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DAX Equity Index Methodology Guide

EFFECTIVE AS OF MARCH 18, 2024

STOXX.com



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DEUTSCHE BÖRSE
GROUP

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1. INTRODUCTION

1.1. INTRODUCTION TO THE DAX INDEX GUIDES

- » The **DAX Equity Index Methodology Guide** contains information on the equity index-specific rules for constructing and deriving portfolio-based indices, the individual component selection process and weighting schemes
- » The **DAX Equity Index Calculation Guide** describes the processes for calculating and disseminating the DAX equity indices, including information on index formulas and adjustments to be made due to corporate actions
- » The **DAX Strategy Index Guide** contains the formulas for, and descriptions of, all DAX strategy indices
- » The **Guide to iNAV Calculation** contains details on how to calculate indicative net asset values ("iNAVs")
- » The **Guide to Industry Classifications used by STOXX Ltd.** contains general information on the industry classifications used in the DAX indices
- » The **Guide to Reference Calculations used by STOXX Ltd.** provides detailed information on the definitions of, and formulas for, the calculations used in STOXX's reports, fact sheets, indices and presentations

1.2. GENERAL INFORMATION

In August 2019, Deutsche Börse AG transferred the administration of the DAX equity indices, formerly known as the "equity indices of Deutsche Börse AG," to its affiliate STOXX Ltd. ("STOXX").

STOXX develops, creates and publishes indices for specific uses, such as for financial instrument issuance. In general, an index is any figure that is published or made available to the public and that is regularly determined by the application of a formula or any other method of calculation, or by an assessment, and on the basis of the value of one or more underlying assets or prices, including estimated prices, actual or estimated interest rates, quotes and committed quotes, or other values or surveys.

All DAX equity indices are governed by the index methodology applicable to the index or index family concerned. The purpose of this DAX Equity Index Methodology Guide (the "Guide") is to provide a easily understood overview of the index methodology that serves as a continuation of the following former documents:

- » The "Guide to the Equity Indices" as last amended with effect from September 1, 2023 (version 11.3.5)
 - » The "Guide to the DAXglobal Equity Indices" as last amended with effect from August 2023 (version 3.6.5)
 - » The "Guide to the DAX Strategy Indices" as last amended with effect from August 22, 2023 (version 3.48)
 - » The "Guide to the World Luxury Index" as last amended with effect from August 2023 (version 1.4)
 - » The "Guide to the GEX Equity Indices" as last amended with effect from August 2022 (version 2.1.5)
-

1. INTRODUCTION

STOXX exercises the greatest care when compiling and calculating equity indices on the basis of the rules set out in this Guide, so as to ensure the highest possible quality of all its indices.

Nevertheless, it cannot guarantee that the various indices as set out in this Guide are calculated without errors in all cases. The same also applies to the various ratios required for index compilation and computation. STOXX accepts no liability for any direct or indirect losses arising from any incorrect calculation of such indices or ratios.

The DAX equity indices do not in any way represent an investment recommendation. In particular, the compilation and calculation of the various indices shall not be construed as a recommendation by STOXX to buy or sell individual securities or the basket of securities underlying a given index.

1.3. ABBREVIATIONS AND ACRONYMS

The following abbreviations and acronyms are used in this Guide:

ADRs	American Depositary Receipts
ADTV	average daily trading volume
AktG	Aktiengesetz (German Stock Corporation Act)
CET	Central European Time
EBITDA	earnings before interest, tax, depreciation and amortization
EFTA	European Free Trade Association
EONIA	Euro OverNight Index Average
ESG	environmental, social and governance
EU	European Union
€STR	Euro Short-term Rate
FIRE	finance, insurance and real estate
FSE	Frankfurt Stock Exchange
GAAP	Generally Accepted Accounting Principles
GDRs	Global Depositary Receipts
HFCAA	Holding Foreign Companies Accountable Act
iNAV	indicative net asset value
IOSCO	International Organization of Securities Commissions
IPO	initial public offering
MAR	Market Abuse Regulation
MCap	market capitalization
OECD	Organisation for Economic Co-operation and Development
NPT	Treaty on the Non-proliferation of Nuclear Weapons
SEC	Securities and Exchange Commission

1. INTRODUCTION

UDA	underlying data announcement
VWAP	volume-weighted average price
WpHG	Wertpapierhandelsgesetz (German Securities Trading Act)
WpÜG	Wertpapierhandelsgesetz (German Securities Trading Act)

2. GENERAL PRINCIPLES

2.1. INDEX CALCULATION PRINCIPLES

Whenever possible, the DAX equity indices are calculated using the following basic principles:

- » Representative: The indices aim to best represent the performance of the target market
- » Tradable: Index components are tradable in terms of the size of the companies and the target market(s) concerned
- » Replicable: Index performance can be tracked by an actual portfolio
- » Stable: There is a high degree of index continuity
- » Rules-based: Index calculation and any changes to the index composition follow transparent rules
- » Predictable: Changes to index rules are publicly announced and a reasonable notice period is given (generally at least two trading days); they are never implemented retroactively
- » Transparent: Decisions are based on public information

2.2. ADVISORY BODY

The **Advisory Board for Equity Indices** (“Arbeitskreis Aktienindizes”) provides advice on topics relating to indices that are administered by STOXX and referenced in this Guide. The board has an advisory function and bases its work on the principles mentioned above and the rules set out in this Guide. It does not take binding decisions on behalf of STOXX.

The Advisory Board for Equity Indices consists of employees appointed by STOXX, and representatives of leading national and international financial institutions. It usually meets bi-annually in March and September. Extraordinary meetings may also be convened.

2.3. INDEX TERMINATION POLICY

Where the termination of an index or an index family that, to STOXX’s knowledge, underlies financial products available for trading on the market is planned, STOXX will conduct a market consultation in advance of such termination in line with STOXX’s Benchmark Transition Policy and its Consultation Policy (both of which are available on the STOXX website). The length of the consultation period will be defined in advance, based on the specific issues involved in each proposed termination subject to STOXX’s Benchmark Transition Policy (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide). The consultation period gives clients and third parties the opportunity to share any concerns about the termination of the index or index family. Based on the feedback received, STOXX may review its decision to terminate an index or an index family (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide). At the end of the consultation period, STOXX will publicly announce its final decision on the termination. A transition period will be granted in the event of termination (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide).

No market consultation will be conducted in those cases in which an index or index family to be terminated does not underlie any financial products available for trading on the market.

3. COVERAGE

3.1. DAX INVESTABLE UNIVERSE

The DAX investable universe comprises all common stocks and equities with similar characteristics listed on the Frankfurter Wertpapierbörse (FWB; in English “Frankfurt Stock Exchange” or “FSE”) that provide real-time and historical component and currency pricing.

This universe and the framework described in sections 3, 4 and 5 are used for the index methodologies that are referenced in this Guide and calculated by STOXX.

3.2. INTERNATIONAL EQUITIES INVESTABLE UNIVERSE

The international equities investable universe comprises all common stocks and equities with similar characteristics from the financial markets listed below that provide real-time and historical component and currency pricing.

This universe and the framework described in sections 3 and 4 are used for the index methodologies that are referenced in this Guide and calculated by STOXX.

Americas		
NYSE (US)	Mexican Stock Exchange (MX)	B3 S.A. – Brasil, Bolsa, Balcão (BR)
Nasdaq (US)	Lima Stock Exchange (PE)	Buenos Aires Stock Exchange (AR)
Toronto Stock Exchange (CA)	Bolsa de Valores de Colombia (CO)	Santiago Stock Exchange (CL)

Europe		
Athens Stock Exchange (GR)	Euronext Paris (FR)	Nasdaq Helsinki (FI)
Bolsa de Madrid (ES)	Euronext Amsterdam (NL)	Nasdaq Iceland (IS)
Deutsche Börse (DE)	Euronext Brussels (BE)	Nasdaq Stockholm AB (SE)
London Stock Exchange (UK)	Euronext Lisbon (PT)	Nasdaq Riga (LV)
SIX Swiss Exchange (CH)	Euronext Dublin (IE)	Nasdaq Tallinn AS (EE)
Vienna Stock Exchange (AT)	Euronext Milan (IT)	Nasdaq Vilnius (LT)
Bucharest Stock Exchange (RO)	Oslo Stock Exchange (NO)	Ljubljana Stock Exchange (SI)
Budapest Stock Exchange (HU)	Malta Stock Exchange (MT)	Macedonian Stock Exchange (MK)
Bulgarian Stock Exchange (BG)	Cyprus Stock Exchange (CY)	Zagreb Stock Exchange (HR)
Warsaw Stock Exchange (PL)	Istanbul Stock Exchange (TR)	Belgrade Stock Exchange (RS)
Prague Stock Exchange (CZ)	Nasdaq Copenhagen (DK)	

Asia/Pacific		
Tokyo Stock Exchange (JP)	Taiwan Stock Exchange (TW)	Philippine Stock Exchange (PH)
Stock Exchange of Hong Kong (HK)	Bursa Malaysia (MY)	Hanoi Stock Exchange (VN)
Shanghai Stock Exchange (CN)	Singapore Exchange (SG)	Ho Chi Minh Stock Exchange (VN)
Shenzhen Stock Exchange (CN)	Stock Exchange of Thailand (TH)	BSE (IN)
Australian Securities Exchange (AU)	Indonesia Stock Exchange (ID)	Pakistan Stock Exchange (PK)

3. COVERAGE

Korea Exchange (KR)	New Zealand Exchange (NZ)	

Middle East and Africa		
Tel Aviv Stock Exchange (IL)	Riyadh Stock Exchange (SA)	Tunis Stock Exchange (TN)
Abu Dhabi Securities Exchange (AE)	Boursa Kuwait (KW)	Casablanca Stock Exchange (MA)
Bahrain Bourse (BH)	Muscat Stock Exchange (OM)	Egyptian Exchange (EG)
Qatar Stock Exchange (QA)	Johannesburg Stock Exchange (ZA)	Nigerian Exchange Group (NG)
Dubai Financial Market (AE)	Nasdaq Dubai (AE)	

4. INDEX CHARACTERISTICS

4.1. MARKET CAPITALIZATION-WEIGHTED INDICES AND PRICE-WEIGHTED INDICES

Free-float market capitalization-weighted indices use the free-float market capitalization to determine their individual constituents' weights. Price-weighted indices are weighted by the price plus another weighting factor. For details on the calculation formula used, see the DAX Equity Index Calculation Guide and the definition of weighting factors provided in section 5.9 of this document.

4.2. SELECTION LISTS

Selection lists are produced for indices that have a fixed number of constituents, so as to be able to determine replacements for any components that are deleted from the indices in the course of a quarter. The selection lists are calculated using the most recent data known to STOXX as of the cutoff date (the last trading day of the previous month).

Selection lists may also indicate potential changes in the composition of the index that will be made at the next review.

4.2.1. PUBLICATION OF SELECTION LISTS

Unless specified otherwise in the index methodology concerned, selection lists are published after 10:00 p.m. CET on the third trading day of a month.

Also unless specified otherwise, the cutoff date/time for creating the selection lists is 5:30 p.m. CET on the last trading day of the month preceding the month in which the selection list is to be created (e.g., May 31 for the June selection list).

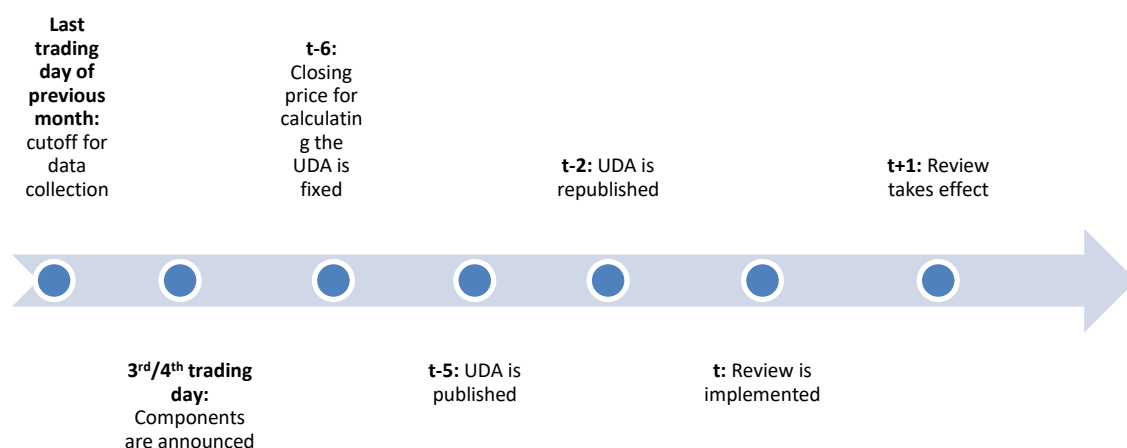
4.3. INDEX REVIEW

4.3.1. GENERAL PRINCIPLES

All indices are reviewed on a regular basis so as to reflect the latest developments on the stock markets, and hence to ensure a transparent and up-to-date index basket. Unless specified otherwise, this review implementation process (also known as "rebalancing") is performed quarterly after the close on every third Friday in March, June, September and December, and the changes take effect as of the next trading day.

If the implementation date falls on a non-trading day, it is brought forward by one trading day. The review effective date continues to be the next trading day after the implementation date.

4. INDEX CHARACTERISTICS



The index divisor is recalculated on the review implementation date as described in the DAX Equity Index Calculation Guide, thus maintaining the continuity of the index values.

4.3.1. COMPONENTS ANNOUNCEMENTS

Changes to index components are announced:

- » After 10:00 p.m. CET on the third trading day of the review month for the DAX blue-chip indices and major benchmark indices
- » After 10:00 p.m. CET on the fourth trading day of the review month for the DAX ESG indices and Scale 30

4.3.2. UNDERLYING DATA ANNOUNCEMENTS

Unless specified otherwise in the index methodology concerned, underlying data announcements (UDAs) are published on the quarterly UDA date, which is five trading days before the review implementation date (i.e., usually the second Friday in March, June, September and December). UDAs contain the weighting factors and weighting cap factors for the new index compositions that take effect as of the trading day following the review implementation date (usually the third Friday of a review month).

Unless specified otherwise in the index methodology concerned, the new number of shares, free-float factors and closing prices used to determine the constituents' weightings and cap factors are fixed as of the trading day prior to the quarterly UDA date (t-6), and are adjusted for corporate actions (with the exception of cash dividends) that will take effect in the period up to the review effective date.

4. INDEX CHARACTERISTICS

UDAs are republished on the Wednesday before the review implementation date (t-2). The revised announcements take into account all corporate actions (including delistings and IPOs) of which STOXX has become aware since the publication of the original UDA at t-5. An exception is made in the case of dividends whose ex-dates take effect during the period between the quarterly UDA date and the review effective date.

4.4. DELETIONS FROM A PARENT INDEX

A parent index is the index that is defined as the investable universe in the "Overview" section of the methodology for another index (which is known as the child index). Unless stated otherwise, a component that is deleted from a parent index is also deleted from all child indices; the notice period in both cases is the same. This does not apply to cases in which the deletion from the parent index is due to an ordinary index review.

5. STOCK CHARACTERISTICS

Within the DAX framework, index values are calculated on the basis of one or more characteristics from the following list. These characteristics are screened during the regular quarterly review process (ordinary adjustment) as well as extraordinarily in the case of corporate actions. See the DAX Equity Index Calculation Guide for further details on how extraordinary adjustments and corporate actions are handled. To access the latest information about extraordinary adjustments, subscribe to the STOXX email distribution list and download the corporate actions forecast regularly.¹

5.1. COUNTRY ASSIGNMENT

5.1.1. GERMAN MARKET

The German market comprises all securities listed on the FSE's Regulated Market segments (Prime Standard and General Standard) and the Regulated Unofficial Market, i.e., the Open Market segments (Scale, Quotation Board).²

5.1.1.1. LEGAL HEADQUARTERS

The operating centre (head quarter) of commercial companies is termed the legal headquarters. It is generally specified in the articles of association.

5.1.1.2. OPERATING HEADQUARTERS

The operational headquarters is the location of (part of) the executive management or (part of) the administrative management.

5.1.2. INTERNATIONAL MARKETS

The STOXX country and regional classifications given in the STOXX Index Methodology Guide apply to the international indices described in sections 12 and 13.

5.2. CURRENCY

Each stock is uniquely assigned a specific currency, depending on the listing selected. If the currency for a given stock or a country changes, the new currency is applied as of the effective date of the currency change for the stock or country concerned.

5.3. DAX INDUSTRY CLASSIFICATION

Stocks belonging to the DAX sector indices are assigned to sectors using the DAX Industry Classification (see the Guide to Industry Classifications used by STOXX Ltd.). Sectors are assigned on the basis of the issuer's main sales focus.

¹ [Registration – STOXX \(stoxx.com\)](https://www.stoxx.com/registration)

² The admission criteria for the various market segments are listed in the [Exchange Rules for the Frankfurter Wertpapierbörse](#).

5. STOCK CHARACTERISTICS

Any changes to sector assignments are made during the annual review of sector classifications for listed companies on the FSE's Regulated Market, and are reflected in the selection list published in September.

If a company's sector classification changes for exceptional reasons (e.g., due to a change in the company's sales focus or, in the case of an investment company, its investment focus), the company will be reclassified on the next quarterly review implementation date. The cutoff date for extraordinary changes in sector classifications is the cutoff date for the March, June and December selection lists. Extraordinary changes in sector classifications are also made in the Scale segment.

The following rules apply to investment companies:

Investment companies are initially allocated to the Financial Services/Private Equity & Venture Capital sector. If a company's activities cover several industrial areas, it is allocated to the "Industrial/Industrial Diversified" sector (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide). Investment companies with a clear focus on a certain sector are allocated to that sector.

5.4. BASIC CRITERIA

5.4.1. DEFINITION OF BASIC CRITERIA

For some indices, a set of basic criteria has to be met for a stock to be eligible. These are as follows:

- » An existing listing on the FSE's Regulated Market
- » Continuous trading on Xetra
- » A minimum free float of 10%
- » A registered office in the EU/EFTA or a principal place of business in Germany is sufficient for foreign companies
- » Publication³ of an audited annual financial report prepared in accordance with the German Securities Trading Act (Wertpapierhandelsgesetz — WpHG).^{4,5} The report must

³ The term "publication" refers to publication of the report on the company's website. STOXX Ltd. commissions data providers to collect the information from the companies' websites when evaluating whether the requirements have been met.

⁴ Section 114(2) and (3) of the WpHG and, in the case of group reporting requirements, section 117 no. 1 of the WpHG

⁵ If the issuer is merely obliged to prepare single-entity financial statements, section 114(2) of the WpHG requires publication of single-entity financial statements that have been prepared and audited

- In the case of issuers whose registered office is in a member state of the European Union or of the Treaty on the European Economic Area, with the national law of the state in which the company is registered
- In the case of issuers whose registered office is in a third country, with the German Commercial Code (Handelsgesetzbuch — HGB), subject to the exemption options listed below.

STOXX will also accept the publication of single-entity financial statements that have been prepared in accordance with the IFRSs. However, if issuers choose to publish single-entity IFRS financial statements, their intrayear reports also have to be prepared in accordance with the IFRSs.

If the issuer is obliged to prepare consolidated financial statements, these must always be prepared in accordance with Regulation (EC) No.1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards (OJ L 243, 11.9.2002, page 2). This means that the consolidated annual financial

5. STOCK CHARACTERISTICS

normally be made publicly accessible within 90 days of the end of the reporting period, as specified in recommendation F.2 of the German Corporate Governance Code; however, an additional grace period permits publication within four months of the end of the reporting period. Both the annual financial report and the full audit opinion must be published to meet the publication requirement. The annual financial report must be made available in either German or English.

- » Publication of a half-yearly financial report (for the first six months of the fiscal year) prepared in accordance with the requirements of the WpHG.⁶ The report must normally be made publicly accessible within 45 days of the end of the reporting period, as specified in recommendation F.2 of the German Corporate Governance Code;⁷ however, an additional grace period permits publication within three months of the end of the reporting period. The half-yearly financial report must be made available in either German or English. In the case of stocks that are newly listed on the FSE's Regulated Market, the issuing company must meet this requirement for the reporting period ending immediately after its listing. The criterion is deemed to have been met for reporting periods ending before the listing.
- » Publication of a quarterly statement or quarterly financial report for the first and third quarters of the fiscal year. The quarterly statement or quarterly financial report must meet the follow-up obligations for the Regulated Market's Prime Standard⁸ regarding the content of the report, the period covered and the format. This applies irrespective of the Regulated Market segment to which the issuer actually belongs. Publication shall normally be made within 45 days of the end of the reporting period; however, an additional grace period permits publication within 75 days of the end of the reporting period. Quarterly statements and quarterly financial reports must be made available in either German or English. In the context of selection list cutoff dates, the criterion is also deemed to have been met if the company's supervisory board and management board have published a statement of intent on the company's website to the effect that the company will publish quarterly statements or quarterly financial reports for all preparation and reporting periods ending after the cutoff date in question. A company that fails to adhere to such a statement of intent is deemed to be in breach of the criterion.
- » No departures have been declared from recommendations C.10 (solely as regards its applicability to the Chair of the Audit Committee⁹), D.8 and D.9 of the German Corporate Governance Code.¹⁰ Compliance with the criterion is assessed on the basis of the

statements and group management report prepared in accordance with the IASs/IFRSs as adopted in the EU and with the interpretations relating to these standards must be published.

The following are also acceptable: consolidated financial statements and group management reports prepared in accordance with accounting standards that were acknowledged as equivalent to the IFRSs by the European Commission in its decision of December 12, 2008 (2008/961/EC), as amended by the Commission Implementing Decision of April 11, 2012 (2012/194/EU) and by Commission Regulation (EC) No. 1289/2008 of December 12, 2008 (these are: US GAAP, Japanese GAAP, Chinese GAAP, Canadian GAAP and South Korean GAAP). In the case of financial years beginning prior to January 1, 2015, third-country issuers may also prepare their reports in compliance with Indian GAAP.

⁶ Section 115(2) to (4) of the WpHG and, in the case of group reporting requirements, section 117(2) of the WpHG.

⁷ <https://www.dcgk.de/en/code/current-version/f-transparency-and-external-reporting.html>

⁸ See the [EU Regulated Market](#) and the follow-up obligations for the Regulated Market (<https://www.deutsche-boerse-cash-market.com/dbcm-en/primary-market/being-public/ipo-line-being-public/regulated-market/!ipo-21956-60156>)

⁹ This provision also applies to small supervisory boards as defined by section 107(4) sentence 2 of the German Stock Corporation Act (Aktiengesetz — AktG).

¹⁰ Any interpretation of the abovementioned recommendations is the company's responsibility. Only companies that do not declare any departures from the recommendations are eligible for ranking. STOXX does not provide any advice on the principles, recommendations and suggestions contained in the German Corporate Governance Code.

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Declaration of Compliance that the company has published for the current calendar year or, in cases in which the publication deadline for the Declaration of Compliance lies in the future, for the previous year. The criterion is deemed to have been breached if no such Declaration of Compliance is publicly available, or if the company declares any departures from the recommendations above.

- » Companies that are newly listed on the FSE's Regulated Market and that have not issued a mandatory annual Declaration of Compliance at the time of listing are deemed to meet the criterion provided that the company's management board (Vorstand) and supervisory board (Aufsichtsrat) have published a statement on the company's website confirming that the company does not depart from the recommendations above. This statement is considered to be valid until the first mandatory annual Declaration of Compliance is published.

Foreign companies that are not required to publish a Declaration of Compliance with the German Corporate Governance Code are deemed to meet the criterion provided that they have published on their website a statement confirming that they do not depart from the recommendations above, as these apply to their legal form and jurisdiction. STOXX has published the template that foreign companies must use to issue such statements on its website at <https://www.stoxx.com/rulebooks>. These statements must be published annually.

- » Minimum liquidity on the FSE:
 - Initial eligibility: To qualify for ranking, stocks that are not an index component at the review cutoff date must have a minimum order book volume over the last 12 months of EUR 1bn, or a turnover rate as described in section 5.12.1 of 20%. Stocks that do not meet this criterion will not be ranked.
 - Continued eligibility: To qualify for continued membership in the index, stocks that are index components at the review cutoff date must have a minimum order book volume over the last 12 months of at least EUR 0.8bn, or a turnover rate as described in section 5.12.1 of 10%. Stocks that do not meet this criterion will not be ranked until they meet the initial eligibility requirement again.

5.4.2. BREACHES OF BASIC CRITERIA

Companies that no longer meet the necessary basic criteria for remaining in the index are removed from it, with the type of basic criteria breached determining the timing of the removal.

