

**S&P Dow Jones
Indices**

A Division of **S&P Global**

iBoxx Contingent Convertible Liquid Developed Europe AT1 Index Guide

October 2024

Table of Contents

1 iBoxx Contingent Convertible Liquid Developed Europe AT1 Index	4
2 Bond Selection rules	5
2.1 Bond type	5
2.2 Credit rating	6
2.3 Amount outstanding	6
2.4 Issuer amount outstanding	6
2.5 Issuer country	6
2.6 Issue Date	6
2.7 Weight capping	7
2.8 Sustainalytics ESG Research	7
3 Bond classification	10
3.1 Country classification	10
3.2 Additional Classification	10
4 Index calculation	11
4.1 Static data	11
4.2 Bond prices	11
4.3 Rebalancing process	11
4.4 Index data	11
4.5 Index calculus	11
4.6 Treatment of the special intra-month events	12
4.6.1 Index and analytics weights	12
4.6.2 Full redemptions: exercised calls, puts and buybacks	12
4.6.3 Maturity extension	12
4.6.3.1 Maturity extension for perpetual bonds without a reset date	12
4.6.3.2 Maturity extension for perpetuals & dated fixed-to-fixed bonds with a reset date	12
4.6.4 Coupon deferrals	13
4.6.5 Conversion	13
4.6.6 Write-down	13
4.7 Unhedged/Hedged index calculation	13
4.8 Index history	13
4.9 Settlement conventions	13

4.10 Calendar	13
4.11 Publication of the Index	14
4.12 Data publication and access	14
4.13 Index review	16
5 Index Governance	17
6 Summary of key ESG factors	18
7 Changes to the iBoxx Contingent Convertible Liquid Developed Europe AT1 Index	22
8 Further information	23
Disclaimer	24

1 iBoxx Contingent Convertible Liquid Developed Europe AT1 Index

The index is designed to reflect the performance of financial institutions AT1 contingent convertible debt denominated in EUR, USD, and GBP, whilst also screening out issuers involved in tobacco, controversial weapons, thermal coal and non-compliance with respect to the United Nations Global Compact Principles. The index rules aim to offer good coverage of the Contingent Convertible (CoCo) bond universe, whilst upholding minimum standards of investability and liquidity. The bond universe of the index is based on the following indices:

- Markit iBoxx EUR Contingent Convertible index
- Markit iBoxx USD Contingent Convertible index
- Markit iBoxx GBP Contingent Convertible index

The currency of the index is US Dollar. Foreign currency (FX) conversions for index calculations will be based on 4 pm London exchange rates.

The bonds in the Index must meet all the criteria described below as of the close of business three business days prior to the rebalancing date provided that the relevant bond data can be verified as of such date (“bond selection cut-off date”). The new index composition becomes effective on the first business day of the next month.

All iBoxx indices are priced based on multiple data inputs. The index uses multi-source prices as described in the document *Markit iBoxx Pricing Rules* publicly available at <https://www.spglobal.com/spdji/en/>.

This document covers the index family structure, rules and calculation methodology.

2 Bond Selection rules

The following selection criteria are used to derive the index constituents from the Contingent Convertible bond universe:

- Bond type
- Credit Rating
- Amount Outstanding
- Sustainalytics ESG Research

2.1 Bond type

The index contains bonds that are contingent convertible capital securities issued by banks. In order for a bond to be classified as contingent convertible (CoCo), it must have an objective pre specified trigger point.

Features of bonds included in the index are:

- Callable bonds
- Perpetual bonds
- Preferred shares
- Extended bonds as defined under section 'Maturity extension' in this document

Bonds with the following features are specifically excluded:

- Extended bonds
- Private placements
- Bail-In bonds (Bonds with no objective pre specified trigger point)
- Insurance bonds
- Non-subordinated debt
- 144A bonds
- Amortizing bonds or sinking funds

For retail bonds and private placements, publicly available information is not always conclusive and the classification of a bond as a retail bond or private placement will be made at S&P DJI's discretion based on the information available at the time of determination. Partial private placements where information on the specific amounts publicly placed and privately placed can be ascertained are included in the indices with the amount publicly placed. If the amount publicly placed is below the cut-off, the bond is not included in the indices. Any bond classified as retail or private placement is added to the list of excluded private placement and retail bonds. The list is published at <https://www.spglobal.com/spdji/en/> for future reference and to ensure consistency.

