

FTSE Convertible Indices Methodology

Revision 11 – FINAL



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Section 1

Introduction

FTSE Convertible Indices are a family of Indices that aim to represent the performance of the global market of Convertible Bonds available to institutional investors.

The index family was previously known as the UBS Global Convertible Indices. It was acquired by Refinitiv (now LSEG) in June 2014.

The Index family is comprised of the Global ('broad') Index and a number of Sub-Index families that are derived from the Global ('broad') Index based on a set of specific criteria defined for each Sub-Index family and is constructed to represent the market composition of a given segment of the Convertible Bond Market.

The composition of the Global ('broad') Index is determined on a continuous basis where additions to and deletions from the Index can happen throughout the month in line with the market events.

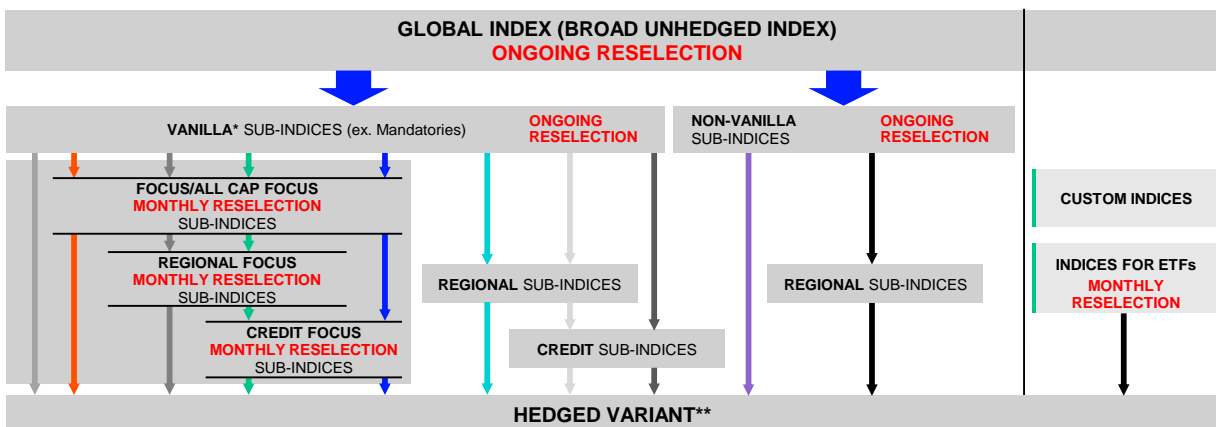
There are no periodic reselections for the Global and Continuous reselection Sub-Indices (Section 3.2). Monthly Sub-Indices such as Global Focus (Section 3.3) follow a monthly reselection cycle.

Concentration factors are recalculated monthly for any indices where capping is applied and/or at specific events (Section 5.3).

The Global Index, as well as most Sub-Indices, are produced in both regular and hedged variants with CHF, EUR, GBP, JPY, and USD being the prevalent currencies across the family.

Geographically Sub-Indices are available for Europe, US, Japan, Asia ex Japan, among other regions. Full list of published indices is available [here](#).

The basic index calculation method is a Market Capitalisation weighted chain-linked index calculation with income reinvestment (Total Return). The unit of measurement is Index Points. (Section 5.1)



*Those Sub-Indices that were not Vanilla from the start became Vanilla at different times, see a full list of available sub-indices and the relevant Vanilla dates [here](#).
 **Some indices do not have a hedged variant.

A number of Sub-Indices such as Qualified, Qualified Monthly Hedged, and Monthly Europe Focus have been constructed to support the ETF funds. ETF indices are calculated as described in the dedicated Methodology.

Section 2

FTSE Global Convertible Index maintenance

2.1 General

The overall approach is to assess eligibility of relevant issues for addition or retention in the Index on a continuous basis.

If appropriate, a default action dates stated in the document may be amended to accommodate local bank holidays or other market events and/or conditions.