A breach of one of the following basic criteria leads to an exclusion from the index following two days' notice, starting on the date on which STOXX becomes aware of the breach:

- » Minimum free float
- » Listing on the FSE's Regulated Market
- » Continuous trading
- » Timely publication of the audited annual financial report
- » Timely publication of the half-yearly financial report
- » Timely publication of the quarterly statement or quarterly financial report

A breach of the timely reporting requirement is deemed to exist if a company fails to publish the required financial reports by the end of the additional grace period:

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- » In the case of the annual financial report, within four months of the end of the relevant reporting period
- » In the case of the half-yearly financial report, within three months of the end of the relevant reporting period
- » In the case of the quarterly statement or quarterly financial report, within 75 days of the end of the relevant reporting period

The subsequent withdrawal of the required financial reports or statements, or of the audit opinion where required, after the periods above is deemed to be the equivalent of a breach of the timely reporting requirement.

Stocks of companies that are in breach of the financial reporting criteria will remain on the current selection list until the end of the month in question, but the companies will not be eligible for index membership.

If a company that has been excluded from the indices subsequently meets the financial reporting requirements, its stock can again be ranked on the next selection list if it meets the necessary criteria.

The standard notice period of two trading days for all of the breaches above will be extended if necessary so as to ensure that the effective date does not conflict with the monthly selection list cutoff date (t) and publication dates, or with the review implementation process. In such a case, the effective date of an extraordinary index change would be modified as follows:

- » In any month: An ad hoc correction that would take effect after t and before the third trading day after the publication of the selection list is postponed and takes effect on the third trading day after the publication of the selection list (i.e., t+6), based on the selection list published on t+3.
- » In review months only: An ad hoc correction that would take effect after the Thursday before the second Friday but before the review effective date is postponed and takes effect on the review effective date.
- » Any information received on the review implementation date or the preceding day is processed so as to take effect on the second or first trading day after the review effective date.

Compliance with the basic criteria of adherence to the required recommendations of German Corporate Governance Code and minimum liquidity is monitored monthly as part of the selection list creation process. A breach of these criteria means that the stock concerned will not be ranked in the relevant monthly selection list and until the next index review. The stock will then be removed from the index during the index review process.

In all of the cases above, the index component in breach is replaced by applying the index-specific replacement rule. STOXX announces the decision and then replaces the relevant component, usually two full trading days after the announcement has been made. Where it is already certain that a component will not comply with these rules on a future date, it may be replaced as early as on the next review date (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide).

5. STOCK CHARACTERISTICS

5.5. CORPORATE ACTIONS

All index components are adjusted for corporate actions. Individual events are treated in the same way in all indices. Please see the DAX Equity Index Calculation Guide for details.

5.6. NUMBER OF SHARES

Each stock in the DAX universe is uniquely assigned a number of shares (including treasury shares held by the company itself). This number is then reviewed on a quarterly basis. It is published in the quarterly UDA and implemented on the quarterly review implementation date.

STOXX determines the number of shares attributable to a company on the basis of regulatory announcements pursuant to the WpHG as provided by the German Company Register (Unternehmensregister), extracts from the Commercial Register (Handelsregistrauszüge) and/or EQS News. Where no regulatory announcements are available, other publicly available sources are consulted in addition to determine the number of shares.

5.7. FREE-FLOAT FACTORS

5.7.1. FIXED HOLDINGS

Shares of a company that are not assigned to the free float are known as “fixed holdings.” These cannot be freely traded by definition.

5.7.2. FREE FLOAT

The term “free float” refers to freely tradable shares of a company that are not in fixed ownership. The following rules are used to determine the free float:

1. Shares held by the issuing company (treasury shares) and all shares held by an owner that, when taken in the aggregate, account for at least 5% of a company's total number of shares and that are attributed to a specific class of shares are considered to be non-free float. Shares held by an owner also include shareholdings
 - » Held by the family of the owner as defined by section 19 of the Market Abuse Regulation (MAR)
 - » For which a pooling arrangement in which the owner has an interest exists
 - » That are managed or kept in safe custody by a third party for the account of the owner
 - » That are held by a company which the owner controls as defined by section 290(2) of the HGB
 - » That are subject to a statutory or contractual qualifying period

This does not include shares held by:

- » Asset managers and trust companies
- » Funds and pension funds

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- » German or foreign investment companies (excluding insurance companies) as part of their special fund assets

as identified using the register of companies maintained by the competent financial supervisory authority, provided that the shares are held as part of short-term investment strategies and the size of the shareholding does not exceed 25% of the company's total number of shares. This does not apply to shareholdings held by venture capital companies, government funds or their financial agencies, or supranational funds.

Shares for which the acquirer has, at the time of purchase, clearly and publicly stated that strategic goals are being pursued, and that the intention is to influence the company's policies and ongoing business in the long term, are not deemed to be short-term investments in this context. In addition, shares acquired via a public purchase offer are not deemed to be short-term investments.

The shareholder structure for a company is determined on the basis of regulatory announcements pursuant to the WpHG, as provided by the German Company Register (Unternehmensregister) and/or EQS News. Where no regulatory announcements are available, other publicly available sources are consulted in addition to determine the number of shares.

2. In the case of an ongoing takeover, the absolute number of shares held by the acquirer is taken from the companies' publications of the results of the tender offer pursuant to the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz — WpÜG). The free float is then calculated as a proportion of the total number of shares in the target company (see section 5.6).

Shares that are controlled by acquiring companies via derivatives are also included when determining the free float. The derivatives must be both subject to registration and actually registered in line with the provisions of the WpHG and WpÜG.

Further details on how to determine the free float in the case of ongoing takeovers can be found in the DAX Equity Index Calculation Guide.

The criteria set out in numbers 1 and 2 above are also applied in full to classes of shares that are subject to restrictions of ownership. When determining the free float as described above, each ISIN under which shares are traded is deemed to be a separate share class.

If STOXX determines and publishes a company's free float as part of a quarterly review, this free-float factor will not be changed or corrected until the next review implementation date unless it is affected by a corporate action (as described in the DAX Equity Index Calculation Guide) prior to the next review date. The same also applies if, after determining the free float, STOXX learns of facts or circumstances that would have led to a different free-float factor being determined had they been known at the time of determination.

5.8. MARKET CAPITALIZATION AND FREE-FLOAT MARKET CAPITALIZATION

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The full market capitalization for a company's share class is defined as the product of the number of shares in a company's share class and the price of that share class.

The free-float market capitalization is that portion of a stock's total market capitalization that is available for trading:

Free-float market capitalization = free-float factor × full market capitalization

5.9. WEIGHTING FACTORS

Price-weighted indices apply weighting factors instead of the "shares x free float" factor. Weighting factors are calculated on the basis of other criteria such as dividend data, and are adjusted for corporate actions. The weighting factor multiplied by the share price determines the weight assigned to a company in a price-weighted index. Please see the DAX Equity Index Calculation Guide for further details.

5.10. WEIGHTING CAP FACTORS

Weighting cap factors limit the maximum weighting for a stock at the time of review. They are updated during the regular quarterly index reviews and are not adjusted for corporate actions. Weighting cap factors are used to achieve diversification, and avoid a single component dominating an index. Different maximum weights are set, depending on the objective of the index concerned.

Further details are given in the individual index methodologies in this Guide.

5.11. VOLUME-WEIGHTED AVERAGE PRICE

The volume-weighted average price (VWAP) is defined as the sum of the product of execution price and volume of each trade for a stock during the calculation period, divided by the total trading volume of that stock during the calculation period.

5.11.1. ADJUSTED VWAP

The VWAP is adjusted for corporate actions that occur during the calculation period. The adjusted VWAP is calculated as follows:

$$VWAP_{it}^{adj} = VWAP_{it} \cdot af_{it}$$

with

$$af_{it} = \frac{c_{it}}{c_{i,t=c}}$$

and

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$$c_{it} = c_{i,t-1} \cdot \frac{p_{i,t-1}^{adj}}{p_{i,t-1}}$$

where

- af_{it} = adjustment factor for stock (i) at time (t)
- c_{it} = correction factor for stock (i) at time (t)
- $c_{i,t-1}$ = correction factor for stock (i) on the previous day (t-1). This is set to 1 at the start of the calculation period (usually 20 trading days before the review cutoff date).
- $c_{i,t=c}$ = correction factor for stock (i) at the selection list cutoff (t=c)
- $p_{i,t-1}$ = close price for stock (i) on the previous day (t-1)
- $p_{i,t-1}^{adj}$ = adjusted close price for stock (i) on the previous day (t-1)

5.11.2. VWAP ADJUSTMENTS FOR MERGERS AND TAKEOVERS

Where a merger or takeover occurs during the calculation period, the share class that is included in the index on a given date is used to calculate the adjusted VWAP for that date. On the day prior to the replacement effective date, the adjustment factor is calculated using the close price for the share class leaving the index and the adjusted close price for the share class entering the index. The new share class inherits the adjustment factors for the old share class prior to the replacement.

5.12. LIQUIDITY

5.12.1. TURNOVER RATE

A turnover rate is calculated for each stock on the selection list. It is determined as the ratio of the 12-month order book volume to the free-float market capitalization as defined in section 5.8.

5.12.2. ORDER BOOK VOLUME

The order book volume is the total turnover recorded on Xetra and the FSE for a company's various share classes.

The period over which the turnover is calculated is stipulated individually for each index type and is applied in line with the specific provisions for the index type concerned.

Where a takeover occurs during the calculation period, the daily turnover for the share class that is included in the index on a given date is used to calculate the order book volume.

Where the shares of a newly listed company result from conversion of the shares of two or more companies that have ceased to exist (i.e., during a merger), the companies' order book volumes are aggregated, provided that both companies were listed on the FSE prior to the merger and were governed by one of its transparency standards. A requirement for aggregating order book volumes is that the companies that no longer exist are no actively traded on any stock exchange. The order book volumes are then aggregated retroactively at this point.

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5.12.3. AVERAGE DAILY TRADED VALUE

In the case of liquidity-weighted indices, average daily traded values (ADTVs) are applied at stock level. All prices and traded quantities available during the selected calendar period are used for each stock i belonging to the relevant country c : this may lead to a different number N_i of total records per stock i .

To make identifying non-trading days easier, the number of null records $NrNull_i$ is counted for each stock; after this, an adjustment factor for non-trading days is calculated for each country c as:

$$NTD_adj_c = \min_{i \in c} \{NrNull_i\}$$

Consequently, the ADTV for stock i from country c is calculated as:

$$ADTV_{i \in c, [t_1, t_{N_i}]} = \frac{\sum_{t=t_1}^{t_{N_i}} p_{i,t} * ts_{i,t} * x_{i,t}}{N_i - NTD_adj_{c \in i}}$$

where

$p_{i,t}$ = close price for stock (i) at time (t)

$ts_{i,t}$ = number of shares of company (i) traded at time (t)

$x_{i,t}$ = exchange rate between currency of company (i) and the base currency of the index at time (t)

5.13. REGULATORY TRADING PROHIBITIONS

5.13.1. U.S. SECURITIES AND EXCHANGE HOLDING FOREIGN COMPANIES ACCOUNTABLE ACT (HFCAA)

Companies which are on the “Conclusive list of issuers identified under the HFCAA,” which is published by the U.S. Securities and Exchange Commission (SEC), are screened for eligibility in the universes for the international region-oriented indices (section 12) and international trend and industry indices (section 13) on the last trading days in January, April, July and October as follows:

- » If a company on the Conclusive list is to be prohibited from trading within the next six months, its stock is deleted from the universes for the international region-oriented indices and international trend and industry indices effective as of the trading day following the third Friday in March, June, September and December.
-

5. STOCK CHARACTERISTICS

- » If a company on the Conclusive list is to be prohibited from trading within the next six months, its stock is ineligible for inclusion in the universes for the international region-oriented indices and international trend and industry indices.

If an alternative listing is available for companies on the Conclusive list that fall within the universes for the international region-oriented indices and international trend and industry indices, the alternative listing can only be added to the universe concerned at the review cutoff.

STOXX will announce the list of identified securities that have been excluded from the universes for the international region-oriented indices and international trend and industry indices on the first trading days in March, June, September and December.

6. DAX ALL SHARE INDICES

6.1. DEUTSCHE BÖRSE SEGMENT INDICES

6.1.1. OVERVIEW

Prime All Share

Companies listed on the FSE can decide whether to apply for inclusion in the General, Prime or Scale segments. Inclusion in the Prime Standard results in higher post-admission transparency obligations. STOXX's Prime All Share index measures the overall performance of all stocks in the Prime Standard segment.

General All Share

Similar to the Prime All Share, the General All Share index comprises all stocks listed in the General Standard segment and describes the performance of this segment.

Scale All Share

The Scale All Share index comprises all stocks in the Scale segment, and hence describes their overall performance. It is primarily geared towards qualified investors who are able to evaluate the opportunities and risks involved in a market segment with low transparency standards.

Universe: All securities in the DAX investable universe.

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Not applicable.

Base value and dates:

- » Prime All Share: 1,000 on March 18, 2016
- » General All Share: 1,000 on March 21, 2003
- » Scale All Share: 1,000 on February 28, 2017

Dissemination calendar: Xetra calendar.

6.1.2. INDEX REVIEW

Component selection: The Prime All Share, General All Share and Scale All Share indices consist of all securities listed in the Prime Standard, General Standard and Scale segments of the FSE, respectively.

Review frequency: The indices are rebalanced on a quarterly basis.

6.1.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

6. DAX ALL SHARE INDICES

Ad hoc exit: If a company changes its trading segment, it is removed from the Deutsche Börse segment index in which it is currently included at the close of its last trading day in that segment, provided that two trading days' notice can be given.

Ad hoc entry: New share classes in the Prime Standard, General Standard or Scale segments of the FSE are included in the relevant Deutsche Börse segment index. A distinction is made between the following two cases:

- a) Where a share class is listed on the FSE for the first time, the company will be included in the index one day after its first trading day.
- b) Where a share class was previously included in another FSE segment, the share class will be included in the index on the day on which it is first quoted in the new segment, provided that two trading days' notice can be given.

Spin-offs: Spin-offs are added permanently if they qualify for a segment index.

6.2. CDAX

6.2.1. OVERVIEW

The CDAX comprises all German companies in the Prime Standard and General Standard segments. It therefore measures the performance of the entire German stock market and is ideal for use in analysis.

Universe: Prime All Share and General All Share.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Not applicable.

Base value and dates: 100 on December 30, 1987.

Dissemination calendar: Xetra calendar.

6.2.2. INDEX REVIEW

Component selection: The index consists of those components of the Prime All Share and General All Share indices that are domiciled in Germany.

Review frequency: The index is rebalanced on a quarterly basis.

6.2.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: If a company changes its domicile and no longer qualifies for inclusion in the CDAX, it is deleted from the latter as soon as the change takes effect, provided that two trading days' notice can be given.

6. DAX ALL SHARE INDICES

Ad hoc entry: Qualifying stocks that are added to the Prime All Share or General All Share are added to the CDAX as well.

If a company changes its domicile and becomes eligible for inclusion in the CDAX, it is added to this index as soon as the change takes effect.

Spin-offs: Spin-offs are added permanently if they qualify for the CDAX.

6.3. CDAX UCITS CAPPED

6.3.1. OVERVIEW

The CDAX UCITS Capped index mirrors the CDAX index except that components are capped at UCITS bounds to allow for a UCITS compliant benchmarking.

Universe: The same as for the CDAX.

Weighting scheme: The same as for the CDAX.

Capping: A 4.5/8.5/35 capping method is used. The procedure is as follows:

Step A) All companies are capped at a maximum of 8.5% using the single cap limit method.

Step B) The components are then ranked from the largest to the smallest (if more than one component has a weight of 8.5% after Step A), the original weight is used to determine the order).

Step C) Maximum weights are determined for the largest five components resulting from Step B). The maximum weights allowed for the largest five components are 8.5%, 7.5%, 7%, 6.5% and 5.5%. All other components are capped at a maximum weight of 4.5%. For example, if the weight of the second-largest component exceeds 7.5%, it is capped at this figure.

Step D) Step C) is repeated until all components meet the restrictions contained in it.

Base value and dates: 1,000 on December 29, 2023.

Dissemination calendar: Xetra calendar.

6.3.2. INDEX REVIEW

Component selection: The same as for the CDAX.

Review frequency: The same as for the CDAX.

6.3.3. ONGOING MAINTENANCE

Replacements: The same as for the CDAX.

6. DAX ALL SHARE INDICES

Ad hoc exit: The same as for the CDAX.

Ad hoc entry: The same as for the CDAX.

Spin-offs: The same as for the CDAX.

6.4. DAX INDUSTRY INDICES

6.4.1. OVERVIEW

Technology All Share

The Technology All Share includes all Prime Standard companies assigned to technological sectors that do not belong to the DAX. DAX companies are excluded to prevent these from dominating.

Classic All Share

All Prime Standard companies assigned to traditional sectors that are not part of the DAX are included in the Classic All Share. DAX companies are excluded to prevent these from dominating.

Universe: Prime All Share.

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Not applicable.

Base value and dates:

- » Technology All Share: 1,000 on December 30, 1997
- » Classic All Share: 1,000 on March 21, 2003

Dissemination calendar: Xetra calendar.

6.4.2. INDEX REVIEW

Component selection: The Technology All Share and Classic All Share indices consist of those components of the Prime All Share that have Technology and Classic industry classifications respectively, but that are not part of the DAX.

Review frequency: The indices are rebalanced on a quarterly basis.

6.4.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

6. DAX ALL SHARE INDICES

Ad hoc exit: If a stock is assigned to a different industry classification or is included in the DAX, it is deleted from its previous DAX Industry index as soon as the change takes effect.

Ad hoc entry: Qualifying stocks that are added to the Prime All Share are added to the relevant DAX Industry index as well.

If a stock is assigned to a different industry classification or is deleted from the DAX, it is added to the relevant DAX Industry index as soon as the change takes effect.

Spin-offs: Spin-offs are added permanently if they qualify for a particular DAX Industry index.

6.5. DAX SECTOR INDICES

6.5.1. OVERVIEW

All Prime Standard companies are included in DAX sector indices on the basis of their sector affiliation. There are three types of DAX sector indices: the DAXsupersector, DAXsector and DAXsubsector. These comprise all companies assigned to the supersector, sector or subsector concerned, based on the DAX Industry Classification.

Universe: Prime All Share.

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Not applicable.

Base value and dates:

- » DAXsupersector indices: 100 on March 21, 2003
- » DAXsector indices: 100 on December 31, 1987
- » DAXsubsector: 100 on March 21, 2003

Dissemination calendar: Xetra calendar.

6.5.2. INDEX REVIEW

Component selection: DAX sector indices consist of those components of the Prime All Share belonging to the supersector (DAXsupersector), sector (DAXsector) or subsector (DAXsubsector) concerned, based on the DAX Industry Classification as described in section 5.3.

Review frequency: The indices are rebalanced on a quarterly basis.

6.5.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

6. DAX ALL SHARE INDICES

Ad hoc exit: If a stock is assigned to a different sector, supersector or subsector in the DAX Industry Classification, it is deleted from its previous DAX Sector index (DAXsector, DAXsupersector or DAXsubsector) as soon as the change takes effect.

Ad hoc entry: Qualifying stocks added to the Prime All Share are added to the relevant DAX Sector index as well.

If a stock is assigned to a different sector, supersector or subsector in the DAX Industry Classification as described in section 5.3, it is added to the relevant DAX Sector index (DAXsector, DAXsupersector or DAXsubsector) as soon as the change takes effect.

Spin-offs: Spin-offs are added permanently if they qualify for a particular DAX Sector index.

6.6. DAX SECTOR ALL INDICES

6.6.1. OVERVIEW

All Prime Standard, General Standard and Scale companies are included in the DAX Sector All indices on the basis of their sector affiliation. There are two types of DAX Sector All indices: the DAXsector All and DAXsubsector All indices. These contain all companies assigned to the sector or subsector concerned, based on the DAX Industry Classification.

Universe: Prime All Share, General All Share and Scale All Share.

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Not applicable.

Base value and dates:

- » DAXsector All: 100 on March 20, 2008
- » DAXsubsector All: 100 on March 20, 2008

Dissemination calendar: Xetra calendar.

6.6.2. INDEX REVIEW

Component selection: The DAX Sector All indices consist of those components of the Prime All Share, General All Share and Scale All Share belonging to the sector (DAXsector All) or subsector (DAXsubsector All) in question, based on the DAX Industry Classification as described in section 5.3.

Review frequency: The indices are rebalanced on a quarterly basis.

6.6.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

6. DAX ALL SHARE INDICES

Ad hoc exit: If a stock is assigned to a different sector or subsector in the DAX Industry Classification, it is deleted from its previous DAX Sector All index (DAXsector All, DAXsubsector All) as soon as the change takes effect.

Ad hoc entry: A qualifying stock that is added to the Prime All Share, General All Share or Scale All Share is also added to the relevant DAX Sector All index.

If a stock is assigned to a different sector or subsector in the DAX Industry Classification due to an annual review or an extraordinary change in the DAX Industry Classification as described in section 5.3, it is added to the relevant DAX Sector All index (DAXsector All, DAXsubsector All) as soon as the change takes effect.

Spin-offs: Spin-offs are added permanently if they qualify for a particular DAX Sector All index.

7. DAX BLUE-CHIP INDICES

7.1. DAX, MDAX, SDAX AND TECDAX

7.1.1. OVERVIEW

DAX

The DAX comprises the 40 largest companies (measured in terms of their market capitalization) on the FSE's Regulated Market that meet certain minimum quality and profitability requirements. In contrast to the other selection indices (the MDAX, SDAX and TecDAX), companies are only eligible for inclusion in the DAX if they meet a profitability requirement for the two most recent fiscal years.

The DAX price index is a continuation of the Börsen-Zeitung Index, which historically extends back to 1959.

MDAX

The MDAX comprises the 50 companies that follow on from the DAX companies in terms of their market capitalization or that are not eligible for inclusion in the DAX because they do not meet its profitability requirements but do meet the minimum quality requirements.

SDAX

The SDAX comprises the 70 companies that follow on from the MDAX companies in terms of their market capitalization and that meet minimum quality requirements.

TecDAX

The TecDAX comprises the 30 largest companies, measured in terms of their market capitalization, that meet minimum quality requirements and that belong to the Technology industry as defined by the DAX Industry Classification (see section 5.3 for further information on the latter).

Universe: Prime All Share and General All Share.

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 15% on a quarterly basis.

Base value and dates:

- » DAX: 1,000 on December 30, 1987
- » MDAX: 1,000 on December 30, 1987
- » SDAX: 1,000 on December 30, 1987
- » TecDAX: 1,000 on December 30, 1997

Dissemination calendar: Xetra calendar.

7. DAX BLUE-CHIP INDICES

7.1.2. INDEX REVIEW

Selection list: STOXX creates and publishes the selection list on a monthly basis. The reporting date for collecting data (the selection list cutoff date) is the last trading day of the month for which the selection list is being created. There are two different selection lists — one for the DAX, MDAX and SDAX, and one for the TecDAX — with the ranks for each list starting at 1.

Selection lists are created by noting the parameters relevant for allocating ranks (i.e., the number of shares, the free-float factor and the VWAP) at the selection list cutoff date and then determining the free-float market capitalization for each company. Compliance with the basic criteria is also assessed as of the cutoff date. In addition, EBITDA data is noted so as to determine companies' eligibility for inclusion in the DAX.

The following applies to the free-float market capitalization:

An adjusted volume-weighted average price over 20 trading days ("20-trading day adjusted VWAP") is used to calculate the free-float market capitalization. This is calculated for each share class as the average of the daily VWAPs, which are based on Xetra prices, for the last 20 trading days, and is adjusted for corporate actions as described in section 5.11. The 20-trading day adjusted VWAP on the last trading day of a month is used to generate the selection list.

The following applies to the order book volume:

The order book volume is the sum of the daily turnover figures for a share class over a 12-month period.

The following special provisions apply:

- » If the daily order book volumes for a company are not available for the whole 12-month period because it only started trading, or its initial listing on a segment governed by one of the transparency standards only took place, at a later date, the order book volumes for the first 20 trading days are ignored and the remaining data is extrapolated linearly over the 12 months. However, this procedure is only applicable to companies that have been traded for at least 30 days as of the reporting date, and if at least ten days' worth of order book volumes can be used for extrapolation.
- » If a company has changed its trading segment (Scale, General Standard or Prime Standard), the order book volume from the previous segment is used as of the selection list cutoff date following the segment change, provided that the company has a total trading history of more than 30 days.

The following provisions apply to the DAX only:

To be considered eligible for inclusion in the DAX, companies that are not already DAX components when the selection list is compiled must meet an additional profitability requirement:

- » Positive EBITDA¹¹ for the two most recent fiscal years as calculated by Refinitiv.