In instances where a new bond type is not specifically excluded or included according to the published index rules, S&P DJI will analyze the features of such securities in line with the principles set out in 2.1 of this guide. S&P DJI may consult specific Index Committees. Any decision as to the eligibility or ineligibility of a new bond type will be published and the index rules will be updated accordingly.

2.2 Credit rating

All bonds in the iBoxx Contingent Convertible Liquid Developed Europe AT1 Index must have a minimum iBoxx Rating of B. Ratings from the following three credit rating agencies are considered for the calculation of the iBoxx Rating:

- Fitch Ratings
- Moody's Investor Service
- S&P Global Ratings

If a bond is rated by more than one of the above agencies, then the iBoxx rating is the average of the provided ratings. The rating is consolidated to the nearest rating grade. Rating notches are not used. Bonds with an RD/SD rating are excluded from the iBoxx Contingent Convertible Liquid Developed Europe AT1 Index. For more information on how the average rating is determined, please refer to the iBoxx Rating Methodology document available at <https://www.spglobal.com/spdji/en/>.

2.3 Amount outstanding

All bonds require a specific minimum amount outstanding in order to be eligible for the indices, as shown below.

- EUR 700 million for EUR denominated bonds
- USD 700 million for USD denominated bonds
- GBP 700 million for GBP denominated bonds

2.4 Issuer amount outstanding

The issuer amount outstanding must be above or equal to:

- EUR 1 billion for EUR denominated bonds
- USD 1 billion for USD denominated bonds
- GBP 1 billion for GBP denominated bonds

The issuer amount outstanding is derived from the amount outstanding in the corresponding benchmark index in each respective currency. Only bonds from an issuer in the same currency are counted towards this threshold. A combination of issuer amounts outstanding across currencies does not take place.

2.5 Issuer country

Bonds from European countries classified as developed markets based on the *Markit Global Economic Development Classification* are eligible for the index. The country of risk for the issuer must be in the countries listed as developed markets in *Markit iBoxx Country Classifications* available at <https://www.spglobal.com/spdji/en/>. The following countries fall into this category: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

2.6 Issue Date

Only bonds issued after Jan. 1, 2013 are eligible to be included in the index. This date corresponds with the beginning of the phase-in of the Basel III standards.

2.7 Weight capping

At each month-end rebalancing after the close of business on the last trading day of the month, the index is market value weighted, subject to the following capping constraints:

- A maximum weight cap of 7.5% for the five largest issuers (Group L).
- A maximum weight cap of 4.5% for all other issuers (Group S).

Group Selection Buffer. The group selections remain fixed unless a Group S issuer's uncapped weight exceeds the uncapped weight of a Group L issuer by at least 1%.

2.8 Sustainalytics ESG Research

The iBoxx Contingent Convertible Liquid Developed Europe AT1 Index screens out constituents based on the following criteria:

Sustainalytics Product Involvement Screening – exclusion is driven by exposure to the following activities and involvement thresholds:

