What do C-suite executives need to know about indices?

August 2022

AUTHOR

David SolGlobal Head of Index Policy david.sol@lseg.com

Introduction

The executives of companies listing their shares on the London Stock Exchange often ask us about indices and their role. In this document we answer some of their most frequently asked questions.

Index basics

What is an index?

A formal definition of an index is that it's a figure that is publicly available and is regularly determined, either by applying a formula or other calculation, or by making an assessment based on the value of one or more underlying assets/prices (including estimated prices, actual or estimated interest rates, quotes and committed quotes, or other values or surveys).

In layman's terms, an index is a calculation that represents a hypothetical portfolio of securities designed to represent an asset class, market or market segment.

An index can be thought of as a recipe in a cookery book: it sets out the ingredients necessary to make a dish, together with the instructions to combine them.

As an index provider, FTSE Russell produces hundreds of recipes that investors can replicate. Investors should be able to follow the recipes step-by-step, which are known as the ground rules of an index, in order to produce a specific 'dish'. But the index is not the dish itself; it's just the guide to produce it.

Indices play an important and informative role at every stage of the investment process. Economists use them to understand and analyze economic trends and investors use indices to conduct risk analysis, develop investment policies and create asset allocation strategies.

"...an index is a calculation that represents a hypothetical portfolio of securities designed to represent an asset class, market or market segment."

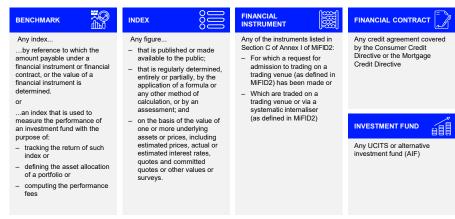


Most investors use indices to evaluate the performance of their investment portfolios. Indices are also used as a basis for investable products, such as index mutual funds or exchange-traded funds (ETFs) that track or replicate an index as closely as possible. These allow for so-called passive (index-based) investment in a specific market, market segment or asset class.

In the EU, indices fall within the scope of the Benchmark Regulation, which took effect in 2018. The Regulation became law in the UK with effect from the end of the EU Exit Transition Period on 31 December 2020.

For a more detailed overview of the Benchmark Regulation, see <u>our FAQ on</u> the subject.

Exhibit 1: Benchmarks and indices—legal definitions



Who are the main index providers?

FTSE Russell, MSCI, S&P Dow Jones Indices, Morningstar, Bloomberg and STOXX | Qontigo are some of the best-known global index providers. These global index firms offer a variety of indices, covering different asset classes and strategies.

These, and several other index firms, are members of the Index Industry Association (IIA). This global body works with market participants, regulators and other representative bodies to promote sound practices in the index industry to strengthen markets and serve the needs of investors.

For further information on the IIA, please see: http://www.indexindustry.org/about-iia/.

What are the main benefits of index inclusion?

Passive funds have grown in popularity during the last two decades. According to the consultancy firm ETFGI, global assets in ETFs (most of which track indices) have risen from \$0.4 trillion in 2005 to \$10.3 trillion in 2022. These funds are a natural source of demand for the companies included in indices.

For any individual company, the extent of this demand is also determined by the way those indices are put together. For example, indices may be weighted by the market capitalization of their constituents or according to some other model.

Indices are also widely used in investment performance measurement among actively managed funds. Furthermore, indices underlie popular hedging instruments such as equity futures, options and swaps, creating demand from derivatives users.

"Indices are also widely used in investment performance measurement among actively managed funds."

Therefore, admission to an index tracked by an ETF or index fund, or widely used as a performance benchmark, means a potential boost in investor interest and company recognition.

Many academic studies have highlighted the existence of a positive 'index inclusion effect' on companies' share prices, meaning a share price rise between the date on which their future index inclusion is announced and the date on which the index inclusion becomes effective¹.

However, there is also evidence that this effect has become weaker over time, perhaps because traders and arbitrageurs have become more sophisticated in anticipating future index changes.