¹¹ Field code: 18198; field name: Earnings before Interest, Taxes, Depreciation & Amortization (EBITDA).

7. DAX BLUE-CHIP INDICES

Inclusion in the selection list

All of the share classes listed on the FSE's Regulated Market segment are included in the selection list for the DAX, MDAX and SDAX. Share classes that meet the basic criteria set out in section 5.4 are ranked. Companies that were initially listed on the FSE also have to have been listed on the Regulated Market or Scale for a minimum of 30 trading days. Share classes that do not meet the criteria set out in section 5.4 are also included in the selection list, but are not ranked. Each ISIN under which shares in a company are traded is considered to be a separate class for this purpose. If a company has several share classes, only the largest share class (measured by free-float market capitalization) is ranked.

If rights issued as part of a capital increase have a value as of the date on which the selection list is generated, the market capitalization given in the list takes the capital increase into account. In this case, an acceptance ratio of 100% is assumed. If the number of shares at the end of the subscription period differs from this assumption, the market capitalization will be adjusted to reflect the actual figure.

The TecDAX selection list only comprises companies that have been defined as belonging to the DAX Industry Classification's Technology industry (see section 5.3). It is created in the same way as the DAX, MDAX and SDAX selection list described above.

Exclusion from ranking

- 1) Companies that do not meet the necessary liquidity criteria for initial or continued eligibility are not ranked.
- 2) Companies for which the FSE has published a decision to revoke their admission under the Stock Exchange Rules are not ranked.
- 3) Companies for which an insolvency event as described in the DAX Equity Index Calculation Guide has occurred are not ranked.

STOXX reserves the right to exclude certain companies from being ranked in the selection list (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide). This is done to ensure that the composition of the indices reflects the market and/or economic reality that the indices aim to represent, and to avoid application of the rules leading to misrepresentations in unforeseeable circumstances. An example of such an exclusion might be a foreign company with a holding company headquartered in Germany but a business focus abroad (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide).

Component selection: The composition of the DAX, MDAX, SDAX and TecDAX indices is reviewed quarterly on the basis of the Fast Exit and Fast Entry rules, and semi-annually on the basis of the Regular Exit and Regular Entry rules.

The review on the basis of the Fast Exit and Fast Entry rules aims to account for significant changes in ranks. Such changes might occur, for example, if companies no longer meet the size requirements (free-float market capitalization); this might be the result of major issues (e.g.,

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substantial changes in the free float or a steep drop in the share price) and should be rapidly reflected in the index.

The “Overview of rules” table below shows when and how the rules detailed below apply.

Overview of rules

<u>DAX</u>	Candidate rank FF MCap¹²	Alternate candidate rank FF MCap	Mar.	June	Sept.	Dec.
Fast Exit	60	47	X	X	X	X
Fast Entry	33	47	X	X	X	X
Regular Exit	53	47	X		X	
Regular Entry	40	47	X		X	
<u>MDAX</u>	Candidate rank FF MCap	Alternate candidate rank FF MCap	Mar.	June	Sept.	Dec.
Fast Exit	110	97	X	X	X	X
Fast Entry	83	97	X	X	X	X
Regular Exit	103	97	X		X	
Regular Entry	90	97	X		X	
<u>SDAX</u>	Candidate rank FF MCap	Alternate candidate rank FF MCap	Mar.	June	Sept.	Dec.
Fast Exit	180	167	X	X	X	X
Fast Entry	153	167	X	X	X	X
Regular Exit	173	167	X		X	
Regular Entry	160	167	X		X	
<u>TecDAX</u>	Candidate rank FF MCap	Alternate candidate rank FF MCap	Mar.	June	Sept.	Dec.
Fast Exit	45	35	X	X	X	X
Fast Entry	25	35	X	X	X	X
Regular Exit	40	35	X		X	
Regular Entry	30	35	X		X	

Selection of the companies in the DAX, MDAX, SDAX and TecDAX indices is based on their free-float market capitalization. The selection list valid at the time in question is always used as the basis for applying the rules outlined below. The four rules are applied successively.

In the case of selection to the DAX, the company to be included or replaced must comply with both the EBITDA criterion outlined above and the free-float market capitalization candidate rank

¹² FF MCap: free-float market capitalization.

7. DAX BLUE-CHIP INDICES

as specified in the thresholds described in this section. If a company would be eligible for inclusion in the DAX based on its free-float market capitalization rank but does not meet the EBITDA criterion, the next-ranked company in the selection list that meets the EBITDA criterion will be considered for inclusion.

- 1) **Fast Exit:** A company in the selection index is replaced if its free-float market capitalization ranks lower than the candidate rank (see the “Overview of rules” table), e.g., if its free-float market capitalization ranks worse than 60th in the DAX rankings. It is replaced by the company with the highest free-float market capitalization that has the appropriate free-float market capitalization rank in the “Alternate candidate rank column” of the “Overview of rules” table for the selection index concerned (e.g., a company that ranks better than or equal to 47th in the DAX rankings). If no companies meet these conditions, the company with the highest market capitalization rank is selected as the successor.
- 2) **Fast Entry:** A company is included in the selection index if it ranks the same as or better than the candidate rank in terms of its free-float market capitalization, e.g., if it ranks better than or equal to 33rd for the free-float market capitalization criterion in the DAX rankings. The company with the lowest free-float market capitalization that is ranked lower than the alternate candidate rank is excluded (e.g., a company that ranks worse than 47th in the DAX rankings). If no companies in the selection index meet these criteria, the company with the lowest free-float market capitalization is removed from the selection index.
- 3) **Regular Exit:** A company in the selection index will be replaced if it ranks lower than the candidate rank in terms of its free-float market capitalization (e.g., if it ranks worse than 53rd for free-float market capitalization in the DAX rankings). It will be replaced by the company with the highest free-float market capitalization that has the appropriate rank for the selection index concerned in the “Alternate candidate rank” column of the “Overview of rules” table (e.g., a company that ranks better than or equal to 47th in the DAX rankings). However, no change will be made if a successor cannot be determined.
- 4) **Regular Entry:** A company will be included in the selection index if it ranks the same as or better than the candidate rank in terms of its free-float market capitalization (e.g., if it ranks better than or equal to 40th for free-float market capitalization in the DAX rankings). The company with the lowest free-float market capitalization that is ranked lower than the alternate candidate rank is excluded (e.g., the company that ranks worse than 47th in the DAX rankings). However, no change will be made if an alternate candidate cannot be determined.

STOXX may deviate from Rules 1–4 above in exceptional cases such as takeovers announced at short notice or significant changes in the free float (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide).

Decisions regarding changes to the composition of the selection index are published after 10 p.m. CET on the third trading day in March, June, September and December; publication is by way of a press release and online at [Index Updates – STOXX \(stoxx.com\)](https://www.stoxx.com/index-updates).

Shortfalls and surpluses in the selection indices

7. DAX BLUE-CHIP INDICES

A shortfall in the number of constituents in a selection index may occur during an index review if a company no longer meets the basic criteria (see section 5.4). An example would be where a company publicly announces that it is discontinuing its Prime Standard listing. In this case, remaining in the selection index is no longer justified, but the change would only take effect as from the next regular review. Since the company would be removed during the regular review before the four rules above were applied, there would be a shortfall in the selection index.

In such cases, the question of whether there is a relegation candidate from a superior index is examined. For example, a shortfall may occur in the SDAX due to an exit from the MDAX in which the company concerned is not admitted to the SDAX but instead no longer belongs to any index, while an SDAX company is simultaneously promoted to the MDAX. In this case, the exit candidate's eligibility for admission to the subordinated selection index is checked using the Regular Exit rule for the selection index concerned.

- a) If the relegation candidate does not contravene the Regular Exit rule, it is admitted directly to the selection index in which the shortfall exists.
- b) If the relegation candidate contravenes the Regular Exit rule, it is not admitted directly to the selection index with the shortfall.
- c) If there are no other relegation candidates but a shortfall exists in the selection index, this is treated as a Fast Exit and the Fast Exit rule for the selection index with the shortfall is applied. In this case, the company that caused the shortfall is considered to be the Fast Exit candidate. A company that could be admitted to the selection index with the shortfall is then found using the Fast Exit rule.

In addition, a surplus of constituents may arise in the selection index. Such a case may occur where a company that so far had not been included in a selection index because it failed to meet the basic criteria (see section 5.4) qualifies for inclusion in the index and replaces an existing constituent. An example of this would be where a company has only recently been listed (IPO). If two companies are swapped and the example above or a similar situation applies, a surplus may arise in the subordinate selection index. For example, if the recently listed company qualifies directly for the MDAX, the company it replaces could be included in the SDAX and cause a surplus there.

If a stock is demoted from a selection index to a subordinate selection index without a stock from the subordinate selection index being promoted at the same time, this may lead to a surplus of companies in the subordinate index. (For example, a recently listed company may be promoted to the MDAX following the regular review. In a first step, the composition of the MDAX is finalized. Once the review of the MDAX is complete, the eligibility of the relegation candidate for admission to the SDAX is reviewed using the Regular Exit rule. In this case, the exit candidate's eligibility for admission to the subordinate selection index is checked using the Regular Exit rule for the selection index concerned.

- a) If the relegation candidate does not contravene the Regular Exit rule, it is admitted directly to the subordinate selection index.
- b) If it contravenes the Regular Exit rule, it is not admitted directly to the subordinate index.
- c) If there are no other relegation candidates and there is still a surplus in the selection index, the surplus candidate is treated as a Fast Entry and the Fast Entry rule for the

7. DAX BLUE-CHIP INDICES

selection index concerned is applied. In this case, the company that caused the surplus is considered to be the Fast Entry candidate. A company that can be removed from the selection index with the surplus is then found using the Fast Entry rule.

The fixed number of constituents for the selection index concerned is restored before the four rules (Fast Exit, Fast Entry, Regular Exit and Regular Entry) are applied. The aim of this process is to ensure that the selection index concerned contains the designated number of companies before it is reviewed.

Review frequency: The composition of the DAX, MDAX, SDAX and TecDAX indices is reviewed on a quarterly basis.

7.1.3. ONGOING MAINTENANCE

Replacements: Deleted companies are replaced by the highest-ranked stock from the most recent selection list that is not included in the index.

Ad hoc exit: A company that is in breach of the basic criteria is removed from the index as described in section 5.4.2, usually with two trading days' notice.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

7.2. LATE/EARLY INDICES

7.2.1. OVERVIEW

Outside Xetra trading hours, STOXX calculates the L/E-DAX, L/E-MDAX, L/E-SDAX and L/E-TecDAX indices every 60 seconds using the prices traded on the FSE. These indices have the same composition as the parent indices concerned, i.e., the DAX, MDAX, SDAX and TecDAX. They give investors an indication of market developments outside the regular Xetra trading period. All L/E indices are calculated as performance indices only.

Universe: The same as for the parent index.

Weighting scheme: The same as for the parent index.

Capping: The same as for the parent index.

Base value and dates: 1,000 on December 30, 1987.

Dissemination calendar: Xetra calendar.

7.2.2. INDEX REVIEW

7. DAX BLUE-CHIP INDICES

Selection list: L/E indices do not have a separate selection list. The selection list for the parent index concerned is used.

Component selection: The same as for the parent index.

Review frequency: The same as for the parent index.

7.2.3. ONGOING MAINTENANCE

Replacements: The same as for the parent index.

Ad hoc exit: The same as for the parent index.

Ad hoc entry: The same as for the parent index.

Spin-offs: The same as for the parent index.

7.3. 10% CAPPED INDICES

7.3.1. OVERVIEW

With the DAX 10% Capped, MDAX 10% Capped, SDAX 10% Capped and TecDAX 10% Capped, STOXX calculates alternative versions of its main blue chip suite that are methodologically equal to their respective parent index, except that the capping limit is set at 10%.

Universe: The same as for the parent index.

Weighting scheme: The same as for the parent index.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates:

- » DAX 10% Capped: 1,000 on December 30, 1987
- » MDAX 10% Capped: 1,000 on December 30, 1987
- » SDAX 10% Capped: 1,000 on December 30, 1987
- » TecDAX 10% Capped: 1,000 on December 30, 1997

Dissemination calendar: Xetra calendar.

7.3.2. INDEX REVIEW

Selection list: The 10% Capped indices do not have a separate selection list. The selection list for the parent index concerned is used.

Component selection: The same as for the parent index.

Review frequency: The same as for the parent index.

7. DAX BLUE-CHIP INDICES

7.3.3. ONGOING MAINTENANCE

Replacements: The same as for the parent index.

Ad hoc exit: The same as for the parent index.

Ad hoc entry: The same as for the parent index.

Spin-offs: The same as for the parent index.

7.4. DAX UCITS CAPPED

7.4.1. OVERVIEW

The DAX UCITS Capped index mirrors the DAX index except that components are capped at UCITS bounds to allow for a UCITS compliant benchmarking.

Universe: The same as for the DAX.

Weighting scheme: The same as for the DAX.

Capping: A 4.5/8.5/35 capping method is used. The procedure is as follows:

Step A) All companies are capped at a maximum of 8.5% using the single cap limit method.

Step B) The components are then ranked from the largest to the smallest (if more than one component has a weight of 8.5% after Step A), the original weight is used to determine the order).

Step C) Maximum weights are determined for the largest five components resulting from Step B). The maximum weights allowed for the largest five components are 8.5%, 7.5%, 7%, 6.5% and 5.5%. All other components are capped at a maximum weight of 4.5%. For example, if the weight of the second-largest component exceeds 7.5%, it is capped at this figure.

Step D) Step C) is repeated until all components meet the restrictions contained in it.

Base value and dates: 1,000 on December 29, 2023.

Dissemination calendar: Xetra calendar.

7.4.2. INDEX REVIEW

Selection list: The DAX UCITS Capped does not have a separate selection list. The selection list for the DAX is used.

Component selection: The same as for the DAX.

7. DAX BLUE-CHIP INDICES

Review frequency: The same as for the DAX.

7.4.3. ONGOING MAINTENANCE

Replacements: The same as for the DAX.

Ad hoc exit: The same as for the DAX.

Ad hoc entry: The same as for the DAX.

Spin-offs: The same as for the DAX.

7.5. DAX EQUAL WEIGHT

7.5.1. OVERVIEW

The DAX Equal Weight comprises the same companies as are included in the DAX, with each company being assigned the same weight.

Universe: The same as for the DAX.

Weighting scheme: The index is equal weighted.

Base value and dates: 1,000 on September 21, 2018.

Dissemination calendar: Xetra calendar.

7.5.2. INDEX REVIEW

Selection list: The DAX Equal Weight does not have a separate selection list. The DAX selection list is used for this index.

Component selection: The same as for the DAX.

Review frequency: The same as for the DAX.

Weighting factors: All components are equal weighted on a quarterly basis. The weightings are published on the second Friday of each quarter, one week prior to the quarterly review implementation date, using Thursday's closing prices.

$$wf_{iT} = \frac{w_i}{p_{it}} * 100bn.$$

The weighting factor wf_{iT} is rounded to the next integer.

7.5.3. ONGOING MAINTENANCE

7. DAX BLUE-CHIP INDICES

Replacements: The same as for the DAX. Replacements are admitted to the index using the same weight as for the old component, based on the closing price four trading days prior to the replacement effective date.

Ad hoc exit: The same as for the DAX.

Ad hoc entry: The same as for the DAX.

Spin-offs: The same as for the DAX.

7.6. HDAX

7.6.1. OVERVIEW

The HDAX index portfolio comprises the 40 companies from the DAX, the 50 companies from the MDAX and the 30 companies from the TecDAX. Companies that are included in both the TecDAX and the DAX or MDAX are only included once. As a result, this index includes all large and medium-sized companies on the Regulated Market without any sector restrictions.

Universe: DAX, MDAX and TecDAX.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 500 on December 30, 1987.

Dissemination calendar: Xetra calendar.

7.6.2. INDEX REVIEW

Component selection: The HDAX index portfolio consists of all companies included in the DAX, MDAX and TecDAX.

Review frequency: The index is rebalanced on a quarterly basis.

7.6.3. ONGOING MAINTENANCE

Replacements: All changes affecting the DAX, MDAX and TecDAX also apply to the HDAX.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: All changes affecting the DAX, MDAX and TecDAX also apply to the HDAX.

7.7. HDAX UCITS CAPPED

7. DAX BLUE-CHIP INDICES

7.7.1. OVERVIEW

The HDAX UCITS Capped index mirrors the HDAX index except that components are capped at UCITS bounds to allow for a UCITS compliant benchmarking.

Universe: The same as for the HDAX.

Weighting scheme: The same as for the HDAX.

Capping: A 4.5/8.5/35 capping method is used. The procedure is as follows:

Step A) All companies are capped at a maximum of 8.5% using the single cap limit method.

Step B) The components are then ranked from the largest to the smallest (if more than one component has a weight of 8.5% after Step A), the original weight is used to determine the order).

Step C) Maximum weights are determined for the largest five components resulting from Step B). The maximum weights allowed for the largest five components are 8.5%, 7.5%, 7%, 6.5% and 5.5%. All other components are capped at a maximum weight of 4.5%. For example, if the weight of the second-largest component exceeds 7.5%, it is capped at this figure.

Step D) Step C) is repeated until all components meet the restrictions contained in it.

Base value and dates: 1,000 on December 29, 2023.

Dissemination calendar: Xetra calendar.

7.7.2. INDEX REVIEW

Selection list: The same as for the HDAX.

Component selection: The same as for the HDAX.

Review frequency: The same as for the HDAX.

7.7.3. ONGOING MAINTENANCE

Replacements: The same as for the HDAX.

Ad hoc exit: The same as for the HDAX.

Ad hoc entry: The same as for the HDAX.

Spin-offs: The same as for the HDAX.

7.8. DAX EX FINANCIALS

7. DAX BLUE-CHIP INDICES

7.8.1. OVERVIEW

The DAX ex Financials tracks those DAX constituents which do not belong to the Finance, Insurance and Real Estate (FIRE) supersector. As a result, it consists of a variable number of companies (normally less than 40).

Universe: DAX.

Weighting scheme: The same as for the DAX.

Capping: Since this is a derived index, its capping rules are the same as for its parent index, the DAX. In line with this, the DAX weighting cap factors are used unchanged for the DAX ex Financials.

Base value and dates: 1,000 on December 2, 2002.

Dissemination calendar: Xetra calendar.

7.8.2. INDEX REVIEW

Component selection: The DAX ex Financials corresponds to the DAX excluding all FIRE supersector components. Inclusion in the index depends on the DAX rules.

In a first step, the composition of the DAX is determined and then the companies in the FIRE supersector as defined by the DAX Industry Classification (see section 5.3) are excluded. In addition, companies belonging to Section K (Financial and insurance activities) of Deutsche Bundesbank's Banking Statistics Customer Classification (as provided by WM Gruppe's WM Datenservice) are excluded from ranking.

Review frequency: The composition of the index is reviewed on a quarterly basis.

7.8.3. ONGOING MAINTENANCE

Replacements: All changes in the composition of the DAX are applied to the DAX ex Financials as soon as they take effect in the DAX. Components that are deleted from the index due to a change in sector classification are not replaced.

Ad hoc exit: Where a change to a company's sector affiliation leads to it being assigned to Section K, the company concerned is removed from the index. STOXX announces this decision and then removes the company, usually two full trading days after the announcement is made (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide).

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

7. DAX BLUE-CHIP INDICES

7.9. DAX EX FINANCIALS 30

7.9.1. OVERVIEW

The DAX ex Financials 30 tracks those companies on the Regulated Market that do not belong to the FIRE supersector and that meet certain minimum quality requirements. It always consists of 30 companies. These are selected on the basis of their market capitalization.

Universe: All securities included in the Prime All Share and General All Share that are eligible for inclusion in the DAX selection list.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 1,000 on December 30, 2003.

Dissemination calendar: Xetra calendar.

7.9.2. INDEX REVIEW

Selection list: The DAX ex Financials 30 is based on the DAX selection list and represents blue chips on the Regulated Market that are not classified as belonging to the Finance, Insurance or Real Estate (FIRE) sector. In other words, it comprises the 30 largest companies listed on the Regulated Market that do not belong to the FIRE supersector.

The DAX ex Financials 30 selection list is used as the basis for the index review. It is created in the same way as the DAX selection list, except for the fact that the profitability criterion does not apply (the basic criteria listed in section 4.1.1.1 do apply, however). What is more, companies belonging to the FIRE supersector as defined in the DAX Industry Classification (see section 5.3) are excluded. In addition, companies belonging to Section K (Financial and insurance activities) of Deutsche Bundesbank's Banking Statistics Customer Classification (as provided by WM Gruppe's WM Datenservice) are excluded from ranking.

The selection list is updated and published on a monthly basis.

Component selection: Components are selected during the index review process in the same way as for the DAX, MDAX, SDAX and TecDAX (see section 7.1.2), applying the ranks shown in the table below.

<u>DAX ex Financials 30</u>	Candidate rank FF MCap	Alternate candidate rank FF MCap	Mar.	June	Sept.	Dec.
Fast Exit	45	35	X	X	X	X
Fast Entry	25	35	X	X	X	X
Regular Exit	40	35	X		X	
Regular Entry	30	35	X		X	

7. DAX BLUE-CHIP INDICES

Review frequency: The composition of the index is reviewed on a quarterly basis.

7.9.3. ONGOING MAINTENANCE

Replacements: Deleted stocks are replaced by the highest-ranked stock on the most recent selection list that is not included in the index.

Ad hoc exit: Where a change to a company's sector affiliation leads to it being assigned to Section K, the company concerned is removed from the index. STOXX announces this decision and then removes the company, usually two full trading days after the announcement is made (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide).

A company that is in breach of the basic criteria is removed from the index as described in section 5.4.2, usually with two trading days' notice.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

7.10. SCALE 30

7.10.1. OVERVIEW

The Scale 30 index selects the most liquid stocks in the FSE's Scale segment. It comprises the 30 most liquid stocks that are traded on Xetra, measured in terms of their 12-month order book volume. Stocks that are only traded on the Frankfurt Stock Exchange are not eligible. As with the methodology used for the DAX family, FSE trading values including Xetra are taken into account. The Scale 30 offers a liquid alternative for qualified investors who are able to evaluate the opportunities and risks involved in a market segment with low transparency standards.

Universe: Scale All Share.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 1,000 on March 17, 2017.

Dissemination calendar: Xetra calendar.

7.10.2. INDEX REVIEW

Selection list: The selection list is updated and published on a monthly basis on the fourth trading day of the month. It is created by ranking all securities included in the Scale All Share according to their liquidity, as measured by their 12-month order book volume on Xetra and the

7. DAX BLUE-CHIP INDICES

FSE. Companies that have been listed for fewer than 30 trading days on the Regulated Market or Scale segment, or that are not listed on Xetra, are not ranked.

The following applies to the order book volume:

The order book volume is the sum of the daily turnover figures for a share class over a 12-month period.

The following special provisions apply:

- » If the daily order book volumes for a company are not available for the whole 12-month period because it only started trading, or its initial listing on a segment governed by one of the transparency standards only took place, at a later date, the order book volumes for the first 20 trading days are ignored and the remaining data is extrapolated linearly over the 12 months. However, this procedure is only applicable to companies that have been traded for at least 30 days as of the reporting date, and when at least ten days' worth of order book volumes can be used for extrapolation.
- » If a company has changed its trading segment (Scale, General Standard or Prime Standard), the order book volume from the previous segment is used as of the selection list cutoff date following the segment change, provided that it has a total trading history of more than 30 days.

Component selection: The 30 highest-ranking companies are selected for the index.

Review frequency: The composition of the Scale 30 index is reviewed on a quarterly basis.

7.10.3. ONGOING MAINTENANCE

Replacements: Deleted components are replaced by the highest-ranked stock on the most recent selection list that is not included in the index.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

8. DAX ESG INDICES

8.1. DAX 50 ESG

8.1.1. OVERVIEW

The DAX 50 ESG tracks the performance of the 50 largest stocks listed on the Frankfurt Stock Exchange's Regulated Market with comparatively good performance based on their environmental, social and governance (ESG) scores. In addition, the stocks must have passed standardized ESG screens for the Global Compact principles and Sustainalytics' ESG Risk Ratings, as well as for involvement in controversial weapons, tobacco production, thermal coal, nuclear power, military contracting, small arms, and unconventional oil and gas.

Universe: HDAX.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 7% on a quarterly basis.

Base value and dates: 1,000 on September 24, 2012.

Dissemination calendar: Xetra calendar.