- *Controversial weapons*
 - > Tailor-made and essential – all companies involved in the core weapon system, or components/services of the core weapon system that are considered tailor-made and essential for the lethal use of the weapon are excluded.
 - > Significant ownership (Tailor-made and essential) – all companies involved, through corporate ownership, in the core weapon system, or components/services of the core weapon system that are considered tailor-made and essential for the lethal use of the weapon are excluded.
 - > Non tailor-made or non-essential – all companies that provide components/services for the core weapon system, which are either not considered tailor-made or not essential to the lethal use of the weapon are excluded.
 - > Significant ownership (non tailor-made or non-essential) – all companies that provide, through corporate ownership, components/services for the core weapon system, which are either not considered tailor-made or not essential to the lethal use of the weapon are excluded.
- *Tobacco*
 - > All companies are excluded where they have involvement in:
 - the production of tobacco products
 - the production of tobacco related products or services
 - > Retail Companies:
 - retailers are excluded where involvement is such that 5% or more of revenues are derived from the sale of tobacco products
- *Thermal Coal*
 - > Extraction – all companies deriving 5% or more of their total revenue from thermal coal extraction are excluded.
 - > Power Generation – all companies deriving 5% or more of their total revenue from thermal coal-based power generation are excluded.
 - > Product/Services – all companies deriving 5% or more of their total revenue from tailor-made products and services that support thermal coal extraction are excluded.
- *Small Arms*
 - > Civilian Customers (assault weapons) – all companies deriving 5% or more of their total revenue from manufacturing and selling assault weapons to civilian customers are excluded.
 - > Civilian Customers (non-assault weapons) – all companies deriving 5% or more of their total revenue from manufacturing and selling small arms (non-assault weapons) to civilian customers are excluded.
 - > Key Components – all companies deriving 5% or more of their total revenue from manufacturing and selling key components of small arms are excluded.
 - > Retail/Distribution (assault weapons) – all companies deriving 5% or more of their total revenue from the retail and/or distribution of assault weapons are excluded.
 - > Retail/Distribution (non-assault weapons) – all companies deriving 5% or more of their total revenue from the retail and/or distribution of small arms (non-assault weapons) are excluded.
 - > Military/Law Enforcement Customers – all companies deriving 5% or more of their total revenue from manufacturing and selling small arms to military/law enforcement customers are excluded.
- *Arctic Oil & Gas Exploration Extraction*
 - > All companies deriving 5% or more of their total revenue from oil and gas exploration in Arctic are excluded.
- *Oil Sands*
 - > All companies deriving 5% or more of their total revenue from oil sands extraction are excluded.
- *Shale Energy Extraction*
 - > All companies deriving 5% or more of their total revenue from shale oil and gas extraction are excluded.

Sustainalytics Global Standards Screening

- United Nations Global Compact
 - > All *Non-Compliant* rated companies are excluded. A company is assessed as Non-Compliant when it is found to be responsible for egregious and severe violations of commonly accepted international norms related to human rights, labour rights, the environment and business ethics. In other words, a company is assessed as Non-Compliant when it does not act in accordance with the UN Global Compact Principles and its associated standards, conventions and treaties.

Corporate issuers that have incomplete Sustainalytics data coverage as of the bond selection cut-off date are to be excluded from the iBoxx Contingent Convertible Liquid Developed Europe AT1 Index.

3 Bond classification

All bonds are classified based on the principal activities of the issuer and the main sources of the cash flows used to pay coupons and redemptions. In addition, a bond's specific collateral type or legal provisions are evaluated. Hence, it is possible that bonds issued from different subsidiaries of the same issuer carry different classifications.

The issuer classification is reviewed regularly based on updated information received by S&P DJI, and status changes are included in the index at the next rebalancing if necessary.

Where the sector classification of a specific entity is not clear due to the diversified business of the entity, a decision is made at S&P DJI's discretion. S&P DJI assigns the classification according to its evaluation of the business risk presented in the security prospectus and annual reports, if available. S&P DJI also compares the classification to peers in the potential sectors. Membership lists including classification are published on the FTP server and in the *Indices* section of the webpage for registered users.

3.1 Country classification

S&P DJI classifies bonds into 'Emerging' and 'Developed' markets according to the *Country Classifications* document available at <https://www.spglobal.com/spdji/en/>. S&P DJI assigns bonds to a market based on the issuer's country of risk.

3.2 Additional Classification

The respective seniority levels are assigned according to the position of the CoCo bond in the capital structure. The iBoxx Contingent Convertible Liquid Developed Europe AT1 Index tracks bonds in the Additional Tier 1 (AT1) section of banks capital structure.

Market Sector	Seniority Level 1	Seniority Level 2
Banks	SUB	AT1

4 Index calculation

4.1 Static data

Information used in the index calculation is sourced from offering circulars and checked against standard data providers.

4.2 Bond prices

For more details, please refer to the *iBoxx Pricing Methodology* document, available in the *Methodology* section of the webpage at <https://www.spglobal.com/spdji/en/>.