If appropriate, a default action stated in the document may be adjusted to accommodate market events and/or conditions.

Where explicitly stated, FTSE Russell will determine an appropriate action/timing of an action.

If more than one action is applicable, then FTSE Russell will determine the most appropriate one to be taken.

From time to time, the User Base may be asked for feedback on any aspect of the index maintenance process or an individual event/security.

If the feedback for an individual event/security is requested, the cut off for providing the feedback is 12:00 AM 00pm UK time on the 3rd Workday following the request, unless specified otherwise.

FTSE Russell may apply expert judgment when administering the benchmark under the circumstances indicated throughout the Methodology and summarised in Section 11.

All proposed changes to the index composition and related announcements are reflected in the Index Status Report.

Price Basis and Price Sources used for Additions to and Deletions from the Global and all Sub-Indices are detailed in Section 6.3.2 and Section 6.3.3 respectively.

2.2 Eligibility criteria for the Global ('broad') Index

To be eligible for consideration for the Global Index an issue will need to meet ALL of the conditions detailed in Section 2.2.1, 2.2.2 and 2.2.7:

2.2.1 General criteria

To be eligible, an issue:

- i. Must be an Equity-Linked Convertible Security as generally recognised in the market. Examples of such issues would include convertibles, Exchangeables, and Mandatory issues.
- ii. Must not be a contingent convertible structure with only downside e.g., contingent conversion features which are dependent on capital ratio triggers.
- iii. The Exchange Property must be a listed share. On this basis various pre-IPO convertibles are excluded from the Global Index. Should the issue become convertible into a listed share post issuance it will be reviewed for eligibility at that time.
- iv. Must not be a Chinese domestic issue or a Taiwanese domestic issue.

- v. Must have an ISIN code.
- vi. Must have terms fixed.
- vii. Can be a security issued in exchange for other securities ('Exchanged Issue').
- viii. Must have at least 12 months of maturity remaining on the proposed Add date.

For any issues where there is uncertainty regarding any of the eligibility criteria, FTSE Russell will determine the eligibility of such issues.

2.2.2 Size Eligibility Criteria

To be eligible an issue must meet or exceed the regional threshold Outstanding Issue Proceeds requirements below when rounded to the nearest 1m in the relevant currency, before calculating the USD equivalent. For the regions where multiple currencies are stated, the currency matching the issue's currency prevails – e.g., a European issue denominated in GBP would be assessed against the GBP threshold.

Region	Thresholds by Relevant Currency*			Countries included in the Region
US	USD 300m			US
Europe	USD 200m	EUR 175m	GBP 150m	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Turkey, UK
Other	USD 200m			Any country not listed under US, Europe, Asia ex-Japan, or Japan regions.
Asia ex-Japan	USD 100m			China, India, Indonesia, Malaysia, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam
Japan	USD 100m	JPY 11,000m		Japan

*For issues not denominated in USD the Outstanding Issue Proceeds will be translated to USD at the FX rates used for Global Index calculations at the end of the Weekday preceding the Issue Date. This will also apply for issues added at any time.

2.2.3 Over-allotment option

An issue with a known over-allotment option at issuance which is below the regional threshold prior to the 'option to increase' being exercised in part or in whole will not be considered as eligible on size criteria until the 'option to increase' is exercised in part or in whole. Once the 'option to increase' is exercised, and providing that the regional threshold for the issue is met, this will trigger a review of its eligibility for addition to the Index. For timings, see Section 2.5.

2.2.4 Upsizing/Re-Opening/'Tap' Issues

An increase in Outstanding Issue Proceeds via Upsizing/Re-Opening/'Tap' issuance from below to above the threshold at any time during the life of an issue will trigger a review of its eligibility for 'addition to the Index. For timings, see Section 2.5.

In the case of Upsizing/Re-Opening/'Tap' issuance, the Outstanding Issue Proceeds are not updated until the 'Tap Issue' becomes fully fungible with the original issue. The review of eligibility for addition will not commence until the date the Outstanding Issue Proceeds are updated.