8.1.2. INDEX REVIEW

Selection list: The DAX 50 ESG index selection list is created for the eligible securities and published on the fourth trading day of each month by STOXX Ltd. ESG exclusion criteria are used to determine the eligible universe. Companies for which product involvement data is not available are not eligible for inclusion.

ESG exclusion criteria

The ESG criteria used to exclude companies from the eligible universe are as follows:

- » **Global Standards Screening:** STOXX excludes companies that do not comply with Sustainalytics' Global Standards Screening. Global Standards Screening identifies companies that violate or are at risk of violating commonly accepted international norms and standards as enshrined in the United Nations Global Compact (UNGC) principles, the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights (UNGPs) and the underlying conventions.
- » **Controversial weapons:** STOXX excludes companies that Sustainalytics identifies as being involved in controversial weapons. The following weapons are defined as controversial: anti-personnel mines, biological and chemical weapons, cluster munitions, depleted uranium, nuclear weapons and white phosphorus weapons.

The criteria for involvement are as follows:

- Internal production or sale of controversial weapons

8. DAX ESG INDICES

- The ultimate holding company owns >10% of the voting rights in an involved company
 - The involved company owns >10% of the voting rights in a company
 - » **Tobacco:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >0% of revenues from the manufacture of tobacco products
 - >5% of revenues from the supply of tobacco-related products/services
 - >5% of revenues from the distribution and/or retail sale of tobacco products
 - » **Thermal coal:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >5% of revenues from thermal coal extraction (including thermal coal mining and exploration)
 - >5% coal-based power generation capacity: coal-fired electricity, heat or steam generation/thermal coal electricity production (including utilities that own/operate coal-fired power plants)
 - » **Unconventional oil and gas:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >5% of revenues from oil and gas exploration and drilling in Arctic regions
 - >5% of revenues from oil sands extraction. This category measures the share of total average oil and gas production, measured in barrels of oil equivalent per day, attributable to oil sands.
 - >5% of revenues from shale energy exploration and/or production
 - » **Nuclear power:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >5% revenues from nuclear power production:
 - Utilities that own/operate nuclear power generators
 - Note: Sustainalytics uses this category to track the percentage of a company's generating capacity that is based on nuclear power
 - >5% of revenues from nuclear power supporting products/services, including:
 - Nuclear power plant design and construction
 - The design and manufacture of specialized parts for use in nuclear power plants, including steam generators, control rod drive mechanisms, reactor vessels, cooling systems, containment structures, fuel assemblies, and digital instrumentation and controls
 - Special services such as the transportation of nuclear power materials, and nuclear plant maintenance
 - Uranium mining and exploration, including companies that mine uranium and convert, enrich and fabricate nuclear fuel
 - >5% of revenues from nuclear power distribution, including:
 - The resale or distribution of electricity generated from nuclear power
 - This applies to distributors, resellers and utilities that distribute nuclear power as a part of their energy mix
 - Note: Sustainalytics uses this category to track the percentage of a company's energy mix that is generated from nuclear power
-

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- » **Small arms:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >0% of revenues from manufacturing and selling assault weapons to civilian customers
 - >0% of revenues from manufacturing and selling small arms (non-assault weapons) to civilian customers
 - >0% of revenues from manufacturing and selling key components of small arms
 - >5% of revenues from retailing and/or distributing assault weapons
 - >5% of revenues from retailing and/or distributing small arms (non-assault weapons)
 - >5% of revenues from manufacturing and selling small arms to military/law enforcement customers
- » **Military contracting:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >5% of revenues from manufacturing military weapons systems and/or integral, tailor-made components of these weapons
 - >5% of revenues from tailor-made products and/or services that support military weapons
- » **Controversy Ratings:** STOXX excludes companies that Sustainalytics identifies as having a Category 5 (“Severe”) Controversy Rating. Sustainalytics assesses companies’ involvement in incidents with negative environmental, social and governance (ESG) implications. Involvement in controversies is one key measure of ESG performance. A controversy is defined as an event or aggregation of events relating to an ESG topic. Events are assessed on the basis of their severity on a scale of 1 to 5 (1 — Low, 2 — Moderate, 3 — Significant, 4 — High, 5 — Severe). The highest event rating under a controversy indicator automatically becomes the Controversy Rating for the company concerned.
- » **ESG Risk Ratings:** STOXX excludes companies that Sustainalytics identifies as having a “Severe” ESG Risk Rating. The ESG Risk Rating evaluates the degree to which a company’s material ESG risk is unmanaged by assessing the company’s exposure to, and management of, the ESG issues that are considered most material for that company from a financial perspective. Sustainalytics assigns companies to one of five risk categories (Negligible, Low, Medium, High and Severe).

Selection list creation

Selection lists are created by capturing the parameters relevant for allocating ranks — the free-float market capitalization and ESG scores — and checking the basic criteria as of the record date (the last trading day of the month).

The following applies to the free-float market capitalization:

A volume-weighted average price over 20 trading days (“20-trading day VWAP”) is used to calculate the free-float market capitalization. This is calculated for each share class as the average of the daily volume-weighted average prices (VWAPs), which are based on Xetra

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prices, for the last 20 trading days. The 20-trading day adjusted VWAP on the last trading day of a month is used to generate the selection list.

The following applies to the ESG score:

- » A value of zero is assigned in those cases in which the ESG score for a company is missing.
- » Companies for which product involvement data is not available are not eligible for inclusion.
- » Companies with the same ESG scores have the same ranks.

Component selection: The composition of the DAX 50 ESG is reviewed quarterly based on the Fast Exit and Fast Entry rules, and semi-annually in March and September based on the Regular Exit and Regular Entry rules.

The following “Overview of rules” table¹³ shows when and how the rules below apply.

Overview of rules

DAX 50 ESG	Candidate rank FF MCap¹⁴/ESG	Alternate candidate rank FF MCap/ESG	Mar.	June	Sept.	Dec.
Fast Exit	75/75	60/60; 60/65; 60/70	X	X	X	X
Fast Entry	40/40	60/60	X	X	X	X
Regular Exit	70/70	60/60	X		X	
Regular Entry	50/50	60/60	X		X	

Companies are selected for the DAX 50 ESG on the basis of the quantitative criteria represented by the free-float market capitalization and the ESG score. The selection list for the DAX 50 ESG that is currently in force is always used as the basis for applying the rules outlined below. The four rules are applied successively.

- 1) **Fast Exit:** A company in the selection index is replaced if it ranks lower than the candidate rank for either its free-float market capitalization or its ESG score (see the “Overview of rules” table), e.g., if it ranks worse than 75th in the free-float market capitalization criterion or worse than 75th in the ESG criterion in the DAX 50 ESG rankings. It is replaced by the company with the highest free-float market capitalization that satisfies the rankings for both criteria in the alternate candidate rank stated in the “Overview of rules” table for the selection index concerned (e.g., if it has a ranking of better than or equal to 60 in the DAX 50 ESG rankings). If there are no companies that meet these conditions, the successor is determined by relaxing the ESG score criterion twice, by five ranks each time (e.g., to 60/65 and then 60/70 in the DAX 50 ESG rankings). If there is still no company that meets the criteria, the company with an ESG

¹³ The “Overview of rules” table provides a simplified overview of how to apply the selection criteria. The precise application of the rankings is described in Rules 1–4.

¹⁴ FF MCap stands for “free-float market capitalization.”

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rank of equal to or less than 60 which has the highest free-float market capitalization is determined to be the successor.

- 2) **Fast Entry:** A company is included in the selection index if it ranks the same as or better than the candidate rank for both its free-float market capitalization and its ESG score (e.g., if it ranks better than or equal to 40th for the free-float market capitalization criterion and better than or equal to 40th for the ESG criterion in the DAX 50 ESG rankings). The company with the lowest free-float market capitalization that is ranked worse than the alternate candidate rank for one of the criteria is excluded (e.g., if it ranks worse than 60th for one of the two criteria in the DAX 50 ESG rankings). If no companies in the selection index meet these criteria, the company with the lowest free-float market capitalization is removed from the selection index.
- 3) **Regular Exit:** A company in the selection index is replaced if it ranks worse than the candidate rank for either its free-float market capitalization or its ESG score (e.g., if it ranks worse than 70th for the free-float market capitalization criterion or worse than 70th for the ESG criterion in the DAX 50 ESG rankings). It is replaced by the company with the highest free-float market capitalization that has the appropriate ranks for the two criteria in the “Alternate candidate rankings” column in the “Overview of rules” table for the selection index concerned (e.g., better than or equal to 60th in the DAX 50 ESG rankings). However, no change will be made if a successor cannot be determined.
- 4) **Regular Entry:** A company is included in the selection index if it ranks the same as or better than the candidate rank for both its free-float market capitalization criterion and its ESG score (e.g., if it ranks better than or equal to 50th for the free-float market capitalization criterion and better than or equal to 50th for the ESG criterion in the DAX 50 ESG rankings). The company with the lowest free-float market capitalization that is ranked lower than the alternate candidate rank in either one of the two criteria will be excluded (e.g., if it ranks worse than 60th in either one of the two criteria in the DAX 50 ESG rankings). However, no change will be made if an alternate candidate cannot be determined.

Decisions on changes to the composition of the DAX 50 ESG index are published after 10 p.m. CET on the fourth trading day in March, June, September and December at <https://www.stoxx.com>.

Shortfalls and surpluses in the DAX 50 ESG

A shortfall in the number of constituents in the DAX 50 ESG may occur during an index review if a company is no longer part of the HDAX. An example would be where a company is to be deleted from the HDAX during the review. In this case, remaining in the selection index is no longer justified, but the change would only take effect as from the next regular review. Since the company would be removed during the regular review before the four rules above were applied, there would be a shortfall in the selection index.

In this case, a review using the Regular Exit rule is performed for the company that caused the shortfall, and the following process is applied to assess the eligibility of the alternate candidate for inclusion in the index.

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- a) If the company concerned does not contravene the Regular Exit rule, the alternate candidate is admitted directly to the selection index.
- b) If the company concerned does contravene the Regular Exit rule, the alternate candidate is not admitted directly to the selection index.
- c) If there are no other alternate candidates but a shortfall exists in the selection index, this is treated as a Fast Exit. Consequently, the Fast Exit rule for the selection index with the shortfall is applied. In this case, the company that caused the shortfall is deemed to be the Fast Exit candidate. A company that could be admitted to the selection index with the shortfall is then found using the Fast Exit rule.

The fixed number of constituents for the selection index concerned is restored before the four rules (Fast Exit, Fast Entry, Regular Exit and Regular Entry) are applied. The aim of this process is to ensure that the selection index concerned contains the designated number of companies before it is reviewed.

It is not possible to have a surplus of companies in the DAX 50 ESG index.

Review frequency: The composition of the DAX 50 ESG is reviewed on a quarterly basis.

8.1.3. ONGOING MAINTENANCE

Replacements: Deleted companies are replaced using the Fast Exit rule, based on the most recent DAX 50 ESG selection list.

Ad hoc exit: If the ESG Controversy Rating for a company that is an index constituent deteriorates to Category 5, the constituent is deleted from the DAX 50 ESG. This takes place two dissemination days after the announcement, i.e., at the opening of the third dissemination day.

A company that is in breach of the basic criteria is removed from the index as described in section 5.4.2, usually with two trading days' notice.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

8.2. DAX ESG TARGET

8.2.1. OVERVIEW

The DAX ESG Target aims to mirror the DAX while also maximizing its ESG score and reducing its carbon intensity by at least 30%. The predicted tracking error is constrained against the parent index. The index includes ESG exclusion filters for Global Standards screening, ESG controversies, controversial weapons, thermal coal, tobacco, nuclear power, military contracting, small arms and oil sands.

Universe: DAX and HDAX.

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Weighting scheme: The index is price-weighted, with the weighting factors being derived from an optimization process that maximizes the ESG score for the index portfolio.

Base value and dates: 1,000 on September 24, 2012.

Dissemination calendar: Xetra calendar.

8.2.2. INDEX REVIEW

Component selection: The composition of the DAX ESG Target is derived from the DAX and the HDAX as follows:

Step 1:

The following exclusions are applied to the DAX and the HDAX:

- » **Global Standards Screening (GSS):** STOXX excludes companies that are not compliant with the GSS. The GSS identifies companies that violate or are at risk of violating commonly accepted international norms and standards as enshrined in the United Nations Global Compact (UNGC) principles, the Guidelines for Multinational Enterprises published by the Organisation for Economic Co-operation and Development (OECD), the UN Guiding Principles on Business and Human Rights (UNGPs) and the relevant underlying conventions.
- » **Controversy Ratings:** STOXX excludes companies that Sustainalytics identifies as having a Category 5 ("Severe") Controversy Rating. Sustainalytics assesses companies' involvement in incidents with negative environmental, social and governance (ESG) implications. Involvement in controversies is one key measure of ESG performance. A controversy is defined as an event or aggregation of events relating to an ESG topic. Events are assessed on the basis of their severity on a scale of 1 to 5 (1 — Low, 2 — Moderate, 3 — Significant, 4 — High, 5 — Severe). The highest event rating under a controversy indicator automatically becomes the Controversy Rating for the company concerned.
- » **Controversial weapons:** Companies must not be involved in controversial weapons activities, as identified by Sustainalytics. The following weapons are defined as controversial: anti-personnel mines, biological and chemical weapons, cluster munitions, depleted uranium, nuclear weapons and white phosphorus weapons. The criteria for involvement are as follows:
 - Internal production or sale of controversial weapons
 - The ultimate holding company owns >10% of the voting rights in an involved company
 - The involved company owns >10% of the voting rights in a company
- » **Product involvement:** Companies involved in products from the following areas are excluded:
 - **Tobacco:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:

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- >0% of revenues from the manufacture of tobacco products
 - >5% of revenues from the supply of tobacco-related products/services
 - >5% of revenues from the distribution and/or retail sale of tobacco products
 - **Thermal coal:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >5% of revenues from thermal coal extraction (including thermal coal mining and exploration)
 - >5% power generation capacity: coal-fired electricity, heat or steam generation/thermal coal electricity production (including utilities that own/operate coal-fired power plants)
 - **Military contracting:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >5% of revenues from manufacturing military weapons systems and/or integral, tailor-made components of these weapons
 - >5% of revenues from tailor-made products and/or services that support military weapons
 - **Small arms:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >0% of revenues from manufacturing and selling assault weapons to civilian customers
 - >0% of revenues from manufacturing and selling small arms (non-assault weapons) to civilian customers
 - >0% of revenues from manufacturing and selling key components of small arms
 - >5% of revenues from manufacturing and selling small arms to military/law enforcement customers
 - >5% of revenues from retailing and/or distributing assault weapons
 - >5% of revenues from retailing and/or distributing small arms (non-assault weapons)
 - **Nuclear power:** STOXX excludes companies that Sustainalytics identifies as meeting one or more of the following criteria:
 - >5% of revenues from nuclear power production
Note: Sustainalytics uses this category to track the percentage of a company's generating capacity that is based on nuclear power
 - >5% of revenues from nuclear power supporting products/services, including:
 - Nuclear power plant design and construction
 - The design and manufacture of specialized parts for use in nuclear power plants, including steam generators, control rod drive mechanisms, reactor vessels, cooling systems, containment structures, fuel assemblies, and digital instrumentation and controls
 - Special services such as the transport of nuclear power materials, and nuclear plant maintenance
-

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- Uranium mining and exploration, including companies that mine uranium and convert, enrich and fabricate nuclear fuel
- >5% of revenues from nuclear power distribution, including:
 - The resale or distribution of electricity generated from nuclear power
 - This applies to distributors, resellers and utilities that distribute nuclear power as a part of their energy mix

Note: Sustainalytics uses this category to track the percentage of a company's energy mix that is generated from nuclear power

- **Oil sands:** STOXX excludes companies that Sustainalytics identifies as deriving:
 - >5% of revenues from oil sands extraction. This category measures oil sands' share of total average oil and gas production in barrels of oil equivalent per day.

Step 2:

DAX companies that have been excluded as described in Step 1 will be replaced in the following manner:

The companies still in the HDAX following screening as described in Step 1 are then ranked from high to low in terms of their free-float market capitalization (as reported in the most recent DAX selection indices selection list). In addition, the ESG score for each constituent is displayed.

Starting with the largest companies (measured in terms of their free-float market capitalization), companies are then included in the index if they have the same or a better ESG ranking than the DAX Regular Exit candidate rank for free-float market capitalization (see section 7.1.2). The ESG ranking is calculated using the composition of the HDAX after all exclusions have been omitted. This process is repeated until the number of DAX ESG Target constituents matches the number of DAX constituents.

Weighting factors calculation: Weightings are derived using an optimization process that aims to maximize the portfolio's ESG score (as measured by Sustainalytics' ESG scores). The following constraints are applied:

- » Asset bounds: For the eligible assets, let
 - w_i = the asset weight in the optimized portfolio
 - b_i = the asset weight in the HDAX
 - b_{min} = the minimum asset weight in the HDAX

In this case, the bounds are:

$$\text{MAX}\left(b_{min}, \frac{b}{2}\right) < w < \text{MIN}(10 * b, b + 2\%, 10\%)$$

- » Tracking error: Predicted tracking error <1.5%
 - » Hard turnover limit: One-way, quarterly turnover <10%
 - » Soft turnover limit: One-way, quarterly turnover <5%
-

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- » Supersector active exposures: Less than 5% active exposure (+/-5%) to the parent benchmark. Companies are assigned to supersectors using the sector classification described in section 5.3. This constraint is not applied to the Utilities supersector.
- » Total carbon intensity reduction: A reduction of at least 30% relative to the parent.
Carbon intensity = (Scope 1 + Scope 2 GHG emissions)/revenue (EUR million)

Where infeasibilities arise, the tracking error, soft turnover and supersector active exposures constraints can all be potentially violated if necessary to find a solution that minimizes the aggregate violations.

The portfolio is constructed using Axioma's portfolio optimization software. Risk predictions are made using the Axioma Europe Medium Horizon Equity Fundamental Factor Risk Model.

The weighting factors w_{it} are derived using the weights determined during optimization. For each constituent, the weight w_i is multiplied by the scale factor 100bn and divided by the current price p_{it} .

The weighting factors determined take effect for index calculation on the review effective date.

$$wf_{it} = \frac{w_{it}}{p_{it}} * 100bn$$

The scale factor 100bn is defined as the sum of the product of the prices p_{it} and the weighting factors w_{it} . The weighting factor w_{it} is rounded to the next integer.

Review frequency: The index is reviewed on a quarterly basis (on the third Friday of the last month in a quarter). In contrast to the standard review process, the prices used to determine the constituent weights are those recorded three days before the quarterly UDA date (t-8).

8.2.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

8.3. DAX ESG SCREENED AND MDAX ESG SCREENED

8.3.1. OVERVIEW

The DAX ESG Screened and MDAX ESG Screened indices aim to mirror the performance of their parent indices (the DAX and the MDAX respectively) while using ESG exclusion filters to remove companies that fail to meet norms-based screening, controversial weapons screening, minimum ESG ratings and a number of product involvement screenings.

8. DAX ESG INDICES

Universe: DAX (DAX ESG Screened) and MDAX (MDAX ESG Screened).

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 1,000 on December 16, 2016.

Dissemination calendar: Xetra calendar.

8.3.2. INDEX REVIEW

Component selection: The composition of the ESG Screened indices is derived from that of their parent indices (the DAX and the MDAX respectively). Starting with the parent index, companies are excluded on the basis of the set of criteria shown below. Companies for which data is not available are considered to be ineligible and are excluded. This exclusion means that the ESG Screened indices can have fewer constituents than their parents. Companies that are excluded are not replaced in the indices.

- » **ESG ratings:** Companies with ISS-ESG ESG ratings of D- or below are excluded.
- » **Norms-based screening:** Companies are assessed for their adherence to international human rights, labor, environmental protection and anti-corruption standards as set out in the UN Global Compact and the OECD Guidelines. Companies that have been flagged as “Red” are excluded. ISS-ESG flags companies as “Red” if they fail to respect established standards and the issue concerned is not addressed.
- » **Controversial weapons:** Companies must not be involved in controversial weapons activities, as identified by ISS-ESG. The following weapons are defined as controversial: anti-personnel mines, biological weapons, chemical weapons, cluster munitions, depleted uranium programs and nuclear weapons (including non-NPT countries, i.e., countries not belonging to the Nuclear Nonproliferation Treaty). ISS-ESG’s controversial weapons research is designed to identify all companies in a corporate structure that have control over the relevant business activities, i.e., all immediate parent companies up to and including the ultimate parent. Companies that have been flagged as “Red” are excluded.
- » **Product involvement:** Companies involved in products from the following areas are excluded:
 - **Tobacco:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >0% of revenues from involvement in the production of tobacco products
 - >5% of revenues from the wholesale or retail distribution of tobacco products

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- **Thermal coal mining:** STOXX excludes companies that ISS-ESG identifies as having:
 - >5% of revenues from thermal coal mining, including any exposure to production or services. The values used for the maximum percentage of revenues are based on the best available data. This may include reported revenues, reported revenue percentages or revenue estimates based on available information.
- **Thermal coal power generation:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from thermal coal power generation. The values used for the maximum percentage of revenues are based on the best available data. This may include reported revenues, reported revenue percentages or revenue estimates based on available information.
- **Oil sands:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from the extraction and processing of oil sands in the most recent fiscal year
- **Nuclear power service:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from the provision of services to the nuclear power industry, including the supply of key components, technical support and maintenance, and nuclear waste management
- **Nuclear power production:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from the generation of electric power from nuclear fission
- **Nuclear power uranium:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from involvement in uranium exploration, extraction and processing
- **Civilian firearms:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >0% of revenues from involvement in the production of civilian firearms and/or the provision of related services
 - >5% of revenues from involvement in the distribution of civilian firearms
- **Military equipment:** STOXX excludes companies that ISS-ESG identifies as having:
 - >5% of revenues from involvement in the production of military equipment and/or the provision of related services

The cutoff date for ISS-ESG data is the last trading day of the month prior to the review month.

Review frequency: The index is reviewed on a quarterly basis.

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8.3.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

8.4. DAX 50 ESG+

8.4.1. OVERVIEW

The DAX 50 ESG+ aims to mirror the performance of the 50 companies with the highest ESG scores out of the 75 largest companies in the HDAX by free-float market capitalization, following the use of ESG exclusion filters to remove companies that fail to meet norms-based screening, controversial weapons screening, minimum ESG ratings and a number of business activity screenings.

Universe: HDAX.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 7% on a quarterly basis.

Base value and dates: 1,000 on March 20, 2017.

Dissemination calendar: Xetra calendar.

8.4.2. INDEX REVIEW

Component selection: The composition of the DAX 50 ESG+ is derived from its parent index, the HDAX, as follows:

The 75 largest companies in the HDAX — the parent index — measured in terms of their free-float market capitalization are selected, and the set of exclusion criteria described below are applied. Companies for which data is not available are excluded. The cutoff date for ISS-ESG data is the last trading day of the month prior to the review month.

- » **ESG ratings:** Companies with ISS-ESG ESG ratings of D- or below are excluded.
- » **Norms-based screening:** Companies are assessed for their adherence to international human rights, labor, environmental protection and anti-corruption standards as set out in the UN Global Compact and the OECD Guidelines. Companies that have been flagged as “Red” are excluded. ISS-ESG flags companies as “Red” if they fail to respect established standards and the issue concerned is not addressed.

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- » **Controversial weapons:** Companies must not be involved in controversial weapons activities, as identified by Sustainalytics. The following weapons are defined as controversial: anti-personnel mines, biological weapons, chemical weapons, cluster munitions, depleted uranium programs and nuclear weapons (including non-NPT countries, i.e., countries not belonging to the Nuclear Nonproliferation Treaty). ISS-ESG's controversial weapons research is designed to identify all companies in a corporate structure that have control over the relevant business activities, i.e., all immediate parent companies up to and including the ultimate parent. Companies that have been flagged as "Red" are excluded.
 - » **Product involvement:** Companies involved in products from the following areas are excluded:
 - **Tobacco:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >0% of revenues from involvement in the production of tobacco products
 - >5% of revenues from the wholesale or retail distribution of tobacco products
 - >5% of revenues from services related to tobacco products
 - **Thermal coal mining:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from thermal coal mining, including any exposure to production or services. The values used for the maximum percentage of revenues are based on the best available data. This may include reported revenues, reported revenue percentages or revenue estimates based on available information.
 - **Thermal coal mining expansion:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - Any involvement in thermal coal mine development, operation or planning
 - **Thermal coal power generation:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from coal-fired electric power generation. The values used for the maximum percentage of revenues are based on the best available data. This may include reported revenues, reported revenue percentages or revenue estimates based on available information.
 - **Thermal coal power generation expansion:** STOXX excludes companies that ISS-ESG identifies as having:
 - Any involvement in coal power expansion or plans to expand
 - **Oil sands:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from the extraction and processing of oil sands in the most recent fiscal year
-

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- **Arctic oil and gas exploration:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from Arctic oil and gas extraction (“Arctic drilling”) in the most recent fiscal year
- **Hydraulic fracturing:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from hydraulic fracturing in the most recent fiscal year
- **Nuclear power service:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from the provision of services to the nuclear power industry, including the supply of key components, technical support and maintenance, and nuclear waste management
- **Nuclear power production:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from the generation of electric power from nuclear fission
- **Nuclear power uranium:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from involvement in uranium exploration, extraction and processing
- **Civilian firearms:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >0% of revenues from involvement in the production of civilian firearms and/or the provision of related services
 - >5% of revenues from involvement in the distribution of civilian firearms
- **Military equipment:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >5% of revenues from involvement in the production of military equipment and/or the provision of related services
 - >10% of revenues from involvement in military equipment and services

The top 50 companies from the remaining universe, measured in terms of their ESG score as sourced from the ISS-ESG ESG Performance Score, are then selected for inclusion in the index. Where fewer than 50 companies are eligible for inclusion, no additional companies are added and the index will consist of this smaller number. Where the ESG Score for two companies is identical, the larger company, measured in terms of its free-float market capitalization, is selected.