4.3 Rebalancing process

The index is rebalanced monthly on the last business day of the month after the close of business. Any inclusion after the index cut-off day (T-3) will not be considered in the rebalancing process, but will become effective at the end of the following month. New bonds issued are taken into account if they are publicly known to settle until the last calendar day of the month, inclusive, and if their rating and amount outstanding has become known at least three trading days before the end of the month.

Two business days before the end of each month, the rating and amount information for the constituents is updated and the list is adjusted for all rating and amount changes which are known to have taken place three business days before the end of the month which could also result in the exclusion of the bond. The changes made on T-2 for rating and amount will not be considered for inclusion.

Forward files will be published on each calculation day starting on the 6th calendar day of the month or the next index publication day if the 6th calendar day falls on a non-business day.

4.4 Index data

The calculation of the index is based on bid prices. New securities are included in the index at their respective ask prices when they enter the index family. If no price can be established for a particular security, the index continues to be calculated based on the last available price. This might be the case in periods of market stress, or disruption as well as in illiquid or fragmented markets. If the required inputs become impossible to obtain, S&P DJI may consult market participants prior to the next rebalancing date. Decisions are made publicly available on a timely basis and S&P DJI may refer back to previous cases.

A sub-index is calculated if at least one bond matches all inclusion criteria. If no bonds qualify for an index, then its level remains constant. If at least one bond becomes available again, the index calculation resumes and is chained to the last calculated level. All bonds are assigned to sub-indices according to their classification.

The rebalancing takes place after close of market on the last trading day of a rebalancing month.

4.5 Index calculus

For specific index formulas please refer to the *iBoxx Bond Index Calculus* document available on <https://www.spglobal.com/spdji/en/> under *Methodology*.

4.6 Treatment of the special intra-month events

Data for the application of corporate actions in the index may not be fully or timely available at all times, e.g. the final call prices for make-whole calls or the actual pay-in-kind percentage for PIK-payment options. In such cases, S&P DJI will estimate the approximate value based on the available data at the time of calculation.

4.6.1 Index and analytics weights

All Markit iBoxx CoCo Indices are market-value-weighted indices. The amount outstanding of a bond is only adjusted at the monthly rebalancing process at the end of each month. However, scheduled redemptions, principal write-downs or conversions are taken into account from the date they occur, as they have a significant influence on index return and analytical values. In addition, bonds that are fully redeemed intra-month are also taken into account intra-month.

4.6.2 Full redemptions: exercised calls, puts and buybacks

If a bond is fully redeemed intra-month, the bond effectively ceases to exist. In all calculations, the redeemed bond is treated as cash based on the last price, the call price or repurchase price, as applicable. The redemption factor, redemption and the redemption price are used to treat these events in the index and analytics calculation. In addition, the clean price of the bond is set to the redemption price, and the interest accrued until the redemption date is treated as an irregular coupon payment.

4.6.3 Maturity extension

4.6.3.1 Maturity extension for perpetual bonds without a reset date

Maturity	Coupon/call structure	Workout date at issuance	Updated Workout date if not called
Perpetual	Fixed/ Callable	Assume first call date as workout date	Extend workout date until the assumed next call date - 5 years from first call date*.

*Assumes the terms allow for a redemption at the new assumed maturity date.

4.6.3.2 Maturity extension for perpetuals & dated fixed-to-fixed bonds with a reset date

Maturity	Coupon/Call structure	Workout Date at issuance	Updated Workout date if not called
Perpetual	Reset*/Callable	Assume first call date as workout date	Extend workout date until the end of the next reset date*
Dated	Reset/Callable	Assume reset date as workout date	Extend workout date until the end of the next reset date or final maturity date*

*Assumes the bond terms allow for a redemption at the new assumed maturity date

4.6.4 Coupon deferrals

If a bond defers coupons, it will remain in the Index. Analytics will be adjusted accordingly. If the issuer resumes paying coupon on an instrument, it will be reflected in the index.

4.6.5 Conversion

If a bond is converted to shares, it will leave the index on the next rebalancing date. The bond will be converted to cash on the conversion date at the respective closing share price and conversion factor. If either the conversion price or factor is not available on the conversion date we will use the available data to calculate a price to be updated once the final price or conversion value is available.