What is the relationship between liquidity and index inclusion?

Index inclusion should be positively correlated with equity liquidity.

One long-standing academic hypothesis is that the inclusion of a stock in an index results in an increase of publicly available information. Reduced information asymmetry then leads to increased trading volume², resulting in a lower bid-offer spread for that stock.

Another reason for a positive correlation between index inclusion and stock liquidity is the way indices are constructed; equity indices typically specify a minimum liquidity threshold for index inclusion.

For example, constituents of the FTSE UK Index Series must turn over at least 0.015% of their shares in issue (after the application of any investability weightings³), based on their monthly median, for at least eight of the 12 months prior to the annual index review. The threshold for non-constituents is higher, with a minimum required turnover of at least 0.025% for at least 10 of the 12 months prior to the annual index review.

For which FTSE Russell indices are London-listed companies eligible?

The criteria for inclusion in a FTSE Russell index are individual to the specific index series.

The eligibility criteria for all FTSE Russell indices are set out in the relevant index ground rules, which are published on the FTSE Russell website.

In general, the screens applied for inclusion in an equity index may include company size, nationality, free float (the percentage of a company's shares considered to be freely available for public purchase), voting rights, foreign ownership and equity liquidity.

For more information, please see FTSE UK Index Series.pdf.

See "On the Changes to the Index Inclusion Effect with Increasing Passive Investment Management," Cameron Scari, University of Pennsylvania, 2016.

See "Institutional Trading and Security Prices: the case of changes in the composition of the S&P 500 index".
J.R Woolridge, Chinmoy Ghosh, 1986.

³ When testing liquidity, the published free float weight on the final trading day of each month is used for the calculation of the liquidity test for that month.

Are overseas companies listed in London eligible for FTSE Russell indices such as the FTSE 100/FTSE 250?

Non-UK incorporated companies, with a premium listing on the London Stock Exchange and a sterling-denominated price on the Stock Exchange Electronic Trading Service (SETS), may be eligible for inclusion in the FTSE UK Index Series (including the FTSE 100 or FTSE 250), subject to meeting all eligibility criteria as detailed within the FTSE UK Index Series ground rules.

The rules for a premium listing are set out by the Financial Conduct Authority (FCA) in its listing rules sourcebook.

In what way is the index inclusion process for the FTSE UK Index Series different for an overseas company?

The index inclusion process is not different for a non-UK incorporated company than for a UK-incorporated company, although the eligibility rules for the FTSE UK Index Series are different (see the next section).

FTSE UK Index Series

What are the eligibility criteria for the FTSE UK Index Series?

Only premium-listed equity shares, as defined by the Financial Conduct Authority, or FCA, in its listing rules sourcebook, which have been admitted to trading to the London Stock Exchange with a sterling-denominated price on SETS, are eligible for inclusion in the FTSE UK Index Series (which includes the well-known FTSE 100 and FTSE 250 indices). Standard-listed companies and depositary receipts are not eligible for inclusion in the FTSE UK Index Series.

Eligible securities are required to pass certain screens for index inclusion, such as nationality, minimum free float, minimum voting rights, foreign ownership restrictions, size and liquidity. Full details of these screens are detailed in the FTSE UK Index Series ground rules, section 6.

The minimum free float requirements for non-UK incorporated and UK-incorporated companies are different.

To be eligible for inclusion in the FTSE UK Index Series, a security must have a minimum free float of 10% if the issuing company is UK incorporated, and a minimum free float of 25%, if it is non-UK incorporated.

"Once a company obtains a premium listing on the London Stock Exchange and its equity passes the eligibility screens outlined in the FTSE UK Index Series ground rules, it is automatically considered for inclusion in the FTSE UK Index Series (and other FTSE Russell equity indices)."

Free float is the percentage of a company's shares that are considered to be freely available for public purchase. Determining a company's free float requires the analysis and classification of the company's shareholders. The procedures for this are described in the Ground Rules and the Free Float Restrictions.