Review frequency: The index is reviewed on a quarterly basis.

8.4.3. ONGOING MAINTENANCE

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Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

8.5. MDAX ESG+

8.5.1. OVERVIEW

The MDAX ESG+ aims to mirror the performance of the MDAX while using ESG exclusion filters to remove companies that fail to meet norms-based screening, controversial weapons screening, minimum ESG ratings and a number of business activity screenings. If fewer than 20% of the companies in the parent index are excluded, an additional filter based on the ESG score is applied to exclude those companies with the lowest ESG scores.

Universe: MDAX.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 1,000 on March 17, 2017.

Dissemination calendar: Xetra calendar.

8.5.2. INDEX REVIEW

Component selection: The composition of the MDAX ESG+ is derived from its parent index, the MDAX. Companies that are excluded are not replaced.

Starting with the parent index, the exclusions shown below are applied. Companies for which data is not available are excluded. The cutoff date for ISS-ESG data is the last trading day of the month prior to the review month.

- » **ESG ratings:** Companies with ISS-ESG ESG ratings of D- or below are excluded.
- » **Norms-based screening:** Companies are assessed for their adherence to international human rights, labor, environmental protection and anti-corruption standards as set out in the UN Global Compact and the OECD Guidelines. Companies that have been flagged as “Red” are excluded. ISS-ESG flags companies as “Red” if they fail to respect established standards and the issue concerned is not addressed.
- » **Controversial weapons:** Companies must not be involved in controversial weapons activities, as identified by Sustainalytics. The following weapons are defined as controversial: anti-personnel mines, biological weapons, chemical weapons, cluster munitions, depleted uranium programs and nuclear weapons (including non-NPT

8. DAX ESG INDICES

countries, i.e., countries not belonging to the Nuclear Nonproliferation Treaty). ISS-ESG's controversial weapons research is designed to identify all companies in a corporate structure that have control over the relevant business activities, i.e., all immediate parent companies up to and including the ultimate parent. Companies that have been flagged as "Red" are excluded.

- » **Product involvement:** Companies involved in products from the following areas are excluded:
- **Tobacco:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >0% of revenues from involvement in the production of tobacco products
 - >5% of revenues from the wholesale or retail distribution of tobacco products
 - >5% of revenues from services related to tobacco products
 - **Thermal coal mining:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from thermal coal mining, including any exposure to production or services. The values used for the maximum percentage of revenues are based on the best available data. This may include reported revenues, reported revenue percentages or revenue estimates based on available information.
 - **Thermal coal mining expansion:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - Any involvement in thermal coal mine development, operation or planning.
 - **Thermal coal power generation:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from coal-fired electric power generation. The values used for the maximum percentage of revenues are based on the best available data. This may include reported revenues, reported revenue percentages or revenue estimates based on available information.
 - **Thermal coal power generation expansion:** STOXX excludes companies that ISS-ESG identifies as having:
 - Any involvement in coal power expansion or plans to expand
 - **Oil sands:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from the extraction and processing of oil sands in the most recent fiscal year
 - **Arctic oil and gas exploration:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from Arctic oil and gas extraction ("Arctic drilling") in the most recent fiscal year
-

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- **Hydraulic fracturing:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >5% of revenues from hydraulic fracturing in the most recent fiscal year
- **Nuclear power service:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from the provision of services to the nuclear power industry, including the supply of key components, technical support and maintenance, and nuclear waste management
- **Nuclear power production:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from the generation of electric power from nuclear fission
- **Nuclear power uranium:** STOXX excludes companies that ISS-ESG identifies as deriving:
 - >1% of revenues from involvement in uranium exploration, extraction and processing
- **Civilian firearms:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >0% of revenues from involvement in the production of civilian firearms and/or the provision of related services
 - >5% of revenues from involvement in the distribution of civilian firearms
- **Military equipment:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >5% of revenues from involvement in the production of military equipment and/or the provision of related services
 - >10% of revenues from involvement in military equipment and services

If fewer than 20% of the companies in the parent index are excluded when the screens above are applied, the companies with the worst ESG performance as defined by ISS-ESG are excluded until the target number of constituents is reached.

Review frequency: The index is reviewed on a quarterly basis.

8.5.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

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8.6. DAX 30 ESG

8.6.1. OVERVIEW

The objective of the DAX 30 ESG is to reflect the performance of the 30 highest ESG ranking companies selected from the 60 largest companies in terms of free-float market capitalization of the HDAX after using ESG exclusion filters to remove companies that fail to meet norms-based screening, controversial weapons screening, and a series of product involvement screenings.

Universe: HDAX.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 1,000 on March 20, 2017.

Dissemination calendar: Xetra calendar.

8.6.2. INDEX REVIEW

Component selection: The DAX 30 ESG composition is derived from its parent index, the HDAX index, as follows:

From the parent index, companies are filtered for exclusion based on the following set of criteria. Companies with missing data are excluded. The cutoff date for all underlying data is the last trading day of the month prior to the review month.

- » **Norms-based screening:** Companies are assessed for their adherence to international human rights, labor, environmental protection and anti-corruption standards as set out in the UN Global Compact and the OECD Guidelines. Companies that have been flagged as “Red” are excluded. ISS-ESG flags companies as “Red” if they fail to respect established standards and the issue concerned is not addressed.
- » **Controversial weapons:** Companies must not be involved in controversial weapons activities, as identified by ISS-ESG. The following weapons are defined as controversial: anti-personnel mines, biological weapons, chemical weapons, cluster munitions, depleted uranium programs and nuclear weapons (including non-NPT countries, i.e., countries not belonging to the Nuclear Nonproliferation Treaty). ISS-ESG’s controversial weapons research is designed to identify all companies in a corporate structure that have control over the relevant business activities, i.e., all immediate parent companies up to and including the ultimate parent. Companies that have been flagged as “Red” are excluded.
- » **Product involvement:** Companies involved in products from the following areas are excluded:
 - **Tobacco:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:

8. DAX ESG INDICES

- >0% revenues from involvement in the production of tobacco products.
- >5% revenues from services related to tobacco products.
- >5% revenues from the wholesale or retail distribution of tobacco products.
- **Coal:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >5% revenues from extraction/mining of coal for the most recent fiscal year period.
 - >5% revenues from generation of electric power using coal. The maximum percentage of revenues values are based on the best available data, which may include reported revenues, reported percentage of revenues, or estimated revenues based on available information.
- **Unconventional Oil & Gas:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >5% revenues from the extraction and processing of oil sands for the most recent fiscal year period.
 - >5% revenues from the hydraulic fracturing for the most recent fiscal year period.
 - >5% revenues from oil and gas extraction through arctic drilling for the most recent fiscal year period.
- **Military Equipment:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >10% revenues from involvement in military equipment and services.
- **Civilian Firearms:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >0% revenues from involvement in the production of civilian firearms and/or the provision of related services.
 - >5% revenues from involvement in the distribution of civilian firearms.
- **Nuclear Power:** STOXX excludes companies that ISS-ESG identifies as meeting one or more of the following criteria:
 - >5% revenues derived from the provision of services to the nuclear power industry, including the supply of key components, technical support, maintenance, and the management of nuclear waste.
 - >5% revenues from core activities in the nuclear fuel cycle to produce energy, including uranium mining, processing and enrichment, fuel production, and the operation of power reactors.

From the remaining companies, the top 60 companies in terms of free-float market capitalization (as reported in the latest DAX selection list) are selected. From these, the top 30 companies in terms of ESG score, sourced from ISS-ESG ESG Performance Score, are then selected into the index. In case the ESG Score is identical for two companies, the larger company in terms of free-float market capitalization is selected.

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In case not enough eligible securities than required by the index methodology are found, no additional company is added.

Review frequency: The index is reviewed on a quarterly basis.

8.6.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

9. DAX DIVIDEND INDICES

9.1. DIVDAX AND DIVMSDAX

9.1.1. OVERVIEW

The DivDAX and DivMSDAX are constructed using the dividend yield as the selection criterion. The DivDAX comprises the 15 companies with the highest dividend yields in the DAX, the German blue-chip index, while the DivMSDAX is based on companies included in the MDAX and SDAX.

Universe: DivDAX: DAX; DivMSDAX: MDAX and SDAX.

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 100 on September 17, 1999.

Dissemination calendar: Xetra calendar.

9.1.2. INDEX REVIEW

Selection list: The selection list is updated and published once a year on the fourth trading day of September. The cutoff date is the last trading day of the month for which the selection list is created.

Component selection: The DivDAX comprises the 15 companies with the highest dividend yields in the DAX, while the DivMSDAX consists of the 15 companies in the combined MDAX and SDAX universe with the highest dividend yields. In addition, shares must demonstrate an average daily traded volume of EUR 250,000 for the last three months. Historical dividend yields are calculated by dividing the distributed dividends by the closing price for the share concerned on the day preceding the ex-date.

Review frequency: The indices are reviewed once a year in September. Rebalancing takes place on a quarterly basis.

9.1.3. ONGOING MAINTENANCE

Replacements: A deleted component is replaced by the next highest-ranked non-component company in the most recent selection list that has not announced the cancellation of upcoming dividend payments. If a replacement cannot be determined, the component is removed without being replaced.

Ad hoc exit: If an index member publicly announces that it will not pay a dividend at the upcoming dividend date, it is removed from the index at the next rebalancing date. If no replacement can be determined, no action is taken. If no rebalancing date occurs between the announcement and the payout date that was previously planned, the change will be made within two full trading days' of the announcement.

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Companies that are excluded from the parent index are also deleted from the DivDAX/DivMSDAX using the same notice period (usually two trading days); however, this is only done if the deletion was triggered by the company becoming insolvent or as a result of a breach of one or more of the following basic criteria (these are described in more detail in section 5.4):

- » Minimum free float
- » Listing on the FSE's Regulated Market
- » Continuous trading

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

9.2. DAXPLUS MAXIMUM DIVIDEND (APPLICABLE AS OF MAY 13, 2024)

9.2.1. OVERVIEW

DAXplus Maximum Dividend is a strategy index that aims to maximize the index portfolio's dividend yield. The index comprises the 25 shares in the HDAX index that have the highest expected dividend yield.

Universe: HDAX.

Weighting scheme: The index is price-weighted, with the weighting factors being derived from the companies' expected dividend yield. The index constituents are weighted proportionally to their expected dividend yield: the higher this is, the higher their weight in the index is.

Capping: The maximum weight for a company is subject to a double capping mechanism. In a first step, the maximum weight is capped at 10%. This procedure prevents individual issues from dominating the index. After this, a liquidity test is performed based on a reference portfolio with a notional amount of EUR 1bn. Components pass this test if the amount to be allocated does not exceed 2.5 times the company's average daily trading volume (ADTV). If the component breaches this threshold, a weight cap of 2.5 times the company's three-month ADTV is applied.

Base value and dates: 100 on May 21, 1999.

Dissemination calendar: Xetra calendar.

9.2.2. INDEX REVIEW

Selection list: The selection list is updated and published on the fourth trading day in May and November.

Component selection: The index consists of the 25 companies in the HDAX that have the highest expected dividend yield and that will pay a dividend in the forthcoming adjustment

9. DAX DIVIDEND INDICES

period. The expected dividend yield is determined using the announced and estimated dividend amounts, and the closing price of the stock at the time of selection.

Those HDAX companies that will pay a dividend within the upcoming six months are eligible for inclusion. In addition, companies must rank among the top 80% in the HDAX in terms of their free-float market capitalization, and among the top 80% for liquidity, measured in terms of their three-month ADTVs. This ensures that the index is highly liquid. Companies must also rank among the top 80% in the HDAX universe, measured in terms of price momentum, excluding companies with a past price history of less than 12 months. Companies with a past price history stretching back less than 12 months (e.g., IPOs and spin-offs) are not eligible for inclusion.

The formula for calculating the price momentum of share i is set out below:

$$PriceMomentum_i = \prod_{t=t_1}^{t=t_n} \left(\frac{P_{it}}{O_{it}} \right) - 1$$

where:

P_{it} = closing price of share i on trading day t

O_{it} = gross adjusted opening price of share i on trading day t

t_1 = the first trading day of the 11th month preceding the month in which the cutoff date falls

t_n = the last trading day of the month preceding the month in which the cutoff date falls

If fewer than 25 companies meet the criteria above, those companies from the current index components are added that (a) have the highest dividend yield from the previous period, and (b) meet the above-mentioned criteria for the largest and most liquid companies and the highest price momentum. Where fewer than 25 companies are selected, companies are added from the universe that (a) have the highest dividend yield from the previous period, and (b) meet the above-mentioned criteria for the largest and most liquid companies and the highest price momentum. By default, the companies added will inherit the smallest dividend yield value available within the composition for the current period.

Weights calculation: The weighting factors are derived from the expected dividend yields by dividing the dividend yield DY_i by the current price p_i and multiplying it by the normalization factor of 1bn. The expected dividend yield is calculated on the basis of the announced or expected dividends and the closing price at the time of ranking.

$$DY_i = \frac{\sum_t d_{i,t}}{p_i}$$

whereby:

$d_{i,t}$ = the announced or expected dividend payout for share i at time t

p_i = the closing price of share i on the last trading day in April and October

t = the time within the upcoming six-month index calculation period

The index weights and weighting factors are calculated as follows:

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$$w_i = \frac{DY_i}{\sum DY_i}$$

$$wf_{i,T} = \frac{w_i}{p_{i,T}} \cdot 100 \text{ bn}$$

whereby:

w_i	=	the weight of share i
DY_i	=	the expected dividend yield of share i
$p_{i,T}$	=	the closing price of share i at the time of rebalancing

The weighting factor $wf_{i,T}$ is rounded to the next integer.

Review frequency: The index is reviewed twice a year in May and November on the basis of data from the cutoff dates of the end of April and end of October. The review results are implemented on the second Friday in May and November and take effect as of the start of trading on the following trading day.

9.2.3. ONGOING MAINTENANCE

Replacements: If a component is deleted from the DAXplus Maximum Dividend, it is replaced by the best candidate on the most recent selection list that has not canceled its dividend distribution, that will pay a dividend in the period up to the next regular rebalancing and that meets the additional index criteria.

If a component is removed from the HDAX index universe and no replacement candidate exists, the component is also removed from the DAXplus Maximum Dividend and is not replaced. If a component cancels its dividend but no replacement candidate exists, the component remains in the index.

Ad hoc exit: If a member of the DAXplus Maximum Dividend publicly announces that it will not pay a dividend on the next scheduled dividend date, it may be removed from the index effective as of the trading day following the second Friday of the month following the effective date of the dividend cancellation, provided that a suitable replacement candidate exists.

If a company is deleted from the HDAX, it is also deleted from the DAXplus Maximum Dividend on the trading day following the second Friday of the month following the effective date of the company's removal from HDAX, unless the deletion is due to the company becoming insolvent or breaching one of the following basic criteria (these are described in more detail in section 5.4):

- » Minimum free float
- » Listing on the FSE's Regulated Market
- » Continuous trading

In these cases, the deletion takes effect after the same notice period as described in section 5.4.2.

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Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

10. DAX RISK-BASED INDICES

10.1. DAXPLUS MINIMUM VARIANCE GERMANY

10.1.1. OVERVIEW

The DAXplus Minimum Variance Germany is based on modern portfolio theory. The weights are derived from an optimization aimed at minimizing the variance of the portfolio of DAX constituents.

Universe: DAX.

Weighting scheme: The index is price-weighted, with the weighting factors being derived from an optimization that minimizes the variance of the index portfolio.

Base value and dates: 100 on September 21, 2001.

Dissemination calendar: Xetra calendar.

10.1.2. INDEX REVIEW

Weights calculation: Optimization can result in a weight of 0.00% for some constituents. These are not then included in the index. Portfolio variance is calculated using the daily stock returns for the last twelve months.

The date as of which the daily returns are included in the portfolio variance calculation depends on the review date and is updated quarterly.

Weights are calculated in three steps:

Step 1)

The daily returns for the last twelve months are calculated for each constituent as follows:

$$\lambda_{ik} = \ln\left(\frac{Share_{ik}}{Share_{ik-1}}\right)$$

whereby:

λ_{ik}	=	daily return of share $i = 1, \dots, 40$ at time $k = 1, \dots, HT$
$Share_{ik}$	=	closing price of share $i = 1, \dots, 40$ at time $k = 2, \dots, HT$
k	=	trading day index
HT	=	number of trading days in the last twelve months

Step 2)

The variances and covariances are then calculated as follows, based on the returns that were calculated in Step 1 for all DAX constituents:

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$$\sigma_i = \sqrt{HT \cdot \frac{1}{HT-1} \sum_{k=1}^{HT} (\lambda_{ik} - \bar{\lambda}_i)^2}$$

where:

σ_i = standard deviation of share $i = 1, \dots, 40$
 $\bar{\lambda}_i$ = average yield of share $i = 1, \dots, 40$

$$Cov_{i,j} = HT \cdot \frac{1}{HT-1} \sum_{k=1}^{HT} (\lambda_{ik} - \bar{\lambda}_i) \cdot (\lambda_{jk} - \bar{\lambda}_j)$$

whereby:

$Cov_{i,j}$ = covariance¹⁵ of share $i = 1, \dots, 40$ to share $j = 1, \dots, 40$

Step 3)

The optimized portfolio weights can then be calculated, based on the variances and covariances calculated in Step 2. The function to be optimized is as follows:

$$\sigma^2_{Portfolio} = \sum_{i=1}^{40} \sum_{j=1}^{40} w_i \cdot w_j \cdot Cov_{i,j} = \sum_{i=1}^{40} \sum_{j=1}^{40} w_i \cdot w_j \cdot \sigma_i \cdot \sigma_j \cdot \rho_{i,j}$$

w_i = weight of share $i = 1, \dots, 40$ in DAX portfolio
 $\rho_{i,j}$ = correlation coefficient of share $i = 1, \dots, 40$ to share $j = 1, \dots, 40$
 $\sigma^2_{Portfolio}$ = variance of DAX portfolio

The correlation coefficient describes the reaction of a share to the change in the price of another share in the same portfolio, and can be calculated as follows:

$$\rho_{i,j} = \frac{Cov_{i,j}}{\sigma_i \cdot \sigma_j}$$

Following the optimization model with objective function and constraints:

$$\min \sigma^2_{Portfolio} = \sum_{i=1}^{40} \sum_{j=1}^{40} w_i \cdot w_j \cdot \sigma_i \cdot \sigma_j \cdot \rho_{i,j}$$

The objective function is optimized subject to the following constraints:

¹⁵ Where $i = j$, the covariance is the same as the variance of share i .

10. DAX RISK-BASED INDICES

$$\text{Constraint 1: } \sum_{i=1}^{40} w_i = 1$$

The first constraint indicates that the sum of the weights in the portfolio must be equal to 100%. Optimization can result in a weight of 0.00% for some constituents. These are not then included in the index.

$$\text{Constraint 2: } w_i \geq 0 \text{ for } (i=1, \dots, 40)$$

The second constraint completes the mathematical model and takes the non-negativity of the weight and the exclusion of short sales into account.

$$\text{Constraint 3: } w_i \leq 0.1 \text{ for } (i=1, \dots, 40)$$

The third constraint ensures that the weight of each constituent is capped at 10%.

Weighting factors calculation

The weighting factors wf_{iT} are derived using the weights determined in the section above. For each constituent, the weight w_i is multiplied by the scale factor 1bn and then divided by the current price p_{it} . The weighting factors (wf_{iT}) are calculated using the closing prices on the Thursday preceding the second Friday of the review month. The weighting factors determined take effect on the review effective date.

$$wf_{iT} = \frac{w_i}{p_{it}} * 100bn.$$

The scale factor 1bn is defined as the sum of the product of the prices p_{it} and the weighting factors wf_{iT} . The weighting factor wf_{iT} is rounded to the next integer.

Review frequency: The index is reviewed on a quarterly basis.

10.1.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

10.2. DAXPLUS MAXIMUM SHARPE RATIO GERMANY

10.2.1. OVERVIEW

The DAXplus Maximum Sharpe Ratio Germany is based on modern portfolio theory. The weights are derived from an optimization aimed at maximizing the Sharpe ratio for the portfolio of DAX constituents.

10. DAX RISK-BASED INDICES

Universe: DAX.

Weighting scheme: The indices are price-weighted, with the weighting factors being derived from an optimization that maximizes the Sharpe ratio for the index portfolio.

Base value and dates: 100 on September 21, 2001.

Dissemination calendar: Xetra calendar.

10.2.1. INDEX REVIEW

Weights calculation: Optimization can result in a weight of 0.00% for some constituents. These are not then included in the index. Portfolio variance is calculated using the daily stock returns for the last twelve months.

The date as of which the daily returns are included in the portfolio variance calculation depends on the review date and is updated quarterly.

The weights for the DAXplus Maximum Sharpe Ratio Germany are calculated in three steps.

Step 1)

The daily returns for the last twelve months are calculated for each constituent as follows:

$$\lambda_{ik} = \ln\left(\frac{Share_{ik}}{Share_{ik-1}}\right)$$

whereby:

λ_{ik}	=	daily return of share $i = 1, \dots, 40$ at time $k = 1, \dots, HT$
$Share_{ik}$	=	closing price of share $i = 1, \dots, 40$ at time $k = 2, \dots, HT$
k	=	trading day index
HT	=	number of trading days over the last twelve months

Step 2)

The variances and covariances are then calculated as follows, based on the returns that were calculated in Step 1 for all DAX constituents:

$$\sigma_i = \sqrt{HT \cdot \frac{1}{HT-1} \sum_{k=1}^{HT} (\lambda_{ik} - \bar{\lambda}_i)^2}$$

where:

σ_i	=	standard deviation of share $i = 1, \dots, 40$
$\bar{\lambda}_i$	=	average yield of share $i = 1, \dots, 40$

10. DAX RISK-BASED INDICES

$$Cov_{ij} = HT \cdot \frac{1}{HT-1} \sum_{k=1}^{HT} (\lambda_{ik} - \bar{\lambda}_i) \cdot (\lambda_{jk} - \bar{\lambda}_j)$$

whereby:

Cov_{ij} = covariance¹⁶ of share $i=1, \dots, 40$ to share $j=1, \dots, 40$

Step 3)

The optimized portfolio weights can then be calculated, based on the variances and covariances calculated in Step 2. The function to be optimized is as follows:

$$sr_p = \frac{r_p - r_f}{\sigma_{Portfolio}}$$

The Sharpe ratio is the difference between a portfolio's return and the risk-free return, divided by the portfolio's standard deviation.

$$r_p = \pi_1 \cdot x_1 + \dots + \pi_n \cdot x_n$$

$$\pi_i = \ln \left(\frac{Share_{iEndoftheyear}}{Share_{iBeginningoftheyear-1}} \right)$$

π_i = annual return of constituent $i=1, \dots, 40$
 r_p = designated return for the entire portfolio

$$\sigma_{Portfolio} = \sqrt{\sigma^2_{Portfolio}}$$

$\sigma_{Portfolio}$ = standard deviation of the entire portfolio

r_f = risk-free return on the capital market

Following the optimization model with objective function and constraints:

$$\max \quad sr_p = \frac{r_p - r_f}{\sigma_{Portfolio}}$$

The objective function is optimized subject to the following constraints:

$$\text{Constraint 1: } \sum_{i=1}^{40} w_i = 1$$

¹⁶ Where $i=j$, the covariance is the same as the variance of share i .