4.6.6 Write-down

Bonds will be written down in the index by adjusting their notional to reflect the amount written down. Provided that there is a write-up option, written down bonds will remain in the index unless the outstanding amount falls below the relevant cut-off threshold. If there is no write-up option and the outstanding amount falls below the relevant cut-off threshold, the bonds will leave the index on the next rebalancing date. If a bond has a write-up option and the outstanding amount is written up to above the relevant cut-off threshold, it may become eligible for the index again, subject to meeting the other inclusion criteria.

Due to the substantial impact that corporate actions may have on the index level, S&P DJI will on a best efforts basis try to obtain all information needed to reflect corporate actions within the indices.

4.7 Unhedged/Hedged index calculation

The index is expressed in hedged and unhedged forms for certain currencies. The formulas for the calculation of the multi-currency hedged and unhedged index versions can be found in the *Markit iBoxx Bond Calculus* document, available on the Indices Documentation page of <https://www.spglobal.com/spdji/en/>. Spot and forward rates are sourced from WMR FX Benchmarks and the 4 pm London fixing is used for the index calculation of hedged and unhedged indices.

4.8 Index history

The Index history starts on 31 December 2013. The index has a base value of 100 on that date.

4.9 Settlement conventions

All iBoxx indices calculate using the assumption of T+0 settlement days.

4.10 Calendar

S&P DJI publishes an index calculation calendar available on <https://www.spglobal.com/spdji/en/> under *iBoxx Indices Calendars*. This calendar provides an overview of the index calculation holidays of the iBoxx bond index families each year.

4.11 Publication of the Index

All indices are calculated at the end of each business day and rebalanced at the end of each month. The indices are calculated on the basis of end-of-day prices on each trading day defined in the calculation calendar for the respective currencies' benchmark Index. S&P DJI publishes an index calculation calendar which is available on <https://www.spglobal.com/spdji/en/> in the *Documentation* section under *iBoxx Calendar*. The index calculation calendar conforms to the recommendations of the Securities Industry and Financial Markets Association (SIFMA):

- Pricing for domestic and global bonds takes place on each SIFMA recommended US trading day
- Pricing for Eurodollar bonds takes place on each SIFMA recommended UK trading day (additional holidays to the US calendar: Easter Monday, May Day, Summer Bank Holiday and Boxing Day)
- The indices are calculated on each SIFMA recommended US trading day and on the last calendar day of each

Bond and index analytical values are calculated each day using that day's closing prices. In addition, bond and index analytical values are calculated with the previous trading day's closing prices on the last calendar day of each month if that day is not a regular trading day as well as on common bank holidays as published in the iBoxx index calculation calendar. This index calculation calendar is available on <https://www.spglobal.com/spdji/en/> under *iBoxx Calendars*. Index data is also available from the main information vendors.

4.12 Data publication and access

The table below summarizes the publication of iBoxx Contingent Convertible Liquid Developed Europe AT1 Index at <https://www.spglobal.com/spdji/en/> for registered users and on the FTP server.

Table 1: Frequency, File type and Access

Frequency	File Type	Access
Daily	Underlying file – Bond level	FTP Server
	Indices file – Index level	FTP Server / website / Bloomberg for index levels only
Daily from the 6th calendar day of the month (or the next index publication day if the 6th calendar day falls on a non-business day)	Forwards	FTP Server
Monthly	End of Month Components	FTP Server / website

Below is a summary of identifiers for each publication channel:

Table 2: Index identifiers

Index Name	Return Type	ISIN	Ticker
iBoxx Contingent Convertible Liquid Developed Europe AT1 (USD) Unhedged	TRI	GB00BF9Q3T33	IBXXCCL1