2.2.5 Market Capitalisation criteria for Mature Issues

An issue being considered for addition to the Global Index at a time other than at issue must satisfy the Market Capitalisation thresholds as detailed in Section 2.6.3.1.2 numeral (ii).

2.2.6 Issues Hard Dropped due to Price, Size or Proactively Deselected

Any issue removed under sections 2.6.3.1.2, 2.6.3.1.3 or 2.6.3.2.3, Drop due to Size, Price, or Proactive Deselection, respectively, may become eligible for addition as a mature issue under Section 2.2 to the Global Index from the Workday immediately following 6 calendar months since the Drop Effective Date, providing that its Percentage Price (See section 6.1.7 for definition) is equal to or greater than 70% for the prior 15 Weekdays. Those issues confirmed as eligible for addition under this sub-section, are set to 'Monitor for Add' and follow the same process of addition as the New Issues (Section 2.5).

2.2.7 Liquidity eligibility criteria

To be eligible an issue must satisfy the minimum liquidity requirement in line with its regional allocation (Section 2.3).

Threshold type	Regional Applicability	Condition to be met.
Qualifying Prices	Does not apply to issues with region: US	2 Qualifying Prices are available. See Section 6.2.2 for the definition of a Qualifying Price.
Traded Value	All Regions	The total Traded Value measured during the period the issue is set as Monitor for Add, excluding the first day the Traded Volume is available on the recognised trading venue is greater than or equal to 7% of the Outstanding Issue Proceeds. (See Section 6.1.12 for Traded Value definition). The maximum period for which the Traded Value is measured can't be more than 30 Weekdays.

2.3 Country allocation

An issue is assigned a Region prior to its addition to the Global Index and is based directly on the Country allocated to that issue.

The allocation of Country to Region is set out in Section 6.4.1.

The general principal of the allocation is 'to look through to the underlying asset'.

The Country of an issue will be determined as follows, stated in order of precedence; if an underlying asset exists at any level in order of precedence, no further checking is done.

- i. Issues with an equity as the underlying asset will be allocated to the country of the **Primary Exchange of the underlying asset**.
- ii. Issues with an ADR or GDR as the underlying asset will be allocated to the country of the Primary Exchange **of the underlying asset** of the ADR/GDR.
- iii. Issues with an **ADR or GDR as the underlying asset** where the ADR/GDR does not have a listed equity as the underlying asset will be allocated to the **country of the Primary Exchange of the ADR/GDR**.
- iv. Issues with a basket of equities as the underlying asset will be allocated to the country of the Primary Exchange of the underlying asset which predominates.

The Primary Exchange of a particular equity is determined using the Primary Issue RIC allocated by LSEG.

FTSE Russell may review and amend the Country of on an issue initially determined based on the process described in this section in consultation with the market.

2.4 Special circumstances

2.4.1 Nominating an Issue as 'Eligible for Consideration'

There may be unusual situations when it may be appropriate for an issue to be proactively considered for the addition to the Global Index in a manner not explicitly detailed in this Methodology.

Should FTSE Russell become aware of such an issue the issue will be set as 'Monitor for Add'. Such action will be notified to the User Base.

For example, an issue which was initially launched as a fully private deal evolves into a public issue of a size sufficient to be eligible for consideration for addition to the Global Index.

