated methodology for the 3 indices:

iBoxx MSCI EUR Senior Corporates Investment Grade ESG Factor Weighted Index

The updated methodology would have reduced the number of constituents for August 2021 from 2792 to 2387. Recalculating the history based on the new methodology starting from the index start date on 31 October 2018 up until 31 August 2021 indicates that the total return index level would have changed from 107.46 to 107.48. This constitutes a change of approximately 2 basis points over a 34-month period.

iBoxx MSCI EUR Senior Corporates Investment Grade ESG Factor Weighted Index (Version 2)

The updated methodology would have reduced the number of constituents for September 2021 from 2688 to 2288. Recalculating the history based on the new methodology starting from the index start date on 31 October 2018 up until 31 August 2021 indicates that the total return index level would have changed from 107.52 to 107.46. This constitutes a change of approximately 7 basis points over a 34-month period.

iBoxx MSCI EUR Senior Corporates ex-EM IG Factor Weighted Index

The updated methodology would have reduced the number of constituents for September 2021 from 2887 to 2796. Recalculating the history based on the new methodology starting from the index start date on 31 October 2018 up until 31 August 2021 indicates that the total return index level would have changed from 107.84 to 107.45. This constitutes a change of approximately 39 basis points over a 34-month period.

5. Consultation timetable

IMBA UK proposes to implement the changes on a going-forward basis, starting at the end of October 2021.

The complete timetable IMBA UK is suggesting is as follows:

•	6 October 2021	Consultation opens
•	25 October 2021	Consultation closes
•	27 October 2021	IMBA UK reviews stakeholder feedback and a final decision is communicated
•	31 October 2021	Implementation for the iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted index & the iBoxx EUR Senior Corporates Investment Grade ESG Factor Weighted (Version 2)

 30 November 2021 Implementation for the Markit iBoxx EUR Senior Corporates ex-EM IG Factor Weighted index

6. Consultation process

The participation of stakeholders in this consultation is important as IMBA UK seeks to gather views on the proposals herein and the suggested timetable for implementation of those proposals. IMBA UK may publish summaries of stakeholders' comments along with IMBA UK's responses to those comments unless the stakeholder in question expressly requests confidentiality.

To participate in this consultation please respond to IMBA UK Administration Services at MK-IndexAdminConsultation@ihsmarkit.com.

Please be advised that all comments will be reviewed and considered before a final decision is made; however, IMBA UK makes no guarantee and is under no obligation to comply with any of the responses. The consultation may result in no changes or outcome of any kind. An announcement will be posted on our website accordingly. IMBA UK reserves the right to make a final decision on the proposal.

Key question

Do you have any concerns regarding IMBA UK's proposal or the implementation timeline?