Index Name	Return Type	ISIN	Ticker
iBoxx Contingent Convertible Liquid Developed Europe AT1 (USD) Unhedged	CPI	GB00BF9Q3W61	IBXXCCL3
iBoxx Contingent Convertible Liquid Developed Europe AT1 (USD) Hedged	TRI	GB00BF9Q3V54	IBXXCCL2
iBoxx Contingent Convertible Liquid Developed Europe AT1 (USD) Hedged	CPI	GB00BF9Q3X78	IBXXCCL4
iBoxx Contingent Convertible Liquid Developed Europe AT1 (EUR) Unhedged	TRI	GB00BF9QGW78	IBXXCCL5
iBoxx Contingent Convertible Liquid Developed Europe AT1 (EUR) Unhedged	CPI	GB00BF9QGX85	IBXXCCL6
iBoxx Contingent Convertible Liquid Developed Europe AT1 (EUR) Hedged	TRI	GB00BF9QGY92	IBXXCCL7
iBoxx Contingent Convertible Liquid Developed Europe AT1 (EUR) Hedged	CPI	GB00BF9QGZ00	IBXXCCL8
iBoxx Contingent Convertible Liquid Developed Europe AT1 (GBP) Unhedged	TRI	GB00BF9QL779	BF9QL77
iBoxx Contingent Convertible Liquid Developed Europe AT1 (GBP) Unhedged	CPI	GB00BF9QLF56	BF9QLF5
iBoxx Contingent Convertible Liquid Developed Europe AT1 (GBP) Hedged	TRI	GB00BF9QLD33	BF9QLD3
iBoxx Contingent Convertible Liquid Developed Europe AT1 (GBP) Hedged	CPI	GB00BF9QL662	BF9QL66
iBoxx Contingent Convertible Liquid Developed Europe AT1 (CHF) Unhedged	TRI	GB00BF9QL993	BF9QL99
iBoxx Contingent Convertible Liquid Developed Europe AT1 (CHF) Unhedged	CPI	GB00BF9QLH70	BF9QLH7
iBoxx Contingent Convertible Liquid Developed Europe AT1 (CHF) Hedged	TRI	GB00BF9QLG63	BF9QLG6
iBoxx Contingent Convertible Liquid Developed Europe AT1 (CHF) Hedged	CPI	GB00BF9QL886	BF9QL88

4.13 Index review

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

5 Index Governance

Index Committee

An S&P Dow Jones Indices Index Committee maintains the indices. All committee members are full-time professionals at S&P Dow Jones Indices. Meetings are held regularly. The Index Committee oversees the management of the indices, including determinations of intra-rebalancing changes, maintenance and inclusion policies, and other matters affecting the maintenance and calculation of the indices.

In fulfilling its responsibilities, the Index Committee has full and complete discretion to (i) amend, apply, or exempt the application of index rules and policies as circumstances may require and (ii) add, remove, or by-pass any bond in determining the composition of an index.

The Index Committee may rely on any information or documentation submitted to it or gathered by it that the Index Committee believes to be accurate. The Index Committee reserves the right to reinterpret publicly available information and to make changes to the indices based on a new interpretation of that information at its sole discretion. All Index Committee discussions are confidential.

The Index Committee is separate from and independent of other analytical groups at S&P Global. In particular, the Index Committee has no access to or influence on decisions by S&P Global Ratings analysts.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For more information on index governance policies, please refer [here](#).

6 Summary of key ESG factors

Explanation of how ESG factors are reflected in the key elements of the benchmark methodology <i>The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].</i>	
Item 1: Name of Benchmark Administrator	S&P Dow Jones Indices Limited
Item 2: Type of benchmark or family or family of benchmarks <i>The “type of benchmark” refers to the type of ‘underlying asset’, as selected from the list provided in Annex II to in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.</i>	Fixed Income
Item 3: Name of benchmark or family of benchmarks	iBoxx Contingent Convertible Liquid Developed Europe AT1
Item 4: Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	
Item 5. If the response to (4) is “Yes,” the indices stated here take into account ESG factors.	Please refer to the S&P Dow Jones Indices Limited Benchmark Register for a list of the benchmarks within this family that account for ESG factors.
Item 6: Where the response to (4) is ‘Yes’, the section below lists those ESG Factors* that are taken into account by the ESG indices governed by the methodology, including those ESG factors listed in Annex II to Delegated Regulation (EU) 2020/1816. <i>*ESG factors’ are defined in Annex II of European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.</i>	
Item 6a: List of Environmental factors considered	Exclusion is driven by exposure to the following factors: <ul style="list-style-type: none"> • Thermal coal • Arctic Oil & Gas Exploration Extraction • Oil Sands • Shale Energy Extraction See section 'Sustainalytics ESG Research' of this guide for details
Item 6b: List of Social factors considered	Exclusion is driven by exposure to the following factors: <ul style="list-style-type: none"> • Controversial weapons • Tobacco • Small Arms See section 'Sustainalytics ESG Research' of this guide for details
Item 6c: List of Governance factors considered	Exclusion is driven by exposure to the following factors: N/A
Item 6d: List of any other overall ESG factors	Exclusion driven by additional factors: <ul style="list-style-type: none"> • United Nations Global Compact (UNGC) ratings