2.4.2 Declining or Ending the Add Process

FTSE Russell may decline or end the Add process for an issue in special circumstances, including, but not limited to:

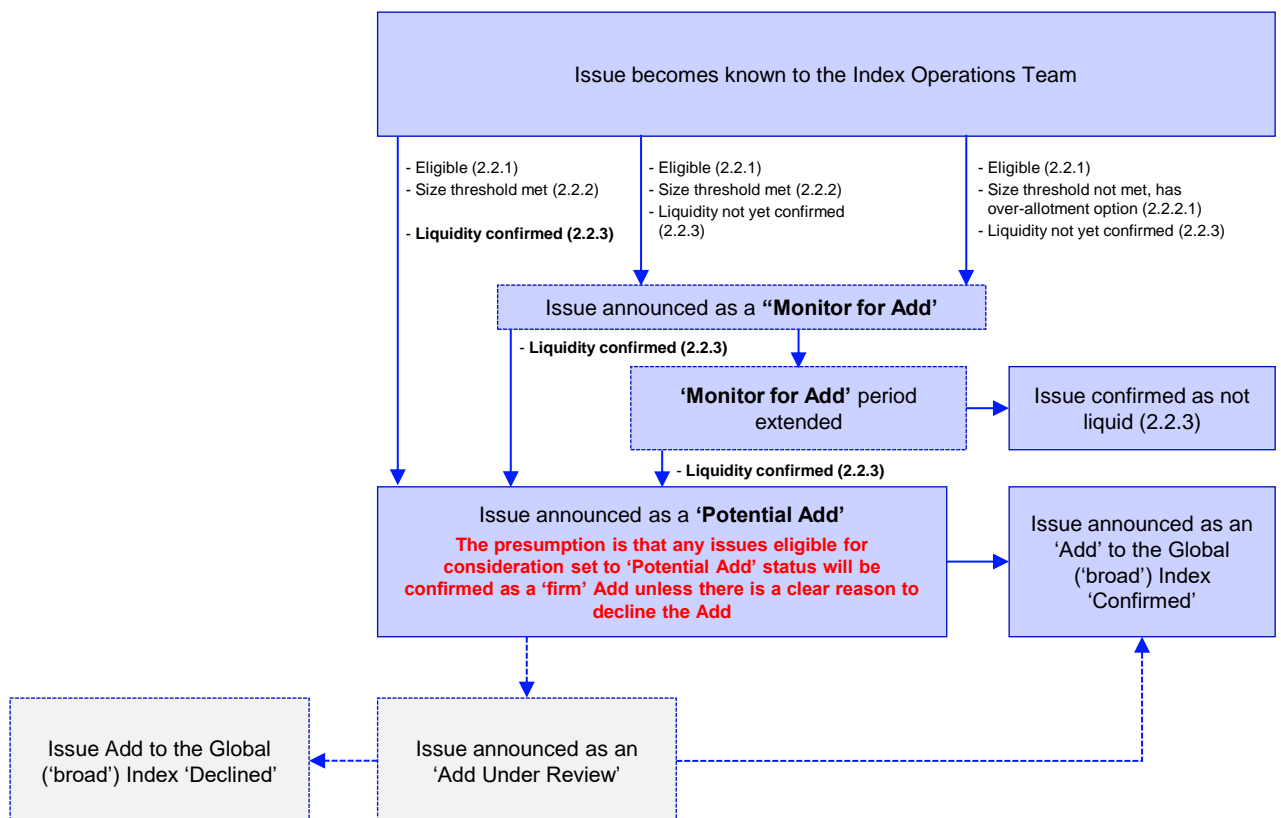
- i. The Market Capitalisation or Outstanding Issue Proceeds are below the size thresholds stated in Section 2.6.3.1.2 while under consideration for addition.
- ii. The issue has been called while under consideration for addition.
- iii. The issue or its underlying become subject to an Offer that materially affects the issue.

- iv. Quantitative data or market information indicates that the liquidity of the issue has substantially altered since the day the issue has been announced as a candidate for addition to the Index.
- v. The price has declined substantially, and the Qualifying Prices test is no longer satisfied. By way of guidance, a substantial price movement would be around 15% more than general market movement for similar issues.
- vi. Restructuring announcements

2.5 Addition to the Global ('broad') Indices

2.5.1 Process overview

No issue can be added to any of the Sub-Indices without first becoming a constituent of the Global Index. An issue may or may not become a constituent of a Sub-Index on the same day as it is added to the Global Index.