What is the admission process to the FTSE UK Index Series for a London-listed company?

There is no admission process as such. Once a company obtains a premium listing on the London Stock Exchange and its equity passes the eligibility screens outlined in the FTSE UK Index Series ground rules, it is automatically considered for inclusion in the FTSE UK Index Series (and other FTSE Russell equity indices). It would normally be considered for inclusion at the next index review date, as set out in the index ground rules.

There are 'fast entry' rules enabling the immediate admission to the FTSE UK Index Series for companies passing a certain size threshold (if a company's full market capitalization ranks 75th or above in the monitored list and the security investable market capitalization is £2bn or more).

The minimum fast entry, full market capitalization requirement is set and published on the FTSE Russell website at the time of the quarterly reviews in March, June, September and December using data from the close of business on the Tuesday before the first Friday of the review month.

Are the eligibility and index admission processes different for companies traded on AIM?

Since they do not have a Main Market premium listing, companies traded on the London Stock Exchange's AlM market are not eligible for admission to the FTSE UK Index Series. However, they are eligible for admission to the FTSE AlM Index Series.

FTSE Russell index methodology

Do companies have any say in their consideration for index admission?

Index admission is determined by the index ground rules and admission policy cannot be influenced by any individual company. However, companies can have a say more broadly in the way FTSE Russell indices are built and maintained by means of the market consultation process.

FTSE Russell <u>regularly consults the market</u> on changes to the methodology of its indices to ensure that they continue to meet investors' requirements and define and lead global standards. Responses to these consultations provide valuable market feedback and may result in changes to the FTSE Russell index methodologies.

"...companies can have a say more broadly in the way FTSE Russell indices are built and maintained by means of the market consultation process."

FTSE Russell's indices are also overseen by 24 advisory committees, whose members are leading representatives from the asset manager, asset owner, custodian, broker and consultant communities. We also engage regularly with other stakeholders, such as central banks and regulators.

Who takes the decision to admit or remove companies?

There is no particular person or entity taking this decision—the admission of a company to (or removal from) a FTSE Russell index is determined by the **ground rules**.

The index ground rules and other methodology documents and policies, which underpin FTSE Russell indices, are written with the intent of removing the need for judgement or discretion, in so far as is feasible. It is rare to find unusual or complex circumstances that are not covered in the methodology documents, but if there were, these would be addressed by a policy document on the exercise of expert judgement.

What are the index ground rules?

An index's ground rules are the key reference document for anyone wishing to understand the methodology of the index. They cover the index's objective and its intended use, the management responsibilities of the entities responsible for calculating, producing and operating the index, relevant index policies (such as the calculation method or the management of corporate events and actions), the security inclusion criteria, screens for index inclusion and the index review frequency.

A glossary of the terms used in FTSE Russell's index ground rules is available here.

Who manages the index admission process at IPO time—broker, company or exchange?

None of the above. As mentioned earlier, the index admission policy is set by the index's ground rules. The admission of a newly listed company will be considered automatically at the next index review date (or, in the case of a large IPO, under the relevant index's fast entry rules).

How often are indices reviewed?

This depends on the index. The index review frequency is stated in the ground rules.

The FTSE UK Index Series, for example, is reviewed on a quarterly basis in March, June, September and December. The index reviews are based on data from the close of business on the Tuesday before the first Friday of the review month. Any constituent changes are then implemented after the close of business on the third Friday of the review month (i.e., they are effective from the beginning of trading on the following Monday).

The FTSE Global Equity Index Series (GEIS), FTSE Russell's flagship global equity benchmark⁴, is reviewed semi-annually in March and September.

See "Indexing the World", May 2022.

How are indices calculated?

The calculation methodology for FTSE Russell indices is set out in the relevant index's ground rules and, in certain cases, in a separate document (for example, the FTSE UK Index Series Guide to Calculation Methods).