	See section 'Sustainalytics ESG Research' of this guide for details
Item 7: Data and standards used	
Item 7a(i): Source of input	Data is sourced externally from Sustainalytics ESG Research
Item 7a(ii): Data input	<p>Sustainalytics is a leading independent ESG and corporate governance research, ratings and analytics firm that supports investors around the world with the development and implementation of responsible investment strategies.</p> <p>In particular, this index uses the following ESG Products: Global Standards Screening and Product Involvement.</p> <p>For details on Sustainalytics ESG Research's full suite of ESG products, please refer to: http://www.sustainalytics.com</p> <p>Sustainalytics' research process involves the collection and analysis of information made available by third parties, including civil society, corporate, government, industry association, investor, media and regulatory sources. Sustainalytics also uses 3rd party data providers about which information is available at https://www.sustainalytics.com/legal-disclaimers/</p>
Item 7b: Verification and quality of data	<p>S&P DJI's Global Data Management Team holds the responsibility of data quality assurance and validation of third-party data sources, including all ESG datasets. This process involves regular reviews of new data received, and includes comparison with previous data, coverage and identifier checks as well as escalation of suspect data to data vendors. S&P DJI also hold regular feedback sessions with data partners and vendors to share any quality concerns and to remedy any issues that are observed during data validations performed by the Global Data Management Team. In addition, all users of third-party data perform their own review of data used in the maintenance of indices.</p> <p>Sustainalytics Quality Approach to:</p> <p>A. Global Standards Screening (GSS) Company Research</p> <ul style="list-style-type: none"> • Continuous improvement and maintenance of quality and research standards • Companies are contacted to verify allegations that are relevant in Sustainalytics Global Standards Screening methodology and their response is taken into consideration, and whenever relevant included • Quality reviews of ESG assessments before publication • For Sustainalytics Global Standards Screening, proposals for assessment changes are reviewed by an internal oversight body. If the proposal is approved, a written report is drafted according to the GSS guidelines. Before a Watchlist or Non-Compliant status for an issue is published, a quality and editorial review is conducted on the report and the sources used therein <p>Data and deliverable management</p> <ul style="list-style-type: none"> • Quality and reliability of Sustainalytics Covered Company and identifier data through automated quality assurance • Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication • Quality and reliability of standard deliverables through end-of-gate quality assurance process • Quality and reliability of custom client deliverables through end-of-gate quality assurance processes (automated and manual) • Monitoring and investigating ESG score fluctuations and their root causes using automated tools