An issue eligible for consideration (Section 2.2.1) and of sufficient size (Section 2.2.2) is first set to 'Monitor for Add' while awaiting the liquidity confirmation (Section 2.2.7).

All issues set to Monitor for Add are monitored daily for liquidity for at least the 10th Weekday after the date on which the issue is announced as a 'Monitor for Add'.

The 'Monitor for Add' stage may be extended with the new end of monitoring date communicated.

Once the issue confirmed as liquid, having met over-allotment eligibility criteria where applicable, the issue is announced as a 'Potential Add'. The issue will be set to 'Potential Add' at any point prior to the end of the 10th Weekday if the liquidity criteria is met, providing it has met the over-allotment eligibility criteria where applicable.

Any issue whose liquidity is confirmed at the same time as it is determined to be eligible for consideration and of sufficient size, will be set directly to 'Potential Add'.

During the 'Potential Add' stage, all feedback is reviewed up to and including 12:00 noon UK time on the 3rd Workday following the announcement of the 'Potential Add' status, unless specified otherwise.

The 'Potential Add' review period may be extended with the new review date communicated ('Add Under Review').

FTSE Russell may, based on feedback, set any issue that does not formally meet the liquidity criteria set out in Section 2.2.7 to a 'Potential Add'.

If the above criteria are satisfied (size, country, liquidity etc) the presumption is that the issue will be confirmed as an Add unless there is a clear reason to decline the Add.

Add to the Index	
Addition Basis	<ul style="list-style-type: none"> • EoD Market Price on Add Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Addition timeline	<ul style="list-style-type: none"> • Add Announcement Date: same day as the Potential Add review date • Add Effective Date: Workday following Add Announcement Date

The issue will be added to the index at the end of the business day on the Add Effective Date and will contribute to index performance at the first index calculation following the Add Effective Date.

The issue with the status 'Add Under Review' can either be announced as an Add or declined as such. The decision to 'Decline' an issue may be reviewed at any time and, if appropriate, the status of the issue will be reset back to 'Potential Add' and trigger a new review process.

2.6 Removal from the Global Index

2.6.1 Process overview

In most cases an issue is removed from the Global Index via a 'Hard Drop' without an immediate option to be added back.

Under certain circumstances, issues could be removed temporarily via a 'Soft Drop' and later reinstated (Section 2.6.2.1).

Any issue removed from the Global Index is simultaneously removed from All Sub-Indices at the same time using the same Price Basis (6.3.2).

An issue may or may not be reinstated following a 'Soft Drop'. If an issue is reinstated to the Global Index, it will be Added to any Sub-Indices it remains eligible for and for which it satisfies the relevant addition criteria (see Section 3). The timing of the reinstatement may vary by Sub-Index.

Issues removed from the index via a 'Hard Drop' process may become eligible for the index addition in the future. (Section 2.2.6).

There is no provision to remove issues from the Global Index solely based on remaining life.

The presumption is that the proposed action is confirmed unless there is a clear reason to amend it.

Events with an outcome of 'Hard Drop'	Events with an outcome of 'Soft Drop' or 'Retain'
<ul style="list-style-type: none"> Drop Due to Issue Approaching Final Conversion Date (Section 2.6.3.1.1) Drop Due to Size (Section 2.6.3.1.2) Drop Due to Price (Section 2.6.3.1.3) Drop Due Exchange Property Delisting (Section 2.6.3.1.4) Drop Due to Being Impractical to Price (Section 2.6.3.1.5) 	<ul style="list-style-type: none"> Drop Due to Issue Approaching a Put (Section 2.6.3.2.1) Drop Due to an Offer (Section 2.6.3.2.2)
Events with an outcome of 'Hard' or 'Soft' Drop	
<ul style="list-style-type: none"> Proactive Deselection (Section 2.6.3.2.3) 	

2.6.2 Removal (Drop) process details

2.6.2.1 'Hard Drop', 'Soft Drop', and Reinstatement process details

All issues considered for a drop under Sections 2.6.3.2.1 – 2.6.3.2.3 will be reviewed against 'Soft Drop' threshold. The default action is that if the issue meets the 'Soft Drop' threshold it will be announced as such in the Index Status Report, unless the issue has a maturity date that is less than 6 months from the day of the anticipated 'Soft Drop' Effective Date, in which case the issue will be 'Hard' dropped using the Removal Basis stated in the section applicable. See relevant sections for details of each threshold and the announcement process.