These methodology documents set out in detail how an index is assembled and calculated. They make it easier for users to replicate the indices in order to support their investment and trading activities, and they assist users in understanding the component factors which influence the performance of the indices.

The documents also explain how index variants are calculated. These variants typically include capital and total return indices, net total return indices based on specified withholding tax rates, indices calculated in currencies other than the base currency, currency-hedged indices, capped indices and sector indices.

Some indices within an index series may be calculated in real time, while others are calculated at end of day only. Within the FTSE UK Equity Index Series, the main headline indices (such as the FTSE 100, FTSE 250, FTSE Small Cap and FTSE All-Share) are all calculated in real time, whereas the FTSE All-Share Sectors, FTSE All-Small, FTSE All-Small Sectors and FTSE 350 Industry Sectors have an end-of-day calculation.

How do consultations work?

FTSE Russell conducts <u>market consultations</u> to invite index users to provide feedback on potential changes to index methodologies. Past consultations have covered topics such as free float, fixed income country classification, nationality and voting rights.

In 2021, we conducted <u>a consultation</u> on the inclusion criteria for the FTSE UK Equity Index Series, covering two key areas: dual class share structures and the associated minimum voting rights requirement; and the minimum free float requirements. The consultation followed a proposal by the UK Financial Conduct Authority to make changes to the UK listing regime.

What happens if my company undergoes a corporate action such as a merger, stock split or special dividend?

Financial markets change continuously: markets increase and decrease in relative size, companies are listed, delisted, taken over and restructured, and securities produce cash flows. An important challenge for an index provider is to record the evolution of markets in a consistent and transparent way.

Corporate actions can be seen as changes in the nature of index constituents. They may impact equity indices in different ways and require detailed and careful examination by index providers.

A mandatory corporate action affects all shareholders: examples of a mandatory action include equity dividends, stock splits, bonus issues and spin-offs (demergers). Voluntary corporate actions include tender offers, rights issues and buybacks.

FTSE Russell's treatment of corporate actions and events is set out in detail in our guides for <u>capitalization-weighted</u> and <u>non-capitalization-weighted</u> indices, respectively.

"Some indices within an index series may be calculated in real time, while others are calculated at end of day only."

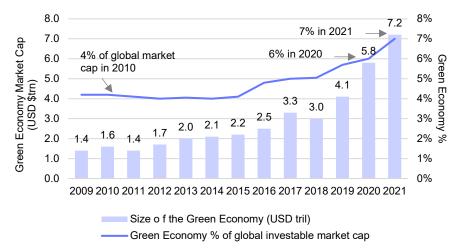
Green and sustainable indices

Does FTSE Russell operate green and sustainable indices?

Yes. FTSE Russell is one of the pioneers of green and sustainable indices: we launched the FTSE4Good index in 2001, at a time when environmental, social and governance-based (ESG) investment was still a niche topic and even shunned by many professionals.

In a recent research report, FTSE Russell estimated that the green economy has recorded a compound annual growth rate of around 14% over the last 12 years. With a market capitalization of over \$7trn and a weight of 7.1% of global equity markets, the green economy by itself would be the fifth largest industry, comparable in size to the fossil fuel sector.

Exhibit 2: Size of the green economy by market capitalization, 2009-2021



Notes: GR-weighted investable market cap. GR2.0 data, including disclosed information and estimates, for 2016 to 2020; Faded 2021 bar represents linear interpolation of 2020 FR data; Data for 2009 to 2015 is extrapolated using disclosed GR percentages and disclosed maximum and minimum ranges.

Source: FTSE Russell, May 2022

With decades of sustainable investment experience, FTSE Russell provides clients with sustainable investment data models, ratings, analytics, and indices covering thousands of companies and the main sovereign issuers globally.

Full details of our green and sustainable indices are available on $\underline{\text{the FTSE Russell}}$ website.

"FTSE Russell is one of the pioneers of green and sustainable indices: we launched the FTSE4Good index in 2001..."

How do they work?