10. DAX RISK-BASED INDICES

The first constraint indicates that the sum of the weights in the portfolio must be equal to 100%. Optimization can result in a weight of 0.00% for some constituents. These are not then included in the index.

$$\text{Constraint 2: } w_i \geq 0 \text{ for } (i=1, \dots, 40)$$

The second constraint completes the mathematical model and takes the non-negativity of the weight and the exclusion of short sales into account.

$$\text{Constraint 3: } w_i \leq 0.1 \text{ for } (i=1, \dots, 40)$$

The third constraint ensures that the weight of each constituent is capped at 10%.

If the value for the objective function is negative, the constituents of the last index are used and are weighted equally.

Weighting factors calculation

The weighting factors wf_{iT} are derived using the weights determined in the section above. For each constituent, the weight w_i is multiplied by the scale factor 1bn and then divided by the current price p_{it} . The weighting factors (wf_{iT}) are calculated using the closing prices on the Thursday preceding the second Friday of the review month. The weighting factors determined take effect on the review effective date.

$$wf_{iT} = \frac{w_i}{p_{it}} * 100bn.$$

The scale factor 1bn is defined as the sum of the product of the prices p_{it} and the weighting factors wf_{iT} . The weighting factor wf_{iT} is rounded to the next integer.

Review frequency: The index is reviewed on a quarterly basis.

10.2.2. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

11. DAX THEME INDICES

11.1. DAXPLUS EXPORT STRATEGY

11.1.1. OVERVIEW

The DAXplus Export Strategy consists of major export-oriented companies that benefit from strong growth outside Germany. It comprises the ten components of the DAX and MDAX with the highest proportions of exports in their revenues.

Universe: DAX and MDAX.

Weighting scheme: The index is equal weighted.

Base value and dates: 100 on March 18, 2002.

Dissemination calendar: Xetra calendar.

11.1.2. INDEX REVIEW

Selection list: The selection list is updated and published once a year on the fourth trading day of September. The cutoff date is the last trading day of August.

Component selection: Ten DAX and MDAX components are selected. The companies chosen are those that, within each index, generate the highest proportion of their revenues outside Germany (based on the figures disclosed in their annual reports for the preceding fiscal year). The Banks and Financial Services sectors are not included in this index.

Review frequency: The index is reviewed once a year in September. Rebalancing takes place on a quarterly basis.

Weighting factors: All components are equal weighted on a quarterly basis. The weightings are published on the second Friday of each quarter, one week prior to the quarterly review implementation date, using Thursday's closing prices.

$$wf_{iT} = \frac{w_i}{p_{it}} * 100bn.$$

The weighting factor wf_{iT} is rounded to the next integer.

11.1.3. ONGOING MAINTENANCE

Replacements: A company that is deleted from DAXplus Export Strategy is replaced by the next-highest ranking company that is still a member of the DAX or MDAX according to the most recent DAXplus Export Strategy selection list. The replacement is included in the index using the same weight as for the old component, based on the closing price for the four trading days prior to the replacement effective date.

Ad hoc exit: Not applicable.

11. DAX THEME INDICES

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

11.2. DAXPLUS SEASONAL STRATEGY

11.2.1. OVERVIEW

The DAXplus Seasonal Strategy is an index of German blue-chip companies calculated by STOXX Ltd. This specialized product permits seasonal investment strategies by locking in the index level achieved during August and September (index levels are traditionally lower during these months). The index comprises the 40 DAX components and is calculated in line with this.

Universe: DAX.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 15% on a quarterly basis.

Base value and dates: 1,000 on December 30, 1987.

Dissemination calendar: Xetra calendar.

11.2.2. INDEX REVIEW

Component selection: The composition of the index outside the disinvestment phase (see below) corresponds to the composition of the DAX.

Review frequency: The index is reviewed on a quarterly basis in line with the methodology used with the DAX.

11.2.3. ONGOING MAINTENANCE

Calculation: The index value is frozen on the last trading day in July and is not changed until the last trading day in September. The period between these two dates is known as the “disinvestment phase.” Index calculation is resumed on the first trading day in October using the composition of the DAX as of that date.

Replacements: All changes affecting the DAX also apply to the DAXplus Seasonal Strategy.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: All changes affecting the DAX also apply to the DAXplus Seasonal Strategy.

11.3. DAXPLUS FAMILY AND DAXPLUS FAMILY 30

11. DAX THEME INDICES

11.3.1. OVERVIEW

The DAXplus Family indices measure the performance of founder-dominated companies (“family enterprises”) that are listed on the Frankfurt Stock Exchange (FSE). The DAXplus Family was developed in cooperation with the Center for Entrepreneurial and Financial Studies (CEFS) at the Technical University of Munich (TUM). STOXX Ltd. reviews the index composition annually in March on the basis of shareholder structure information provided by GlobalData.

Universe: All securities included in the Prime All Share and listed on Xetra.

Weighting scheme: The indices are free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 1,000 on June 21, 2002.

Dissemination calendar: Xetra calendar.

11.3.2. INDEX REVIEW

Selection list: The selection list for the DAXplus Family 30 is updated and published on the fourth trading day in March. The cutoff date is the last trading day in February.

Component selection: The DAXplus Family is an all-share index comprising all stocks listed on the Frankfurt Stock Exchange’s Prime Standard that meet the specific selection criteria for family enterprises. For this purpose, family enterprises are characterized by the following two attributes:

- **Family ownership**
The group of “index-relevant persons” (see below in this section for further information) is a major shareholder in the company, i.e., it holds at least 25% of all ordinary shares of the company

and/or
- **Family management**
The group of index-relevant persons holds at least 5% of the ordinary shares of the company and is also involved in the company’s management (management or supervisory board membership).

The group of index-relevant persons consists of the company’s founders (either sole founders or teams of founders, as appropriate) and their families.

Shares that are held indirectly by an asset management, investment or holding company that is owned or controlled by the group of index-relevant persons are also attributed to this group.

In addition, the DAXplus Family 30 is a liquid selection index comprising the 30 largest family enterprises (based on their free-float market capitalization) that had an ADTV of at least EUR 500,000 for the preceding three months at the time of the index review.

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GlobalData supplies the shareholder structure data used in the selection process. The cutoff date for collection of the shareholder structure data is usually the last trading day in January. Where a new addition is made to the Prime All Share after the shareholder structure data cutoff date but before the review cutoff date (i.e., the last trading day in February), the shareholder structure data on the date of admission to the Prime All Share is used for the new admission instead.

Review frequency: The indices are reviewed once a year in March. Rebalancing takes place on a quarterly basis.

11.3.3. ONGOING MAINTENANCE

Replacements: Deleted companies are replaced by the highest-ranked stock from the most recent selection list that is not included in the index.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

11.4. GEX

11.4.1. OVERVIEW

The GEX (German Entrepreneurial Index), which was launched on January 3, 2005, comprises German entrepreneurial firms listed on the Frankfurt Stock Exchange (FSE). It was developed in cooperation with the Center for Entrepreneurial and Financial Studies (CEFS) at the Technical University of Munich (TUM).

Universe: Prime All Share.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Components are capped at a maximum weight of 10% on a quarterly basis.

Base value and dates: 1,000 on July 30, 2004.

Dissemination calendar: Xetra calendar.

11.4.2. INDEX REVIEW

Component selection: Companies have to satisfy certain prerequisites to be included or to remain in the GEX. Since the GEX measures the performance of entrepreneurial firms, GEX constituents have to comply with the five selection criteria listed below. Criteria 1 to 3 are used to distinguish entrepreneurial firms from the universe of all listed companies. Criteria 4 and 5 then further restrict GEX constituents to those companies that are listed on the German Prime Standard.

11. DAX THEME INDICES

A company's ordinary shares are included in the GEX if:

- 1) The "group of GEX-relevant persons", when taken together, holds at least 25% of the company's ordinary shares. The group of GEX-relevant persons consists of:
 - a. Active members of the management board and their families
 - b. Active members of the supervisory board and their families
 - c. Former members of the management and supervisory boards and their families

Stakes are also attributed to the group of GEX-relevant persons if:

- d. Asset management, investment or holding companies indirectly hold ownership stakes for the abovementioned group of GEX-relevant persons (i.e., the asset management, investment or holding companies themselves are owned by GEX-relevant persons) or
- e. Companies holding at least 30% of the company concerned (the threshold for mandatory offers) are themselves at least 25% owned by "their" group of GEX-relevant persons. In this case, an adjusted ownership stake is used, which is calculated as the product of the two relative ownership stakes (Criterion 1).
Example: The management board of Company A (GEX-relevant persons) holds 20% of the shares in Company A, while Company B holds 50%. The remaining 30% are in free float. The chair of the supervisory board of Company B (a GEX-relevant person) owns 60% of Company B. Question: Does Company A comply with Criterion 1?

Answer: Yes. The GEX-relevant stake is 50%, which is higher than the mandatory 25% (Criterion 1). Calculation: $20\% + (50\% \times 60\%) = 20\% + 30\% = 50\%$

- 2) The group of GEX-relevant persons, when taken together, holds not more than 75% of the companies' ordinary shares. When calculating GEX-relevant stakes in accordance with Criterion 1, neither the direct ownership stake of the owner-dominated holding company nor the calculated adjusted ownership stake may exceed the 75% threshold (Criterion 2).
- 3) The company's post-IPO age does not exceed ten years. The post-IPO age is calculated as the period between the review cutoff date for the selection criteria and the date of the company's initial public offering (IPO) or the date on which the ordinary shares were listed (Criterion 3).

In addition, GEX components must be

- 4) Companies based in Germany (Criterion 4) and
- 5) Listed on the FSE's Prime Standard and continuously traded on Xetra (Criterion 5).

GlobalData supplies the shareholder structure data used in the selection process. The cutoff date for the collection of shareholder structure data is usually the last trading day in January. Where a new addition is made to the Prime All Share after the shareholder structure data cutoff date but before the review cutoff date (i.e., the last trading day in February), the shareholder

11. DAX THEME INDICES

structure data on the date of admission to the Prime All Share is used for the new admission instead.

Review frequency: The index is reviewed once a year in March. Rebalancing takes place on a quarterly basis.

11.4.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

12. INTERNATIONAL REGION-ORIENTED INDICES

12.1. DBIX DEUTSCHE BÖRSE INDIA

12.1.1. OVERVIEW

DBIX Deutsche Börse India mirrors the performance of the most liquid and largest American Depositary Receipts¹⁷ (ADRs) and Global Depositary Receipts (GDRs)¹⁸ that have been issued by Indian companies and that are traded on the New York Stock Exchange or Nasdaq, or on the London Stock Exchange, respectively.

Universe: The parent index is the STOXX World DR index.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: The weight of individual index components is capped at 15%. If there is a shortfall of components that results in the index having fewer than seven constituents, the index switches to an equal weight capping scheme.

Base value and dates: 100 on March 15, 2002.

Dissemination calendar: STOXX Global Calendar.

12.1.2. INDEX REVIEW

Component selection:

The parent index is filtered for companies that have been assigned to India as described in the STOXX country assignment methodology (see section 5.7. of the STOXX Index Methodology Guide).

Companies from the parent index with this country assignment are admitted to the index selection list if they have had an ADTV of at least USD 1.2mn over the previous six months. The ADTV threshold for companies that are already index constituents is only two-thirds of the threshold value for entry candidates (i.e., USD 0.8mn).

Companies on the index selection list are ranked on the basis of their market capitalization. The 25 companies with the highest market capitalization are included in the index. The maximum number of index constituents is therefore 25. However, if the number of companies on the selection list is insufficient, the index may have fewer constituents.

The cutoff date for calculating companies' ADTV and market capitalization is the last trading day of the month prior to the month in which the index review takes place. The market capitalization used for ranking is calculated as the average of the 20 trading days ending on the last trading day before the review month.

¹⁷ American Depositary Receipts (ADRs) are receipts for the shares of a remotely based corporation that are held in the vault of a US bank and that entitle the shareholder to all dividends and capital gains. ADRs are traded on a number of stock exchanges worldwide and are denominated in USD.

¹⁸ Global Depositary Receipts (GDRs), which were developed by analogy to American Depositary Receipts (ADRs), securitize share ownership in foreign companies. A GDR can represent one or several shares, or a fraction of a share. GDRs are traded on exchanges worldwide instead of the original shares.

12. INTERNATIONAL REGION-ORIENTED INDICES

To assure index continuity and representativeness, the liquidity and/or market capitalization thresholds defined above may be adjusted downwards if there is a general decrease in the measure concerned across the given region.

Review frequency: The index is reviewed on a quarterly basis.

12.1.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

12.2. DAXGLOBAL BRIC

12.2.1. OVERVIEW

The DAXglobal BRIC comprises companies from Brazil, India and China. These are represented by ADRs and GDRs that are traded on the New York Stock Exchange or Nasdaq, or on the London Stock Exchange, respectively. In the case of China, H-shares and red chips are eligible for the index. Ten companies from each country are selected for the index. The maximum number of index constituents is therefore 30.

Universe: The parent indices are the STOXX World DR, STOXX China Red Chips TMI and STOXX China H TMI.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: Double capping is applied, with the maximum weight for each country being set to 35% and the weight for each component being limited to 10% of the total index capitalization.

Base value and dates: 100 on September 21, 2001.

Dissemination calendar: STOXX Global Calendar.

12.2.2. INDEX REVIEW

Selection list: The selection list is updated and published on the second Friday of the review month. The cutoff date is the last trading day of the month for which the selection list is created.

Component selection:

The parent index is filtered for companies that have been assigned to Brazil, India and China as described in the STOXX country assignment methodology (see section 5.7 of the STOXX Index Methodology Guide).

12. INTERNATIONAL REGION-ORIENTED INDICES

Companies from the parent index with these country assignments are admitted to the index selection list if they have had an ADTV of at least USD 1.0mn over the previous six months.

Companies on the index selection list are ranked on the basis of their market capitalization. The ten companies from each country on the selection list with the highest market capitalization are included in the index. The maximum number of index constituents is 30.

The cutoff date for calculating companies' ADTV and market capitalization is the last trading day of the month prior to the month in which the index review takes place. The market capitalization used for ranking is calculated as the average of the 20 trading days ending on the last trading day before the review month.

To assure index continuity and representativeness, the liquidity and/or market capitalization thresholds defined above may be adjusted downwards if there is a general decrease in the measure concerned across the given regions.

Review frequency: The index is reviewed once a year in September. Rebalancing takes place on a quarterly basis.

12.2.3. ONGOING MAINTENANCE

Replacements: A deleted component is replaced with the highest-ranked non-component from the selection list, which is added using the weight derived from its free-float market capitalization.

If an extraordinary modification becomes necessary, a replacement company from the same country as the departing company is admitted to the index (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide). If this is not possible (e.g., due to limitations affecting the entire country such as changes in economic policies or extraordinary regulatory restrictions), the companies affected are deleted from the index without a replacement company being determined (this is a discretionary rule; see section 2.3 "Discretion" in the DAX Equity Index Calculation Guide). In this case, the weight of the departing company is automatically redistributed among all the countries involved.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

12.3. DAXGLOBAL CHINA

12.3.1. OVERVIEW

The DAXglobal China portfolio tracks the performance of the 40 largest and most liquid Chinese companies. The constituents comprise red chips and H-shares from the Hong Kong Stock Exchange, plus ADRs from the London Stock Exchange, Nasdaq and the New York Stock Exchange.

12. INTERNATIONAL REGION-ORIENTED INDICES

Universe: The parent indices are the STOXX World DR, STOXX China Red Chips TMI and STOXX China H TMI.

Weighting scheme: A liquidity weighting applies.

Capping: The weight of individual index components is capped at 10%. If there is a shortfall of components that results in the index having fewer than 10 constituents, the index switches to an equal weight capping scheme.

Base value and dates: 100 on September 21, 2001.

Dissemination calendar: STOXX Global Calendar.

12.3.2. INDEX REVIEW

Selection list: The selection list is updated and published on the second Friday of the review month. The cutoff date is the last trading day of the month for which the selection list is created.

Component selection: The parent index is filtered for companies that have been assigned to China as described in the STOXX country assignment methodology (see section 5.7. of the STOXX Index Methodology Guide).

Companies from the parent index with this country assignment are admitted to the index selection list if they have had an ADTV of at least USD 1.0mn over the previous six months.

Companies on the index selection list are ranked on the basis of their market capitalization. The 40 companies with the highest market capitalization on the selection list are included in the index.

The cutoff date for calculating companies' ADTV and market capitalization is the last trading day of the month prior to the month in which the index review takes place. The market capitalization used for ranking is calculated as the average of the 20 trading days ending on the last trading day before the review month.

To assure index continuity and representativeness, the liquidity and/or market capitalization thresholds defined above may be adjusted downwards if there is a general decrease in the measure concerned across the given region.

Weights calculation: The target weight of component i at time t is calculated as follows:

$$w_{it} = \frac{6M \text{ ADTV } EUR_i}{\sum_{j=1}^{40} 6M \text{ ADTV } EUR_j}$$

where the denominator is the sum of the six-month ADTV in EUR of all 40 companies in the index.

The weighting factor of component i at time t is calculated as follows:

12. INTERNATIONAL REGION-ORIENTED INDICES

$$wf_{it} = 100bn * \frac{w_{it}}{p_{it}}$$

with p_{it} being the closing price of component i at time t . The weighting factor wf_{it} is rounded to the next integer.

Review frequency: The index is reviewed once a year in September. Rebalancing takes place on a quarterly basis.

12.3.3. ONGOING MAINTENANCE

Replacements: A deleted component is replaced with the highest-ranked non-component from the selection list. Replacements are included in the index using the same weight as for the old component, based on the closing price for the four trading days prior to the replacement effective date.

If an extraordinary modification becomes necessary, a replacement company from the same country as the departing company is admitted to the index (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide). If this is not possible (e.g., due to limitations affecting the entire country such as changes in economic policies or extraordinary regulatory restrictions), the companies affected are deleted from the index without a replacement company being determined (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide). In this case, the weight of the departing company is automatically redistributed.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

13. INTERNATIONAL TREND AND INDUSTRY INDICES

13.1. DAXGLOBAL AGRIBUSINESS

13.1.1. OVERVIEW

DAXglobal Agribusiness mirrors the performance of companies belonging to the agricultural economy. Agricultural companies are defined as companies that generate more than 50% of their revenues from one of the following sectors: agriproduct, agricultural equipment, agriproduct operations, ethanol/biodiesel, livestock operations, plantations, agricultural chemicals, biotechnology, fertilizers, agriculture, animal feed, seeds, agricultural chemicals, sugar, agricultural equipment, fertilizer and minerals.

Universe: The parent indices are the STOXX World DR, STOXX TMI, STOXX GCC TMI, STOXX China A TMI and STOXX China P Chips TMI.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: A 40/8/4.5 capping method used. The procedure is as follows:

Step A) All companies are capped at a maximum of 8% using the single cap limit method.

Step B) The components are then ranked from the largest to the smallest (if more than one component has a weight of 8% after Step A), the original weight is used to determine the order).

Step C) Maximum weights are determined for the largest six components resulting from Step B). The maximum weights allowed for the largest six components are 8%, 7.5%, 7%, 6.5%, 6% and 5%. All other components are capped at a maximum weight of 4.5%. For example, if the weight of the second-largest component exceeds 7.5%, it is capped at this figure.

Step D) Step C) is repeated until all components meet the restrictions contained in it.

Base value and dates: 100 on December 28, 2001.

Dissemination calendar: STOXX Global Calendar.

13.1.2. INDEX REVIEW

Component selection:

GlobalData preselects global securities issued by companies generating more than 50% of their revenues from one of the following sectors: agriproduct, agricultural equipment, agriproduct operations, ethanol/biodiesel, livestock operations, plantations, agricultural chemicals, biotechnology, fertilizers, agriculture, animal feed, seeds, agricultural chemicals, sugar, agricultural equipment, fertilizer and minerals.

STOXX applies the preselection provided by GlobalData to filter for companies from those countries listed in the International Equities investable universe as set out in section 3.2. It then replicates this filtered list of companies using the parent indices provided in section 13.1.1.

13. INTERNATIONAL TREND AND INDUSTRY INDICES

Companies from the parent indices that have been attributed to an eligible country are admitted to the index selection list if their ADTV is at least USD 1.2mn both for the previous six months and in each of the previous two months. In addition, they must have a market capitalization of at least $1.2 * \text{USD } 150\text{mn}$ and an aggregate trading volume of at least $1.2 * 250,000$ shares (for each of the previous six months).

Companies that are already index constituents must have an ADTV of at least USD 0.8mn, both for the previous six months and for each of the previous two months. In addition, they must have a market capitalization of at least $\text{USD } 0.8 * 150\text{mn}$ and an aggregate trading volume of at least $0.8 * 250,000$ shares (for each of the previous six months).

All companies on the index selection list are admitted as index constituents.

Companies from countries that are not included in the International Equities investable universe as set out in section 3.2 are not eligible for inclusion in the index selection list. Local exchanges in the following countries are also excluded from selection: Brazil, China (Shanghai, Shenzhen), India, Mexico, Russia, Saudi Arabia and Thailand.

The ADTV, the market capitalization and the aggregate volume are calculated as ending on the last trading day of the month prior to the month in which the index review takes place.

To assure index continuity and representativeness, the liquidity and/or market capitalization thresholds defined above may be adjusted downwards if there is a general decrease in the measure concerned across the given region/sector.

Review frequency: The components are reviewed semi-annually in March and September. Rebalancing takes place on a quarterly basis.

13.1.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

13.2. DAXGLOBAL GOLD MINERS

13.2.1. OVERVIEW

The DAXglobal Gold Miners comprises those companies in the gold mining industry that generate at least 50% of their revenues from gold mining. The number of index constituents is allowed to vary between 20 and 35.

Universe: The parent indices are the STOXX World DR, STOXX TMI, STOXX GCC TMI, STOXX China A TMI and STOXX China P Chips TMI.

13. INTERNATIONAL TREND AND INDUSTRY INDICES

Weighting scheme: A liquidity weighting applies.

Capping: The weight of individual index components is capped at 15%. If there is a shortfall of components that results in the index having fewer than seven constituents, the index switches to an equal weight capping scheme.

Base value and dates: 100 on September 21, 2001.

Dissemination calendar: STOXX Global Calendar.

13.2.2. INDEX REVIEW

Component selection:

GlobalData preselects global securities issued by companies generating more than 50% of their revenues from gold mining.

STOXX applies the preselection provided by GlobalData to filter for companies from the following countries:

Americas			
NYSE (US)	Class 1	Mexican Stock Exchange (MX)	Class 2
Nasdaq (US)	Class 1	B3 S.A. – Brasil, Bolsa, Balcão (BR)	Class 3
Toronto Stock Exchange (CA)	Class 1		

Europe			
Athens Stock Exchange (GR)	Class 1	Euronext Milan (IT)	Class 1
Bolsa de Madrid (ES)	Class 1	Oslo Stock Exchange (NO)	Class 1
Deutsche Börse (DE)	Class 1	Istanbul Stock Exchange (TR)	Class 2
London Stock Exchange (UK)	Class 1	Nasdaq Copenhagen (DK)	Class 1
SIX Swiss Exchange (CH)	Class 1	Nasdaq Helsinki (FI)	Class 1
Vienna Stock Exchange (AT)	Class 1	Nasdaq Iceland (IS)	Class 1
Euronext Paris (FR)	Class 1	Nasdaq Stockholm AB (SE)	Class 1
Euronext Amsterdam (NL)	Class 1	Nasdaq Riga (LV)	Class 1
Euronext Brussels (BE)	Class 1	Nasdaq Tallinn AS (EE)	Class 1
Euronext Lisbon (PT)	Class 1	Nasdaq Vilnius (LT)	Class 1
Euronext Dublin (IE)	Class 1		

Asia/Pacific			
Tokyo Stock Exchange (JP)	Class 1	Taiwan Stock Exchange (TW)	Class 2
Stock Exchange of Hong Kong (HK)	Class 3	Bursa Malaysia (MY)	Class 2
Shanghai Stock Exchange (CN)	Class 2	Singapore Exchange (SG)	Class 3
Shenzhen Stock Exchange (CN)	Class 2	Stock Exchange of Thailand (TH)	Class 2
Australian Securities Exchange (AU)	Class 1	Indonesia Stock Exchange (ID)	Class 2
Korea Exchange (KR)	Class 2	BSE (IN)	Class 2
Philippine Stock Exchange (PH)	Class 2	Pakistan Stock Exchange (PK)	Class 2

13. INTERNATIONAL TREND AND INDUSTRY INDICES

Middle East and Africa			
Riyadh Stock Exchange (SA)	Class 2	Johannesburg Stock Exchange (ZA)	Class 3

STOXX replicates this filtered list of companies via the parent indices provided in section 13.2.1 using the following rules:

- Class 1 countries: Shares that are listed in Class 1 countries qualify for inclusion in the index. ADRs/GDRs from shares that are listed in Class 1 countries do not qualify for inclusion in the index.
- Class 2 countries: Shares that are listed in Class 2 countries do not qualify for inclusion in the index but may be considered for inclusion via ADRs/GDRs that are listed in the USA and the UK.
- Class 3 countries: Shares that are listed in Class 3 countries will be substituted by ADRs/GDRs provided that the latter account for at least 75% of the liquidity of the shares represented.