Any issue 'Soft' dropped from the Index will be monitored until the final results of the event that initiated the 'Soft Drop' are available to the Index Management Team. When the outcome is known, the issue will be considered for reinstatement to the Global Index. If no results that are explicitly stated as the outcome of the event that triggered the 'Soft Drop' are available to the Index Management Team on the 1st Workday immediately following the 2 calendar months from the event's final Settlement Date or Exercise/Closing Date, if no Settlement Date is known ('no result' monitoring period), the issue will be tested for reinstatement based on the information available on that day.

FTSE Russell may extend the 'no result' monitoring period after an exceptionally long period elapsing since the final Settlement Date or Exercise/Closing Date, if no Settlement Date is known, of the event that triggered the 'Soft Drop' designate the issue as 'No Longer Eligible for Reinstatement'.

An issue considered for reinstatement is tested using the Outstanding Issues Proceeds effective at the close of the business day on the day the outcome of the event that caused the 'Soft Drop' is known, based on the procedure detailed in Section 2.6.3.1.2 (Size) and 2.6.3.1.3 (Price). The issue must satisfy BOTH Size and Price tests during the same period to be reinstated, as well as have a maturity date that is more than 6 months from the Workday immediately after the anticipated Reinstatement Date. In addition to the Size and the Price tests, for issues tested following 'no result' monitoring period, the issue will need to meet the Qualifying Price Conditions (Section 6.2.2) regardless of its Region; for clarity, a minimum of 2 qualifying prices must be available to carry out Qualified Price Testing.

Reinstatement to Sub-Indices is done in accordance with eligibility criteria applicable for each of the Sub-Indices and processed in the same way as any other Add. See Section 3 for more details on Sub-Indices.

The Reinstatement Effective Date for the Global and Continuous Reselection Sub-Indices may vary by the index family. Unless amended, it will be the 3rd Workday following the Reinstatement Announcement Date.

2.6.3 Removal details

2.6.3.1 Events with an Outcome of 'Hard Drop'

2.6.3.1.1 Drop Due to issue approaching a Final Conversion Date

For **issues which have been called** and **issues that are approaching maturity**, the Drop Notification Date will be the 15th Workday before the earlier of the last day to elect to convert, or the last day on which action needs to be taken to allow the issue to be converted.

Drop Due to Issue Approaching a Final Conversion Date

Removal Basis	<ul style="list-style-type: none"> • EoD Market Price on Drop Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Removal timeline	<ul style="list-style-type: none"> • Drop Notification Date: see above • Drop Announcement Date: 1st Workday following Drop Notification Date • Drop Effective Date: 6th Workday from Drop Notification Date

2.6.3.1.2 Drop due to Size

All constituents of the Global Index are checked daily against the size thresholds stated below or upon any change to the Outstanding Issue Size (see Section 2.7).

An issue will be dropped from the Index if the issue fails (i.e., does not meet) ANY of the thresholds listed below on 5 consecutive Weekdays, except where the issue’s Market price, as determined by LSEG Pricing Service (LPS), is equal to or greater than 75% of the Accreted Issue Price, in which case the testing period would be 10 consecutive Weekdays. For issues where there has been a change to the Outstanding Issue Size, the issue is re-tested on the 5 Weekdays preceding the Change Notification Date (see Section 2.7) using the new Outstanding Issue Size.