	<p>Update cycle</p> <ul style="list-style-type: none"> • Continuous monitoring is conducted as incidents occur and feed into updates of Sustainalytics Global Standards Screening reports • Quarterly updates to Sustainalytics Global Standards Screening reports • New companies added to the universe as a result of rebalancing are researched and updated in client systems quarterly • Corporate actions are processed in client systems on a quarterly basis in order to capture any involvement changes arising from mergers, acquisitions or other corporate actions. <p>B. Product Involvement Company Research</p> <ul style="list-style-type: none"> • Continuous improvement and maintenance of quality and research standards • All Product Involvement research is reviewed by senior analysts. The review comprises checking the accuracy of the involvement analysis by studying the original source as well as consistency with the research methodology and framework • Final validation of the research before publication is done by the Research Manager. Assessment changes are additionally reviewed by an internal oversight body <p>Data and deliverable management</p> <ul style="list-style-type: none"> • Quality and reliability of Sustainalytics Covered Company and identifier data through automated quality assurance • Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication • Quality and reliability of standard deliverables through end-of-gate quality assurance process • Quality and reliability of custom client deliverables through end-of-gate quality assurance processes (automated and manual) • Monitoring and investigating ESG score fluctuations and their root causes using automated tools <p>Update cycle</p> <ul style="list-style-type: none"> • Product Involvement Research is updated annually • New companies added to the universe as a result of rebalancing are researched and updated in client systems quarterly • Corporate actions are processed in client systems on a quarterly basis in order to capture any involvement changes arising from mergers, acquisitions or other corporate actions
<p>Item 7c: International reference standards</p>	<p>The methodology behind Sustainalytics Global Standards Screening is based on the following international standard:</p> <ul style="list-style-type: none"> • UN Global Compact Principles • OECD • World Governance Indicators • On top of these international (convention-based) standards Sustainalytics also look at industry specific standards or initiatives. Examples are the Round Table on Sustainable Palm Oil, the standards for Systemically Important Banks, local Corporate Governance codes, and many others • Said industry specific standards are incorporated in Sustainalytics assessments of companies' management of ESG issues in Sustainalytics ESG Risk Rating <p>For Product Involvement Sustainalytics does not rely on international standards or conventions.</p>

Item 8a: Information updated on	31 March 2023
Item 8b: Reason for update	Methodology change

7 Changes to the iBoxx Contingent Convertible Liquid Developed Europe AT1 Index

May 31, 2024	<ul style="list-style-type: none"> • Addition of 1% buffer rule for weight capping. An issuer would only become subject to the top 7.5% capping if the issuer's constituent weight in the index exceeds the constituent weight of an issuer within the top 7.5% capping group by 1.0%.
June 30, 2023	<p>Annual Index Review 2022</p> <ul style="list-style-type: none"> • Treatment of distressed debt exchanges • Maturity extension section added
March 31, 2023	<ul style="list-style-type: none"> • Changes made to bond selection rules for issuers involved in tobacco and thermal coal, based on Sustainalytics ESG Research dataset • Bond selection rules adjusted to screen out issuers involved in small arms, arctic oil & gas exploration extraction, oil sands, and shale energy extraction, based on Sustainalytics ESG Research dataset
June 30, 2022	<ul style="list-style-type: none"> • Monthly forward start date updated from 10th calendar day to 6th calendar day
Sep. 30, 2021	<ul style="list-style-type: none"> • Bond selection rules adjusted to screen out issuers involved in tobacco, controversial weapons, thermal coal and non-compliance with respect to the United Nations Global Compact Principles, based on Sustainalytics ESG Research dataset • Monthly forward start date updated from 12th calendar day to 10th calendar day
March 31, 2021	<ul style="list-style-type: none"> • Governance and Regulatory Compliance section added
Feb. 28, 2021	<p>Annual Index Review 2020</p> <ul style="list-style-type: none"> • New securities enter at their respective ask prices
Aug. 2020	<ul style="list-style-type: none"> • Changes to weight capping (Section 2.8) from Aug. 31, 2020
Jan. 2020	<ul style="list-style-type: none"> • Addition of Finland to the list of Developed European countries from Jan. 31, 2020 (Section 2.6) • Introduction of minimum iBoxx rating of B from Jan. 31, 2020 (Section 2.2)
March 2018	<ul style="list-style-type: none"> • Launch of the iBoxx Contingent Convertible Liquid Developed Europe AT1 Index (USD, EUR)
June 2018	<ul style="list-style-type: none"> • Launch of the iBoxx Contingent Convertible Liquid Developed Europe AT1 Index (GBP, CHF)

8 Further information

Client support

For client support please contact index_services@spglobal.com.

Formal complaints

Formal complaints should be emailed to spdji_compliance@spglobal.com.

Please note: spdji_compliance@spglobal.com should only be used to log formal complaints.

General index inquiries

For general index inquiries, please contact index_services@spglobal.com.

Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients by providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used. Index returns shown do not

represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

Intellectual Property Notices/Disclaimer

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM

BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.

Some indices use the Global Industry Classification Standard (GICS[®]), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates

or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.

ESG Indices Disclaimer

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy or completeness of such ESG scores, ratings, or data. No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled

objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.