If companies' shares are listed on more than one exchange, the primary listing is used for DAXglobal Gold Miners.

Companies from the parent indices that have been attributed to an eligible country are admitted to the index selection list if they have an ADTV over the previous three months of at least USD 2mn and a full market capitalization of at least USD 500mn. Ranking is based on free-float market capitalization. The 35 companies on the selection list with the highest free-float market capitalization are included in the index.

If fewer than 20 companies qualify for inclusion in the index based on the component selection criteria, the market capitalization criterion of ≥USD 500mn is lowered.

To assure index continuity and representativeness, the liquidity and/or market capitalization thresholds defined above may be adjusted downwards if there is a general decrease in the measure concerned across the given region/sector.

Weights calculation: The target weight of component i at time t is calculated as follows:

$$w_{it} = \frac{3M\ ADTV\ EUR_i}{\sum_{j=1}^a 3M\ ADTV\ EUR_j}$$

where the denominator is the sum of the three-month ADTV in EUR of all companies $a = [20,35]$ in the index.

The weighting factor of component i at time t is calculated as follows:

$$wf_{it} = 100bn * \frac{w_{it}}{p_{it}}$$

with p_{it} being the closing price of component i at time t . The weighting factor wf_{it} is rounded to the next integer.

13. INTERNATIONAL TREND AND INDUSTRY INDICES

Review frequency: The components are reviewed semi-annually in March and September. Rebalancing takes place on a quarterly basis.

13.2.3. ONGOING MAINTENANCE

Replacements: Deleted companies are not replaced.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

13.3. WORLD LUXURY INDEX

13.3.1. OVERVIEW

The World Luxury Index comprises the 20 largest and most liquid stocks from the global luxury goods industry worldwide. Companies are considered as belonging to the luxury goods industry if more than 50% of their overall revenues are generated from luxury articles.

The World Luxury Index is a BNP Paribas index and is calculated and distributed by Deutsche Börse AG.

Universe: The parent indices are the STOXX World DR, STOXX TMI, STOXX GCC TMI, STOXX China A TMI and STOXX China P Chips TMI.

Weighting scheme: The index is free-float market capitalization weighted.

Capping: The weight of individual index components is capped at 10%. If there is a shortfall of components that results in the index having fewer than 10 constituents, the index switches to an equal weight capping scheme.

Base value and dates: 100 on February 2, 2007.

13.3.2. INDEX REVIEW

Selection list: The selection list is updated and published on the second Friday of the review month. The cutoff date is the last trading day of the month for which the selection list is created.

Component selection: GlobalData preselects global securities issued by companies generating more than 50% of their overall revenues from luxury articles.

GlobalData performs the luxury goods sector and subsector classifications. It also provides the data on percentage revenues per luxury goods subsector.

13. INTERNATIONAL TREND AND INDUSTRY INDICES

STOXX uses the preselection provided by GlobalData to filter for companies from countries listed in the International Equities investable universe as set out in section 3.2. It then replicates this filtered list of companies using the parent indices provided in section 13.3.1

Companies from the parent indices that have been attributed to an eligible country are admitted to the index selection list if they have had an ADTV of at least USD 5mn over the previous six months.

Companies on the index selection list are ranked according to their percentage revenues per luxury goods subsector. The higher the percentage revenue per luxury goods subsector, the higher the company's rank. If two or more companies have the same percentage revenue per luxury goods subsector, the company with the larger full-market capitalization is ranked higher. A maximum of five companies per luxury goods subsector can be included in the World Luxury Index. The 20 companies with the highest percentage revenues are included in the index.

Review frequency: The index is reviewed once a year in September. Rebalancing takes place on a quarterly basis.

Dissemination calendar: STOXX Global Calendar.

13.3.3. ONGOING MAINTENANCE

Replacements: A deleted component is replaced with the highest-ranked non-component from the selection list, which is added using the weight derived from its free-float market capitalization.

Ad hoc exit: Not applicable.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

14. IDDAX INDICES

14.1. IDDAX 50 EQUAL WEIGHT

14.1.1. OVERVIEW

The idDAX 50 Equal Weight tracks the performance of the 50 largest and most liquid companies on the German stock market. It comprises all (40) stocks in the DAX plus the ten most liquid companies from the FSE's Regulated Market.

Universe: Prime All Share and General All Share.

Weighting scheme: The index is equal weighted.

Base value and dates: 100 on March 21, 2005.

Dissemination calendar: Xetra calendar.

14.1.2. INDEX REVIEW

Selection list: The selection list is updated and published on a monthly basis on the fourth trading day of the month. The cutoff date is the last trading day of the month for which the selection list is created.

Component selection: The idDAX 50 Equal Weight is composed of the DAX constituents plus the ten companies with the highest turnover on the FSE's Regulated Market that meet the basic criteria (see section 5.4) as reported in the DAX, MDAX and SDAX selection lists. The order book volume is defined as the sum of the turnover on the FSE for the company's relevant share classes.

Review frequency: The index is reviewed on a quarterly basis in line with the methodology used with the DAX.

Weighting factors: All components are equal weighted on a quarterly basis. The weightings are published on the second Friday of each quarter, one week prior to the quarterly review implementation date, using Thursday's closing prices.

$$wf_{iT} = \frac{w_i}{p_{it}} * 100bn.$$

The weighting factor wf_{iT} is rounded to the next integer.

14.1.3. ONGOING MAINTENANCE

Replacements: Any component that is deleted is replaced by the highest-turnover stock from the most recent selection list. Replacements are included in the index using the same weight as for the old component, based on the closing price for the four trading days prior to the replacement effective date.

14. IDAX INDICES

Ad hoc exit: A company that is in breach of the basic criteria is removed from the index as described in section 5.4.2, usually with two trading days' notice.

Ad hoc entry: Not applicable.

Spin-offs: Spin-off stocks are deleted at the close of the day on which they start trading.

15. METHODOLOGY REVIEWS

The goal of methodology reviews is to maintain integrity of the index concerned, i.e., to ensure that the index methodology remains applicable and that it results in an accurate and reliable representation of the market/economic realities that the index seeks to measure.

15.1. FREQUENCY OF REVIEW

Index methodologies are reviewed annually, and ad hoc if a limitation has occurred, in order to ensure that index integrity is maintained. If a limitation cannot be addressed by a methodology review, this may result in index cessation or transition. STOXX Ltd. shall not be liable for any losses arising from any decisions taken during methodology reviews.

15.2. REVIEW PROCEDURE

15.2.1. INITIATING METHODOLOGY REVIEWS

The Index Management Committee (IMC) proposes an annual methodology review schedule for approval by the Index Governance Committee (IGC) (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide).

The IMC is in charge of initiating ad hoc methodology reviews in case of limitations or where another STOXX committee recommends initiating a methodology review (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide).

15.2.2. DECISION AND ESCALATION

The following STOXX committees are responsible for deciding on amendments to index methodologies:

The IMC decides on changes to index methodologies, unless

- a) A material change to the index methodology is proposed (see section 10.3 of the DAX Equity Index Calculation Guide)
- b) The change is triggered by an Unclear Rule or Insufficient Rule (forming part of a limitation, see section 9 of the DAX Equity Index Calculation Guide)
- c) It relates to a request for a market consultation or
- d) Financial products relating to the index have a notional value/notional amount in excess of EUR 100mn

If any of conditions a) to d) above apply, the decision is taken by the IGC.

15.3. MATERIAL CHANGES WITH CONSULTATION

As described in the STOXX Changes to Methodology Policy and the STOXX Consultation Policy (publicly available on the STOXX website under the Index Regulations section), a consultation is performed before any material changes to index methodologies are proposed.

Changes to an index methodology are considered material in the event of:

15. METHODOLOGY REVIEWS

- a) A substantial change in the index objective or market/economic reality that the index aims to mirror (e.g., market leader components vs. mid-cap companies), or
- b) A substantial change in index methodology regarding aspects such as, but not limited to, those listed below that would result in a change to the overall concept behind or nature of the index:
 - i. Calculation methods or formulas with a substantial impact on index performance
 - ii. Rules on how to determine index constituents using the index methodology
 - iii. Rules on how to determine the weights of index constituents using the index methodology
 - iv. Rules on the treatment of corporate actions

By contrast, index methodology updates resulting from the application of existing methodological principles, minor clarifications of existing rules and corrections that do not change the overall concept behind, or nature of, the index are generally considered non-material.

The IMC determines whether an amendment is material as defined above. If such a determination cannot be made, the proposed amendment shall be treated as material (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide).

In the case of changes to methodologies as described in the STOXX Changes to Methodology Policy, STOXX consults with stakeholders that can reasonably be expected to be affected (“stakeholders”) before taking a decision.

“Stakeholders” mean (a) persons or entities who have an index license with STOXX regarding a benchmark administered by STOXX (“subscribers”) and/or, as far as STOXX is reasonably aware, (b) persons or entities and/or third parties who own contracts or financial instruments that reference a benchmark administered by STOXX (“investors”).

STOXX shall inform affected stakeholders as follows, while observing the principle of proportionality:

- » Either via public consultation open to the entire market and performed via the STOXX website or
- » Where the relevant stakeholders are known, directly on a restricted basis via the stakeholders’ e-mail addresses.

STOXX shall inform stakeholders in writing about:

- » The key elements of any proposed relevant changes
- » The rationale for any proposed relevant changes
- » The specific questions to be answered
- » The deadline for receiving feedback
- » The time line for implementing the relevant changes
- » The contact details to be used to provide feedback
- » Relevant definitions

The consultation shall enable stakeholders to submit comments.

The standard consultation period shall be one month, with an option to shorten or extend this period.

15. METHODOLOGY REVIEWS

The IGC may decide to shorten the one-month period in the following cases:

- » In extreme or exceptional market conditions or similar extraordinary situations
- » In urgent cases, such as in situations in which the index can no longer be replicated
- » In situations where there is no known stakeholder impact or only a limited number of stakeholders
- » In order to align the effective date of a proposed change with index maintenance (e.g., equity/bond index rebalancing, an index review or a corporate action adjustment) or
- » Any other similar cases, while applying the principle of proportionality

The IGC will consider the feedback received and decide whether the changes concerned shall take effect.

The IGC is not bound by any feedback received. Moreover, if the feedback received is ambiguous, or if no stakeholders participated, the IGC may decide to conduct another consultation, which once again shall not be binding.

If the IGC decides that the relevant changes shall take effect, STOXX will communicate a time line for implementing the relevant changes, where this has not already been communicated in the consultation materials.

Following the consultation, STOXX will make available the stakeholder feedback received together with a summary of its response to that feedback, except in those cases in which the stakeholders concerned have requested confidentiality.

The decision will be communicated as soon as possible via an announcement or press release.

STOXX Ltd. will not issue a notification if it comes to the conclusion that doing so is not permitted under the applicable laws, and may also decide to issue such a notification at a later point in time when the reasons for not issuing it no longer apply.

Force majeure or other events beyond the control of STOXX Ltd. may make it impossible for STOXX Ltd. to issue a notification within the requisite time or by the means set out herein. In such cases, STOXX Ltd. may exceptionally issue the notification either immediately following such an event or in any case by other means.

At the end of each consultation, STOXX Ltd. will make available the stakeholder feedback received together with a summary of its response to that feedback, except in those cases in which confidentiality has been requested by the stakeholders concerned (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide).

15.4. NON-MATERIAL CHANGES WITHOUT CONSULTATION

Non-material changes to the index methodology, including a description of their impact and rationale, will be published via an announcement or press release. They take effect immediately following publication unless otherwise specified in the notification (this is a discretionary rule; see

15. METHODOLOGY REVIEWS

section 2.3 “Discretion” in the DAX Equity Index Calculation Guide). STOXX Ltd. will not issue a notification if it comes to the conclusion that doing so is not permitted under the applicable laws, and may also decide to issue such a notification at a later point in time when the reasons for not issuing it no longer apply (this is a discretionary rule; see section 2.3 “Discretion” in the DAX Equity Index Calculation Guide). Force majeure or other events beyond the control of STOXX Ltd. may make it impossible for STOXX Ltd. to issue a notification within the requisite time or by the means set out herein. In such cases, STOXX Ltd. may exceptionally issue the notification either immediately following such an event or in any case by other means.

15.5. PUBLICATION OF METHODOLOGY CHANGES

The effective date for benchmark methodology changes is aligned where feasible with the periodic benchmark review dates on which the benchmark composition is changed, and a rebalancing is triggered to avoid any extraordinary impact on clients. In general, material methodology changes should be publicly announced three months prior to their implementation. The IGC may decide to shorten the notice period:

- a) In exceptional or urgent cases such as extreme or exceptional market conditions or similar extraordinary situations
- b) In situations in which there is no stakeholder impact and it has been agreed that the notice period has to be shortened, but immediate communication is not possible. An example of a situation requiring urgent action is where the investor’s ability to replicate the index benchmark performance with their portfolio is no longer guaranteed. In such cases, changes or amendments to the published index methodology must be made on the day on which the new rule or change is implemented.
- c) To align with the period benchmark review dates and rebalancing of the benchmarks
- d) Where a material change in its methodology is proposed, STOXX shall share its evaluation of the key elements of the methodology that will be impacted by the change. In addition, STOXX Ltd. shall include an assessment of whether the representativeness of the benchmark and its appropriateness for its intended use will be put at risk if the proposed material change is not put in place. In the case of any changes or amendments to this DAX Equity Index Methodology Guide, STOXX ensures that both the public and subscribers are provided with detailed information on the nature and rationale of the changes, as well as the implications of, and terms for, the new methodology that will enter into force.

16. APPENDIX

16.1. HISTORICAL DATA

Index histories exist for all indices as from their baseline dates at the latest.

The DAX price index is a continuation of the Börsen-Zeitung Index, which historically extends back to October 1959. However, historical index levels for the DAX performance index are only available as from its baseline date in December 1987.

The time line for the CDAX price index extends back to 1970, while the history of the CDAX performance index is only available as from its baseline date in December 1987.

All histories up to and including June 18, 1999, are based on the prices recorded in floor trading on the Frankfurt Stock Exchange (FSE). Xetra and Frankfurt Stock Exchange prices have been used to calculate the indices since June 21, 1999.

16.2. DOCUMENT CHANGE HISTORY

Published Feb. 15, 2024 Effective Mar. 18, 2024	Version 12.2 – Launch of DAX, MDAX, SDAX, TecDAX 10% Capped and DAX, CDAX, HDAX UCITS Capped – Adjustment of the scale factor for DAXplus Maximum Dividend, DAXplus Minimum Variance, DAXplus Maximum Sharpe Ratio, DAXglobal China and DAXglobal Gold Miners from 1bn to 100bn – Adjustment of the DAX Advisory Board meeting schedule
Published Dec. 18, 2023 Effective Mar. 18, 2024	Version 12.1 – Increase of the capping limit for DAX, MDAX, SDAX and TecDAX from 10% to 15% – Inclusion of DAX 30 ESG – General improvement of wording throughout the document
Published Sept. 29, 2023 Effective Mar. 18, 2024	Version 12.0 – Initial development of the document – Restructuring of the DAX index guides – Changes to the DAX calculation formula, corporate actions treatment and minor changes to various indices

16.2.1. DOCUMENT CHANGE HISTORY FOR THE FORMER GUIDE TO THE DAX EQUITY INDICES

Published June 2, 2023 Effective June 2, 2023	Version 11.3.4 – Discontinuation of DAX International 100 & DAX International Mid 100
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Published Apr. 5, 2023 Effective Apr. 5, 2023	Version 11.3.3 – Clarifications of how to determine the free float (section 2.3) and share capital (section 2.5)
Published Mar. 7, 2023 Effective Mar. 7, 2023	Version 11.3.2 – Discontinuation of DAXsubsector Oil & Gas (Distribution) index
Published Feb. 28, 2023 Effective Feb. 28, 2023	Version 11.3.1 – Clarification of the conditions leading to exclusion from ranking (section 4.1.1.2) – Clarification regarding companies that fail to publish required financial information in time (section 5.1.2) – Clarification of the data source used in section 6.2.2
Published Aug. 3, 2022 Effective Aug. 3, 2022	Version 11.3.0 – Change to the methodology used for the quarterly review process, introducing the quarterly underlying data announcement and bringing forward the review schedule to the second Friday (t-5) in section 7. Insertion of a new section 7.1 to reflect the changes.
Published June 28, 2022	Version 11.2.9 – Changes to section 4.1.1.1 following the amendment of section 107 of the German Stock Corporation Act (Aktiengesetz — AktG) and the German Corporate Governance Code
Published Apr. 14, 2022	Version 11.2.8 – Launch of the DAX JPY TTM, a currency conversion of the DAX EUR based on the JPY TTM spot rate
Published Feb. 25, 2022 Effective Feb. 25, 2022	Version 11.2.7 – Clarification of the wording of section 4.1.1.2 regarding how to determine order book volumes in the case of segment changes – Clarification of the wording of section 4.1.1.3 regarding the DAX selection criteria (EBITDA criterion) – Clarification of the wording of section 4.1.1.1 regarding the basic criteria applicable to foreign companies – Clarification of the wording of section 5.1.6 regarding the assumptions to be used when establishing whether the basic criteria have been met during tender offers
Published Feb. 3, 2022 Effective Feb. 3, 2022	Version 11.2.6 – Clarification of rule 5.1.4 on extraordinary free float adjustments: addition of the cancellation of a tender offer as a possible trigger for an extraordinary adjustment
Published Nov. 8, 2021 Effective Nov. 8, 2021	Version 11.2.5 – Transition from EONIA to the euro short-term rate (€STR) as the new risk-free interest rate for the X-MDAX and X-TecDAX in section 6.2
Published Sept. 15, 2021	Version 11.2.4 – Addition of DAX ex Financials 30 to section 5.1.2

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Published Aug. 2, 2021 Effective Aug. 30, 2021	Version 11.2.3 – Discontinuation of the ÖkoDAX
Published July 22, 2021 Effective Aug. 30, 2021	Version 11.2.2 – Rule change: Amendment of section 6.3.4 regarding the opening criteria for the DAX, due to the change in the number of index constituents
Published June 28, 2021 Effective Aug. 30, 2021	Version 11.2.1 – Integration of Version 11.1.7
Published June 9, 2021 Effective Aug. 30, 2021	Version 11.2 – Rule change: Introduction of the turnover rate and addition of minimum liquidity as a basic criterion in section 2.6 and section 4.1.1.1 – Rule change: Removal of selection by order book volume in the relevant sections for the selection indices (sections 4.1.1.1, 4.1.1.2, 4.1.3, 4.1.4 and 4.1.5) – Rule change: Implementation of the increase in the number of DAX constituents from 30 to 40 and decrease in the number of MDAX constituents from 60 to 50 in sections 3.1, 4.1.1, 4.1.5.4 and 6.3.4
Published June 28, 2021	Version 11.1.7 – Alignment of the ranking list publication date in non-review with review months in section 11.2
Published May 28, 2021	Version 11.1.6 – Clarification of the wording regarding universe extension in sections 2.11 and 4.3 – Discontinuation of the General Standard index on May 31, 2021
Published Apr. 23, 2021	Version 11.1.5 – Clarification of the admission criterion regarding compliance with the German Corporate Governance Code in section 4.1.1.1 – Clarification of the wording of the selection rule for the ÖkoDAX in sections 3.1 and 4.8
Published Jan. 18, 2021 Effective Feb. 25, 2021	Version 11.1.4 – Clarification of the application of the requirements in section 4.1.1.1
Published Jan. 7, 2021 Effective Feb. 25, 2021	Version 11.1.3 – Correction: Incorrect wording in section 4.1.1.1 regarding the half-yearly financial reporting requirements
Published Dec. 30, 2020 Effective Feb. 25, 2021	Version 11.1.2 – Clarification of the definition of EBITDA in section 4.1.1.2
Published Dec. 22, 2020 Effective Feb. 25, 2021	Version 11.1.1 – Correction of the tables in section 4.1 “Equity Index Rankings” – Correction of references to section 11.3 “Sector Classification”

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Published Dec. 16, 2020 Effective Feb. 25, 2021	Version 11.1 – Rule change: Removal of the Prime Standard requirement in sections 3.1 and 4.1 – Rule change: Introduction of additional basic criteria in section 4.1.1.1 – Rule change: Additional basic criteria added to section 5.1.2 – Rule change: Change in the review schedule for the DAX and DAX-derived indices in sections 4.1.1, 4.1.4, 4.1.3 and 4.1.5
Effective Nov. 24, 2020	Version 10.4 – Rule change: Introduction of the profitability requirement for the DAX in section 4.1.1.2
Effective Nov. 23, 2020	Version 10.3.4 – Introduction of net return versions of the CDAX and Prime All Share indices – Clarification of how to determine the subscription price in section 8.2.1
Effective Nov. 9, 2020	Version 10.3.3 – Introduction of the DAX 50 ESG Daily Settlement index
Effective Oct. 9, 2020	Version 10.3.2 – Clarification to the rule in section 5.1.5 on determining the deletion price
Effective Aug. 19, 2020	Version 10.3.1 - Rule change: Addition of “Insolvency of Companies” section
Effective Aug. 19, 2020	Version 10.3 - Rule change in section 5.1.1 “Insolvency of Companies”
Effective Aug. 3, 2020	Version 10.2.12 - Decommissioning of selected DAXsupersector, DAXsector, DAXsubsector and DAXsubsector All indices
Effective July 8, 2020	Version 10.2.11 - Clarification of wording in section 2.6 - Amendment to sections 4.2.1 and 4.3.1.1
Effective June 26, 2020	Version 10.2.10 - Introduction of a CZK variant of the DAX
Effective June 20, 2020	Version 10.2.9 - Clarification of section 5.1.1 “Insolvency of Companies”
Effective June 15, 2020	Version 10.2.8 - Governance update, clarification of sections 1.3, 1.4 and 9 - Correction of wording in section 4.1.5.4 relating to the Fast Exit Rule
Effective Apr. 20, 2020	Version 10.2.7 - Rule enhancement in section 5.1.4: Adjustment for market cap neutral free-float changes - Rule clarification in section 4.1.1.2: Aggregation of turnover in the case of mergers
Effective Mar. 20, 2020	Version 10.2.6 - Updated meeting schedule for the Advisory Board - Correction of mistranslation from the former German version in section 2.11

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Effective Mar. 5, 2020	Version 10.2.5 - Clarification of section 5.1.7
Effective Mar. 4, 2020	Version 10.2.4 - Launch of DAX 50 ESG
Effective Feb. 10, 2020	Version 10.2.3 - Correction of incorrect wording in sections 4.1.1.1 and 4.1.1.3
Effective Jan. 17, 2020	Version 10.2.2 - Harmonization of the usage of the terms “Xetra” and “Frankfurt Stock Exchange”/“FSE” throughout the rule book
Effective Oct. 16, 2019	Version 10.2.1 - Amendments to change handling in sector classifications for the DAX ex Financials and DAX ex Financials 30 (sections 4.1.4 and 4.1.5)
Effective Oct. 2, 2019	Version 10.2 - Clarifications relating to changes in how to determine the EONIA rate
Effective for index calculations as of September 2019	Version 10.1.1 - Clarifications to former Version 9.3.0 with respect to the EU Benchmark Regulation — changes in how to calculate volatility criteria (section 5.1.3) that cease to apply as of Sept. 23, 2019
Effective Aug. 16, 2019	Version 10.1 - Clarifications to former Version 9.2.4 with respect to the EU Benchmark Regulation - Changes relating to the transfer of index administration to STOXX Ltd. - Inclusion of the ÖkoDAX in the Equity Guide (section 4.1.6)
Effective June 26, 2019	Version 9.2.4 - Amendment to section 8.4 “Spin-offs” to cover multiple spin-offs - Changes to references to family ownership in section 2.3 “Free Float” due to the new Market Abuse Regulation (MAR)
Effective for index calculations as of December 2018	Version 9.2.3 - Removal of two-month EURIBOR from the calculation of the X indices
Effective Oct. 23, 2018	Version 9.2.2 - Change in the logic used in timing Advisory Board meetings - Inclusion of the cutoff time as well as the cutoff date when creating ranking lists - Rule clarification for section 4.1.1.2 relating to inclusion in the ranking list in the event of multiple share classes - Deletion of section 4.1.1.4 “Transition Rules” and deletion of the note about the relevance of the Index Guide/transition rules - Renewed introduction of sequential creation of the ranking list - Correction to the wording regarding the X indices - Clarification of the chaining process used with equal weighted indices
Effective Sept. 24, 2018	Version 9.2.1 - Termination of calculation and dissemination of the Midcap Market index
Effective Aug. 31, 2018	Version 9.2.0 - Addition of note about the relevance of the Index Guide/transition rules