FTSE Russell may also extend the duration of the testing periods, for up to a maximum of 6 weeks at a time, for all issues during any market wide events adversely affecting pricing. Any such change will be announced in the Index Status Report.

i. Outstanding Issue Proceeds:

Must be greater than or equal to 75% of the Outstanding Issue Proceeds thresholds used for addition (Section 2.2.2).

Region	Cash equivalent of 75% of Outstanding Issue Proceeds*			Countries included in the Region
US	USD 225m			US
Europe**	USD 150m	EUR 131.25m	GBP 112.5m	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Turkey, UK
Other	USD 150m			Any country not listed under US, Europe, Asia ex-Japan, or Japan regions.
Asia ex- Japan	USD 75m			China, India, Indonesia, Malaysia, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam.
Japan**	USD 75m	JPY 8,250m		Japan

*For issues not denominated in USD, the Outstanding Issue Proceeds will be translated to USD at the FX rates used for Global Index calculations.
 ** For issues denominated in a currency specified as a threshold, the local currency threshold will apply, for other issues the Outstanding Issue, Proceeds will be translated to USD at the FX rates used for Global Index calculations.

ii. Market Capitalisation:

Must be greater than or equal to USD 75m, and greater than or equal to the lesser of USD 400m and 30% of the Accreted Issue Proceeds.

Any issue failing a threshold on 2 consecutive Weekdays, **excluding issues being tested due to the change in the Outstanding Issue Size**, will be included in the Index Status Report issued on the following Workday as a ‘Potential Drop Due to Size’. Once announced as such, the issue will either remain on the Index Status Report until it is announced as a Drop or will be removed from the report the Workday after it no longer fails the threshold that triggered the announcement.

Drop Due to Size	
Removal Basis	<ul style="list-style-type: none"> • EoD Market Price on Drop Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Removal timeline	<ul style="list-style-type: none"> • Drop Notification Date: 1st Workday following the 5th consecutive day of the issue failing the Size threshold • Drop Announcement Date: The same as Drop Notification Date • Drop Effective Date: 2nd Workday following the Drop Notification Date

Removal basis for the issues re-tested after the change in Outstanding Issue Size are detailed in Section 2.7.3

2.6.3.1.3 Drop due to Price

All constituents of the Global Index are checked daily against both price spread thresholds stated below. An issue will be dropped from the Index if the issue fails EITHER of the thresholds on 5 consecutive Weekdays, except where the issue's Market price, as determined by LSEG Pricing Service (LPS), is equal to or greater than 75% of the issue's Accreted Issue Price, in which case the testing period would be FTSE Russell may also extend the duration of the testing periods, for up to a maximum of 6 weeks at a time, for all issues during any market wide events adversely affecting pricing. Any such change will be announced in the Index Status Report.

Price Spread Threshold type	Threshold
Face value	> 4%
Bid price	> 6%

Any issue failing a threshold on 2 consecutive Weekdays will be included in the Index Status Report issued on the following Workday as a 'Potential Drop Due to Price'. Once announced as such, the issue will either remain on the Index Status Report until it is announced as a Drop or will be removed from the report the Workday after it no longer fails the threshold that triggered the announcement.

Drop Due to Size	
Removal Basis	<ul style="list-style-type: none"> • EoD Market Price on Drop Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Removal timeline	<ul style="list-style-type: none"> • Drop Notification Date: 1st Workday following the 5th consecutive day of the issue failing the Price threshold • Drop Announcement Date: The same as Drop Notification Date • Drop Effective Date: 2nd Workday following the Drop Notification Date

2.6.3.1.4 Drop due to Exchange Property Delisting

As soon as the FTSE Russell becomes aware of the de-listing, the following will apply:

Drop due to Exchange Property Delisting	
Removal Basis	<ul style="list-style-type: none"> • EoD Market Price on Drop Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Removal timeline	<ul style="list-style-type: none"> • Drop Notification Date: The same day the Index Management Team becomes aware of the de-listing • Drop Announcement Date: The same as Drop Notification Date • Drop Effective Date: 2nd Workday following the Drop Notification Date

2.6.3.1.5 Drop due to Being Impractical to Price

For an issue to become impractical to price BOTH of the following conditions must be satisfied.