The index objective and construction methodology of each FTSE Russell green or sustainable index is given in the index ground rules, available on the FTSE Russell website.

Two proprietary models are key in constructing our green and sustainable indices:

- ESG ratings and data: This model allows investors to understand a company's exposure to and management of ESG issues. The ESG ratings are comprised of an overall rating that breaks down into underlying pillar and theme exposures and scores. The pillars and themes are built on over 300 individual indicator assessments that are applied to each company's unique circumstances. The ESG Ratings cover 7,200 securities in 47 developed and emerging markets, comprising the constituents of the FTSE All-World Index, FTSE All-Share Index and Russell 1000 Index.
- Green Revenues: This model measures green revenues for over 16,000 equities, based on publicly disclosed information. Around 3,000 are currently found to have green products and services. In cases where detailed disclosures are lacking, the model leverages additional data (such as product volumes) to produce robust, bottom-up estimates of revenues from each company. The data captures 133 types of green products and services.

Can a company be included in a green and sustainable index but not be part of the FTSE 100 or FTSE 250?

Yes. The selection criteria for green and sustainable indices are separate from those for the FTSE UK Equity Index Series (which includes the FTSE 100 and FTSE 250).

What is the Green Economy mark?

The Green Economy mark is given to London-listed companies and funds that generate over 50% of their total annual revenues from products and services that contribute to the global green economy. For pre-revenue issuers, 100% of their business activity must be green to qualify.

FTSE Russell's Green Revenues model is used to capture and classify the revenue generated by a company from products and services that contribute to the transition to a green economy.

As at August 2020, more than 95 companies and funds had received the Green Economy mark, representing a combined market capitalization of more than £145bn across the London Stock Exchange Group's Main Market and AIM.

Index governance

Which regulatory body supervises the index industry (and FTSE Russell indices)?

Index firms are supervised and regulated both directly and indirectly (for example, by means of funds regulation).

Some of the most relevant global, regional and national regulations and guidelines are:

- The EU (and UK) Benchmark Regulation
- The International Organization of Securities Commissions (IOSCO) Benchmark Principles
- The ESMA Guidelines on ETFs and other UCITS issues
- The US ETF listing standards
- The EU Markets in Financial Instruments Regulation (MiFIR)

The UK's Financial Conduct Authority (FCA) has granted FTSE International Limited authorization as a benchmark administrator and FTSE International Limited is listed on the FCA Benchmarks Register. This authorization covers different asset classes and includes the FTSE, Russell, FTSE Canada equity and fixed income index brands that are used as benchmarks in the UK.

FTSE Russell also issues a Statement of Compliance with respect to the recommendations made by the International Organization of Securities Commissions (IOSCO) in the Principles for Financial Benchmarks Final Report (the IOSCO Principles).

How does an index provider manage potential conflicts of interest?

As a benchmark administrator, FTSE Russell has processes in place to identify, assess and manage potential conflicts of interest.

Any conflicts of interest are recorded in a Conflicts of Interest Register and reviewed periodically in line with our governance framework (see the chart below). Conflicts of interest may arise in areas including organizational ownership, index design, clients, partners or suppliers, individual employees and directors.

These processes are subject to review by the FTSE Russell Index Management Board on an annual basis, or more frequently if the possibility of a conflict arises. If a conflict is identified, management and compliance assess the nature of the conflict and determine what controls may be put in place to manage the conflict adequately, and any disclosure that may be required. In the event that satisfactory controls cannot be established, the activity will be declined or discontinued.

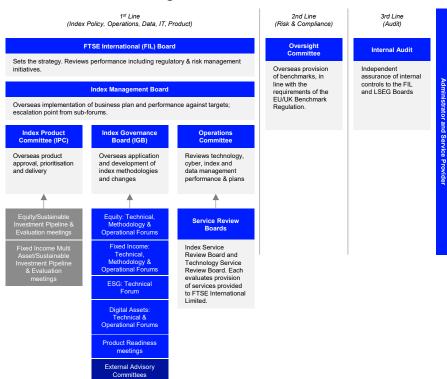


Exhibit 3: FTSE Russell governance framework

For more information, please see FTSE Russell Governance Framework.pdf.