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	- Addition of section 4.1.1.4: "Transition Rules"
Effective June 5, 2018	Version 9.1.0 - Launch of the DAX Net Return CHF - Section 9.6: Inclusion of DAX currency variants
Effective for index calculation as of September 2018 rebalancing	Version 9.0.0 - Change in index methodology for the MDAX, SDAX and TecDAX and for indices derived from these (e.g., the HDAX): elimination of the distinction between Tech and Classic in the MDAX and SDAX selection criteria; inclusion of specific DAX companies in the TecDAX - Increase in the number of MDAX components from 50 to 60 and in the number of SDAX components from 50 to 70
Effective May 28, 2018	Version 8.6.0 - Section 4.1.1.3: Change to the Fast Exit rule
Effective May 16, 2018	Version 8.5.0 - Launch of the DAX ex Financials 30 Net Return
Effective Feb. 7, 2018	Version 8.4 - Launch of the Scale 30
Effective Dec. 29, 2017	Version 8.3.0 - Amendments to selection criteria for ex Financials indices (sections 4.1.2 and 4.1.4)
Effective May 8, 2017	Version 8.2.1 - Changes to contact details
Effective Mar. 15, 2017	Version 8.2.0 - Discontinuation of Entry All Share and Entry Standard indices - Changes to index methodology for all indices that are based on the Entry Standard segment: the Scale All Share replaces the Entry All Share
Effective Mar. 1, 2017	Version 8.1.0 - Section 4.1.1.2: Introduction of sequential creation of the ranking list in order to make changes in the DAX transparent in the MDAX, SDAX and TecDAX ranking lists - Section 5.1.6: Change to the requirements for conversion into tendered shares
Effective Nov. 30, 2016	Version 8.0.2 - Section 4.1.1.1: Correction to the wording in section 4.1.1.2 - Section 4.1.1.1: Relocation of the reference to the minimum elapsed time since first listing in the basic criteria in section 4.1.1.2 - Section 6.3.4: Concretization of the DAX opening criteria - Introduction of net return versions for the DAX, MDAX, SDAX and TecDAX - Section 3.4.1: Introduction of the XDAXDAX
Effective Sept. 5, 2016	Version 8.0.1 - Change to the English version of the Guide to the Equity Indices of Deutsche Börse only – section 4.1.1.3: Correction to the wording for the Regular Exit rule
Effective Sept. 5, 2016	Version 8 - Section 4.1.1: Introduction of purely quantitative rules for the composition of the MDAX, SDAX and TecDAX, based on the DAX model
Effective May 31, 2016	Version 7.2 - Section 4.1.1.1: Correction of paragraph on the expanded basic criteria for foreign companies
Effective Apr. 26, 2016	Version 7.1

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	- Section 3: Correction of a typo in the “General Index Information” table falsely identifying the General Standard index as FF MCap when it is actually MCap-weighted - Section 6.3.6: Editing of the wording regarding the index-specific deviation threshold from one index tick to another
Effective Jan. 18, 2016	- Section 6.3 - Change in the DAX opening criterion from 9:03 a.m. to 9:06 a.m.
Effective Dec. 15, 2015	Version 7.0 - Restructuring of the Guide

16.2.2. DOCUMENT CHANGE HISTORY FOR THE FORMER GUIDE TO THE DAX STRATEGY INDICES

Effective Aug. 22, 2023	Version 3.48 - Clarification of the currency used to calculate the carbon intensity figure for the DAX ESG Target (section 3.18.1)
Effective June 2, 2023	Version 3.47 - Termination of the idDAX Leveraged/Short NC indices
Effective Feb. 28, 2023	Version 3.46 - Clarification of the data source in section 2.5
Effective Dec. 19, 2022	Version 3.45 - Clarification of the extraordinary review rule for the DivDAX/DivMSDAX (section 2.1) and the DAXplus Maximum Dividend (section 2.9)
Effective Nov. 21, 2022	Version 3.44 - Launch of the DAX Futures Switch and DAX Futures Leverage indices
Effective Nov. 11, 2022	Version 3.43 - Change to the DAX ESG Target methodology (addition of Controversy Ratings)
Effective Oct. 5, 2022	Version 3.42 - Renaming of the DAX ESG+ to the DAX 50 ESG+
Effective Sept. 2, 2022	Version 3.41 - Launch of the DAX ESG+ - Change to the selection rule for the DAXplus Maximum Dividend (section 2.9)
Effective Aug. 3, 2022	Version 3.4 - Change to the methodology used for the quarterly review process, introducing the quarterly underlying data announcement and bringing forward the review schedule to the second Friday (t-5) for the DivDAX, DivMSDAX, DAXplus Seasonal Strategy, DAXplus Export Strategy, DAXplus Family, DAXplus Minimum Variance, DAXplus Maximum Sharpe Ratio, idDAX 50 Equal Weight, DAX Equal Weight, DAX ESG Target, DAX ESG Screened, MDAX ESG Screened and MDAX ESG+. The changes to each index are shown in section 3 individually.
Effective May 30, 2022	Version 3.30 - Launch of the MDAX ESG+
Effective May 20, 2022	Version 3.29

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	– Addition of product involvement screening for thermal coal power generation to the DAX/MDAX ESG screened indices (section 2.18)
Effective May 6, 2022	Version 3.28 – Change to the DAXplus Maximum Dividend: Implementation of an additional measure to the index selection process
Effective Apr. 14, 2022	Version 3.27 – Launch of the DAX Monthly Hedged JPY TTM indices based on the DAX JPY TTM currency conversion
Effective Apr. 1, 2022	Version 3.26 – Correction of the wording in sections 2.18 and 3.19 relating to the ESG screened indices
Effective Feb. 28, 2022	Version 3.25 – Launch of the DAX ESG Screened and MDAX ESG screened indices
Published Nov. 17, 2021 Effective Nov. 19, 2021	Version 3.24 – Launch of the idDAX 50 ESG NR Decrement 4.0%
Published Nov. 8, 2021 Effective Nov. 8, 2021	Version 3.23 – Transition from EONIA to the euro short-term rate (€STR) in the methodology for the following indices: – DAX Risk Control indices as the risk-free money market investment – sections 1.13, 2.13 and 3.9 – Leverage and Short indices as the interest term in the calculation formula – sections 2.16 and 3.3 – idDAX Leveraged/Short NC indices as the interest term in the calculation formula – section 3.14
Effective Sept. 15, 2021	Version 3.22 – Implementation of changes to the number of DAX constituents in the calculation formulas for the DAXplus Minimum Variance Germany and DAXplus Maximum Sharpe Ratio Germany (section 3.4)
Published July 8, 2021 Effective Aug. 30, 2021	Version 3.2 – Alignment of the idDAX 50 index methodology with changes to the DAX selection indices methodology introduced in the course of the DAX reform
Effective July 16, 2021	Version 3.12 – Clarification that decrement indices have a floor value of zero
Effective Apr. 1, 2021	Version 3.11 – Launch of the DAX ESG Target
Effective Feb. 25, 2021	Version 3.10 – Rule change: Removal of the requirement for a Prime Standard listing from the idDAX 50 Equal Weight (section 1.16)
Effective Jan. 18, 2021	Version 3.9 – Changes to the index calculation times due to the introduction of the Xetra Trade-at-Close trading phase
Effective Nov. 5, 2020	Version 3.8 – Change to the Fast Exit rule for the DivDAX and DivMSDAX
Effective June 26, 2020	Version 3.7 – Launch of the DAX Daily Hedged CZK

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Effective June 15, 2020	Version 3.6 – Governance update, clarification of sections 3.16.1, 3.17.2, 5.3, 5.4, 5.7.2 and 5.9
Effective Apr. 2, 2020	Version 3.5 – Clarification of the wording in section 2.9
Effective Mar. 16, 2020	Version 3.4 – Clarification of the wording in section 2.9
Effective Mar. 10, 2020	Version 3.3 – Deletion of the idDAX 12x Leveraged NC (TR) (EUR), idDAX 14x Leveraged NC (TR) (EUR) and idDAX 15x Leveraged NC (TR) (EUR) indices
Effective Oct. 2, 2019	Version 3.2 Clarifications relating to changes in how to determine the EONIA rate
Effective Oct. 16, 2019	Version 3.1 – Clarifications with respect to the EU Benchmark Regulation and changes relating to the transfer of index administration to STOXX Ltd.
Effective Apr. 30, 2019	Version 2.30 Change to the selection and capping rules for the DAXplus Maximum Dividend
Effective Nov. 16, 2018	Version 2.29 Launch of the DAX Equal Weight
Effective May 16, 2018	Version 2.28 – Launch of the DAXplus Maximum Dividend Net Return
Effective Sept. 11, 2017	Version 2.27 – Launch of the idDAX Leveraged/Short NC indices
Effective Aug. 3, 2017	Version 2.26 Launch of the idDAX 50 Equal Weight and idDAX 50 Equal Weight Decrement 4.0%
Effective Mar. 20, 2017	Version 2.25 Change of data provider for the DAXplus Family indices' shareholder structures
Effective Apr. 25, 2016	Version 2.24 – Editing of the wording regarding the index-specific deviation threshold from one index tick to another – Correction of the starting date for using Xetra prices to calculate the DAX
Effective Sept. 8, 2015	Version 2.23 – Launch of the DAXplus 30 Decrement 40
Effective June 2, 2015	Version 2.21 – Change in the reverse split trigger level for Leverage/Short indices
Effective May 8, 2015	Version 2.21 – Launch of the monthly currency hedged indices
Effective Apr. 9, 2015	Version 2.20 – Launch of the LevDAX x9, LevDAX x10, ShortDAX x9 and ShortDAX x10
Effective Mar. 23, 2015	Version 2.19 – Change in review frequency for the DAXplus Family indices
Effective Feb. 17, 2015	Version 2.18 – Change to the selection and capping rules for the DAXplus Maximum Dividend
Effective Dec. 22, 2014	Version 2.17 – Clarifications to the rule book in line with the IOSCO Principles
Effective Aug. 28, 2014	Version 2.16 – Launch of the ShortMDAX

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Effective Aug. 20, 2014	Version 2.15 – Launch of the HDAX Hedged
Effective Jan. 27, 2014	Version 2.14 – Change to section 3.3.3 “Daily leverage and short indices”
Effective Oct. 25, 2013	Version 2.13 – Amendment of the extraordinary replacement rule in the DAXplus Maximum Dividend
Effective Aug. 16, 2013	Version 2.12 – Update to contact details (Appendix)
Effective July 25, 2013	Version 2.11 – Modifications due to extreme market movements
Effective February 25, 2013	Version 2.9 – Rule adjustments to the daily leverage and daily short indices – Description of price-relevant capital changes in section 4
Effective Nov. 26, 2012	Version 2.9 – Amendments to the rules for the LevDAX x3 and ShortDAX x3 indices
Effective July 23, 2012	Version 2.7 – Launch of additional LevDAX and ShortDAX indices
Effective July 2012	Version 2.6 – Launch of the DAXplus Minimum Variance/Maximum Sharpe Ratio Net Return indices
Effective May 16, 2011	Version 2.6 – Launch of the DivMSDAX
Effective Apr. 4, 2011	Version 2.5 – Launch of the DAX Risk Control indices
Effective Mar. 9, 2011	Version 2.4 – Launch of LevDAX Optimal
Effective Jan. 17, 2011	Version 2.3 – Launch of the ShortTecDAX
Effective Dec. 17, 2010	Version 2.2 – Inclusion of borrowing costs in the short indices
Effective Sept. 27, 2010	Version 2.1 – Launch of the LevDAX x2 Monthly and ShortDAX x2 Monthly
Effective Jan. 4, 2010	Version 2.0 – Introduction of the DAXplus Family
Effective Aug. 28, 2009	Version 1.19 – Changed chaining date for the DAXplus Maximum Dividend
Effective May 4, 2009	Version 1.18 – Launch of the DAX Dividend Points and DivDAX Dividend Points indices
Effective Apr. 27, 2009	Version 1.17 – Launch of the DAXplus Risk Trigger Germany
Effective Mar. 30, 2009	Version 1.16 – Launch of the LevDAX x4, ShortDAX x2 and ShortDAX x4

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Effective Mar. 9, 2009	Version 1.15 – Launch of the DAXplus Maximum Dividend
Effective Feb. 5, 2009	Version 1.14 – Concretization of exception handling in the DivDAX
Effective Dec. 16, 2008	Version 1.13 – Launch of DAXplus Directors Dealings Germany
Effective Mar. 31, 2008	Version 1.12 – International indices moved to the “Guide to the International Strategy Indices of Deutsche Börse”
Effective Sept. 3, 2007	Version 1.11 – Launch of the DAXplus Maximum Sharpe Ratio Japan (JPY) and DAXplus Minimum Variance Japan (JPY)
Effective July 9, 2007	Version 1.10 – Launch of the DAXplus Maximum Sharpe Ratio France, DAXplus Maximum Sharpe Ratio Japan, DAXplus Maximum Sharpe Ratio Switzerland and DAXplus Maximum Sharpe Ratio US
Effective July 9, 2007	Version 1.10 – Launch of the DAXplus Minimum Variance France, DAXplus Minimum Variance Japan, DAXplus Minimum Variance Switzerland, DAXplus Minimum Variance US
Effective June 12, 2007	Version 1.9 – Launch of the DAXplus Maximum Sharpe Ratio Germany
Effective May 29, 2007	Version 1.8 – Launch of the DAXplus Minimum Variance Germany
Effective Mar. 27, 2007	Version 1.7 – Launch of the ShortDAX
Effective Aug. 7, 2006	Version 1.6 – Launch of the DAXplus Protective Put
Effective June 28, 2006	Version 1.5 – Launch of the LevDAX
Effective June 6, 2006	Version 1.4 – New cap limit for the DAXplus Seasonal Strategy
Effective Jan. 23, 2006	Version 1.3 – Launch of the DAXplus Covered Call
Effective Oct. 24, 2005	Version 1.2 – Launch of the DAXplus Export Strategy
Effective May 13, 2005	Version 1.1 – Launch of the DAXplus Seasonal Strategy

16.2.3. DOCUMENT CHANGE HISTORY FOR THE FORMER GUIDE TO THE DAXGLOBAL INDICES

Effective Aug. 2023	Version 3.6.5 – Update to sectors screened for the DAXglobal Agribusiness
Effective June 2023	Version 3.6.4 – Termination of the DAXglobal Asia, DAXglobal Water, DAXglobal Asia Food & Beverages, DAXglobal Asia Basic Resources, DAXglobal Asia Infrastructure/Transportation and DAXglobal Asia Technology & Telecommunication indices
Effective Apr. 2023	Version 3.6.3

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	– Addition of section 4.8.2 “U.S. Securities and Exchange Holding Foreign Companies Accountable Act (HFCAA)”
Effective Mar. 2023	Version 3.6.2 – Correction of the closing price used for unscheduled replacements in section 4.9.3
Effective Feb. 2023	Version 3.6.1 – Clarification of the data source in section 3.1 – Correction of the closing price used for unscheduled replacements in section 4.9.3
Effective Sept. 2022	Version 3.6 – Discontinuation of the DAXglobal Latin America
Effective Aug. 2022	Version 3.5 – Change to the methodology used for the quarterly review process, introducing the quarterly underlying data announcement and bringing forward the review schedule to the second Friday (t-5). The changes are implemented in section 4.9.
Effective May 2022	Version 3.4 – Discontinuation of the DAXglobal Russia and DAXglobal Russia+
Effective Mar. 2022	Version 3.3 – Removal of Russia from the list of eligible countries in the DAXglobal BRIC 2.1.2 and reduction in the number of constituents to 30 – Addition of Russia as a non-eligible exchange for the DAXglobal Agribusiness and DAXglobal Water (section 2.2.1) – Removal of Russia from the list of exchanges in Appendix 8.2 that is used to determine the list of eligible countries for the DAXglobal Gold Miners in section 2.2.2
Effective Mar. 2022	Version 3.2.2 – Update of the wording in section 4.8.1 regarding the deletion price of a constituent from zero to 0.001 in local currency
Effective Feb. 2022	Version 3.2.1 – Change to the list of eligible exchanges on which ADRs and GDRs can be traded for the DBIX Deutsche Börse India, DAXglobal BRIC, DAXglobal Russia, DAXglobal Russia+, DAXglobal Asia and DAXglobal Asia sector indices
Effective Sept. 2021	Version 3.2 – Discontinuation of the DAXglobal China Sector family, the DAXglobal Vietnam, DAXglobal Austria Dividend, DAXglobal Austria Eastern Europe Exposure, DAXglobal Emerging 11, DAXglobal Shipping, DAXglobal Steel and certain DAX Asia sector indices
Effective Jan. 2021	Version 3.1.7 – Change to the calculation times for the DAXglobal Austria Dividend and DAXglobal Austria Eastern Europe Exposure indices
Effective Oct. 2020	Version 3.1.6 – Discontinuation of the DAXglobal Africa and DAXglobal GCC
Effective Oct. 2020	Version 3.1.5 – Clarification in section 4.9.3 of the deletion price to be used with mergers and acquisitions
Effective Sept. 2020	Version 3.1.4 – Clarifications in section 3.3 relating to the DAXglobal Emerging Markets – Discontinuation of the DAXglobal Alternative Energy
Effective June 2020	Version 3.1.3 – Governance update to sections 1.1, 4.3.2, 6, 7.2.2 and 7.2.3

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Effective Apr. 2020	Version 3.1.2 – Correction of incorrect cross-references and criteria definitions in tables 3.2 and 3.3
Effective Oct. 2019	Version 3.1.1 – Clarifications with respect to the EU Benchmark Regulation
Effective Aug. 2019	Version 3.1 – Clarifications with respect to the EU Benchmark Regulation and changes relating to the transfer of index administration to STOXX Ltd.
Effective Sept. 2018	Version 2.21 – Discontinuation of the DAXglobal Austria Mid-Cap, DAXglobal Nuclear Energy and DAXglobal Coal – Amendments to the selection and weighting criteria for the DAXglobal Africa and DAXglobal GCC – Amendments to the selection criteria for the DAXglobal Emerging 11 – Concretization of the selection criteria for the DAXglobal Gold Miners, DAXglobal Steel and DAXglobal Shipping – Correction to the list of eligible exchanges
Effective Dec. 2014	Version 2.20 – Clarifications to the rule book in line with the IOSCO Principles
Effective Feb. 2013	Version 2.18 – Amendments to the “Special Consideration of Critical Economic Situations as well as treatment of trading suspensions and trading restrictions” section – Amendments to the selection criteria for the DAXglobal Nuclear Energy
Effective Dec. 2011	Version 2.14 – Treatment of stock suspensions
Effective July 2011	Version 2.13 – Launch of additional net return indices – Amendments to the inclusion rules for the DAXglobal China indices
Effective June 2011	Version 2.12 – Amendments to 40/10/5 capping – Amendments to the inclusion rules for the DAXglobal Russia+
Effective Mar. 2010	Version 2.10 – Launch of the DAXglobal China Urbanization
Effective Feb. 2010	Version 2.9 – Change in the rebalancing time line
Effective Dec. 2009	Version 2.8 – Amendments to the selection criteria for the DAXglobal India, DAXglobal Russia, DAXglobal Russia+, DAXglobal Vietnam, DAXglobal Nuclear Energy and DAXglobal Agribusiness
Effective Nov. 2009	Version 2.7 – Launch of the DAXglobal Gold Miners – Launch of the DAXglobal Coal – Launch of the DAXglobal Shipping – Launch of the DAXglobal Steel
Effective Mar. 2009	Version 2.6 – Amendments to the selection criteria for the DAXglobal Russia+, DAXglobal Nuclear Energy and DAXglobal Agribusiness

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Effective Dec. 2008	Version 2.5 – Launch of the DAXglobal GCC – Launch of the DAXglobal Latin America
Effective Oct. 2008	Version 2.4 – Changes to withholding tax – Change to calculation period
Effective June 2008	Version 2.3 – Launch of the DAXglobal Africa
Effective Mar. 2008	Version 2.2 – Launch of the DAXglobal Vietnam
Effective Mar. 2008	Version 2.1 – Launch of the DAXglobal Water
Effective Feb. 2008	Version 2.0 – Launch of the DAXglobal China – Launch of the DAXglobal China sector indices
Effective Dec. 2007	Version 1.15 – Changes to the weighting concept for the DAXglobal Asia and DAXglobal Asia sector indices
Effective Oct. 2007	Version 1.14 – Launch of the DAXglobal Austria Dividend – Launch of the DAXglobal Austria Eastern Europe Exposure – Launch of the DAXglobal Austria Mid-Cap
Effective Oct. 2007	Version 1.13 – Launch of the DAXglobal Sarasin Sustainability Germany – Launch of the DAXglobal Sarasin Sustainability Switzerland
Effective Sept. 2007	Version 1.12 – Changes to withholding tax – Changes to the adjustment of the DAXglobal Emerging 11 total return index using net dividends
Effective Aug. 2007	Version 1.11 – Change in the calculation frequency for the DAXglobal BRIC
Effective July 2007	Version 1.10 – Launch of the DAXglobal Agribusiness – Launch of the DAXglobal Nuclear Energy
Effective June 2007	Version 1.9 – Launch of the DAXglobal Emerging 11
Effective Mar. 2007	Version 1.8 – Launch of the double cap limit for the DAXglobal Alternative Energy
Effective Mar. 2007	Version 1.7 – Launch of the DAXglobal Russia+
Effective Feb. 2007	Version 1.6 – Launch of the DAXglobal Asia sector indices
Effective Feb. 2007	Version 1.5 – Launch of the DAXglobal Asia
Effective Dec. 2006	Version 1.4 – Launch of the free float rule
Effective Oct. 2006	Version 1.3 – Inclusion of ADRs in the DAXglobal Alternative Energy

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Effective Aug. 2006	Version 1.2 – Launch of the DAXglobal Alternative Energy – Launch of the DAXglobal Russia
Effective June 2006	Version 1.1 – Launch of the DAXglobal BRIC
Effective Apr. 2006	Version 1.0 – Launch of the DBIX Deutsche Börse India index

16.2.4. DOCUMENT CHANGE HISTORY FOR THE FORMER GUIDE TO THE WORLD LUXURY INDEX

Effective July 2023	Version 1.4 – Clarification of subsector capping and the index ranking process – Addition of section 2.5.1 “US Securities and Exchange Holding Foreign Companies Accountable Act (HFCAA)”
Effective Aug. 2022	Version 1.3 – Change to the quarterly review process methodology to introduce quarterly underlying data announcement (UDA) dates, plus change in the review date to the second Friday (t-5). The changes can be found in section 2.6.
Effective Mar. 2022	Version 1.2 – Exclusion of Russian companies from the index universe
Effective Oct. 2008	Version 1.1 – Change to calculation period
Effective Feb. 2007	Version 1.0 – Launch of the World Luxury Index

16.2.5. DOCUMENT CHANGE HISTORY FOR THE FORMER GUIDE TO THE GEX EQUITY INDICES

Effective August 3, 2022	Version 2.1.5 – Change to the quarterly review process methodology to introduce quarterly underlying data announcement (UDA) dates, plus bringing forward the review schedule to the second Friday (t-5) in section 4. Addition of a new section 4.1 to reflect the changes.
Effective Oct. 9, 2020	Version 2.1.4 – Clarification of the deletion price used in section 3.6.2
Effective Aug. 19, 2020	Version 2.1.3 – Clarification of section 2.3
Effective June 17, 2020	Version 2.1.2 – Governance update/clarifications in sections: 1.9, 3.3.2, 6.2.2, 6.4 and 6.5.1
Effective Oct. 4, 2019	Version 2.1.1 – Clarifications to former version 2.1 with respect to the EU Benchmark Regulation

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Effective Aug. 16, 2019	Version 2.1 – Clarifications to former version 1.4 with respect to the EU Benchmark Regulation – Changes relating to the transfer of index administration to STOXX Ltd.
Effective Mar. 15, 2017	Version 1.4 – Change of data provider
Effective Mar. 18, 2015	Version 1.3 – Change in review frequency
Effective Dec. 19, 2014	Version 1.2 – Clarifications to the rule book in line with the IOSCO Principles
Effective Nov. 10, 2014	Version 1.1 – Clarification to selection criterion no. 5