How does FTSE Russell interact with asset managers?

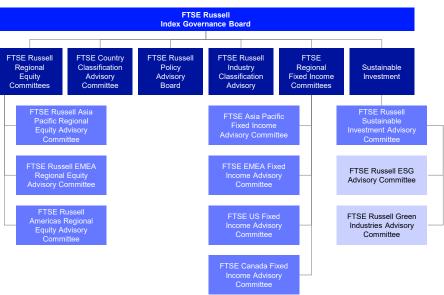
The primary means of interaction between FTSE Russell and asset managers is through our external advisory committees.

These committees are made up of leading investment market professionals from around the world.

Members are drawn from organizations that make use of FTSE Russell indices, both on the buy-side and sell-side. The firms typically include asset owners, asset managers and investment consultants, as well as representatives from the broking, custodian, securities lending, digital asset and other communities.

Committee members offer a depth of knowledge, unique viewpoints and share the objective of seeking to preserve the integrity of the indices and a transparent index review process.

Exhibit 4: FTSE Russell advisory committee structure



Note: Committees consist of leading market professionals from around the globe, including pension plan trustees, investment managers, consultants and other sector participants. Independent oversight of our index capability is central to our approach to doing business.

ABOUT FTSE RUSSELL

FTSE Russell is a leading global provider of index and benchmark solutions, spanning diverse asset classes and investment objectives. As a trusted investment partner we help investors make better-informed investment decisions, manage risk, and seize opportunities.

Market participants look to us for our expertise in developing and managing global index solutions across asset classes. Asset owners, asset managers, ETF providers and investment banks choose FTSE Russell solutions to benchmark their investment performance and create investment funds, ETFs, structured products, and index-based derivatives. Our clients use our solutions for asset allocation, investment strategy analysis and risk management, and value us for our robust governance process and operational integrity.

For over 35 years we have been at the forefront of driving change for the investor, always innovating to shape the next generation of benchmarks and investment solutions that open up new opportunities for the global investment community.

CONTACT US

To learn more, visit Iseq.com/ftse-russell; email info@ftserussell.com; or call your regional Client Service team office:

EMEA +44 (0) 20 7866 1810

Asia-Pacific

North America +1 877 503 6437

Hong Kong +852 2164 3333

Tokyo +81 3 6441 1430

Sydney +61 (0) 2 7228 5659

Disclaimer

© 2023 London Stock Exchange Group plc and its applicable group undertakings (the "LSE Group"). The LSE Group includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) The Yield Book Inc ("YB") and (7) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "The Yield Book®", "Beyond Ratings®" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of the LSE Group or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB or BR. FTSE International Limited is authorized and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by the LSE Group, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical error as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of the LSE Group nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly, or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or of results to be obtained from the use of FTSE Russell products, including but not limited to indexes, data and analytics, or the fitness or suitability of the FTSE Russell products for any particular purpose to which they might be put. Any representation of historical data accessible through FTSE Russell products is provided for information purposes only and is not a reliable indicator of future performance.

No responsibility or liability can be accepted by any member of the LSE Group nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any error (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analyzing, editing, transcribing, transmitting, communicating, or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of the LSE Group is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of the LSE Group nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of the LSE Group nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indexes cannot be invested in directly. Inclusion of an asset in an index is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

The information contained in this report should not be considered "research" as defined in recital 28 of the Commission Delegated Directive (EU) 2017/593 of 7 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council ("MiFID II") and is provided for no fee.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-tested calculations are based on the same methodology that was in effect when the index was officially launched. However, back-tested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change from month to month based on revisions to the underlying economic data used in the calculation of the index.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of the LSE Group nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of the LSE Group. Use and distribution of the LSE Group data requires a licence from FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB, BR and/or their respective licensors.