- i. An acceptable price is not available from any Recognised Convertible Exchange
- ii. A LSEG Pricing Service (LPS) Closing Price is not available, or LSEG Pricing Service (LPS) have notified that pricing of the issue will be terminated

FTSE Russell will determine an acceptable price to execute the drop or determine that a further review of the circumstances is required prior to announcing the drop.

Drop Due to Being Impractical to Price	
Removal Basis	<ul style="list-style-type: none"> • Price as determined by the Index Manger
Removal timeline	<ul style="list-style-type: none"> • Drop Notification Date: The day Index Management confirms that both conditions specified have been met. • Drop Announcement Date: As determined by FTSE Russell • Drop Effective Date: 2nd Workday following the Drop Notification Date

2.6.3.2 Events with an outcome of ‘Soft Drop’ or ‘Retain’

2.6.3.2.1 Drop due to issue approaching a Put

For an issue approaching a Put, the Drop Notification Date is normally the 11th Workday prior to the last date on which a holder may elect to ‘Put’ rather than retain the issue. For issues with terms that allow the holder to submit and then withdraw their notice, the last day on which the notice may be withdrawn is the relevant date.

The Index Management Team will determine if an issue is less than or equal to the ‘Soft Drop’ threshold for the Put. An issue that meets the removal threshold will be ‘Soft’ dropped from the Global Index. FTSE Russell may, taking into account market conditions and other relevant factors, determine that the issue will not be treated as set out in the tables below.

‘Soft Drop’ Put Threshold Determination Ratio

$$\frac{\text{Market Price}}{\text{Put Price}}$$

Index Action	Announcement of the Action is more than 15 Workdays before the Put Date	Announcement of the Action 15 Workdays or less before the Put Date
Issues is retained in the index.	Ratio > 105%	Ratio > 102%
Issue is ‘Soft’ dropped from the index	Ratio ≤ 105%	Ratio ≤ 102%

‘Soft’ dropped issues will be monitored for reinstatement until the result of the Put is known see Section 2.6.2.1 for the full detail of the process following a ‘Soft Drop’ action.

'Soft Drop' and Reinstatement (where applicable)	
Removal Basis	<ul style="list-style-type: none"> • EoD Market Price On 'Soft Drop' Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
'Soft Drop' timeline	<ul style="list-style-type: none"> • Drop Notification Date: (see above) • Drop Announcement Date: Workday following the Drop Notification Date • 'Soft Drop' Effective Date: 6th Workday following the Drop Notification Date
Reinstatement timeline	<ul style="list-style-type: none"> • See Section 2.6.2.1

If the issue is not 'Soft' dropped, and some or all holders elect for early redemption, then the following actions are taken:

Amount Outstanding After Put	Index Action
≤20% of Original Issue Size	<p>The Outstanding Issue Size will be amended to reflect the change. The change will be applied at the Put Price.</p> <p>In most circumstances an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Put Price.</p>
>20% of Original Issue Size	<p>The change will be treated as a regular change in Outstanding Issue Size with the change applied using the Bid price on the Effective Date.</p> <p>In some circumstances an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Bid Price.</p>

2.6.3.2.2 Drop due to an Offer

This details situations where the issue becomes the subject of an Offer, examples of such events are:

- Offer to purchase the convertible by the issuer or another entity,
- Offer to pay holders a cash amount in consideration of a terms change,
- Offer to pay holders a cash amount in consideration of the holder not exercising a Put option,
- Offer to exchange the issue for a new or existing issue.

The Index Management Team will determine the classification of the Offer (Partial, Exchange, Short, or Long) as soon as the Offer details become known.

Possible Offer classifications, along with the default treatments, are detailed below. For the Offer confirmed as 'Long', the day the Offer becomes known to the Index, it will be treated as Drop Notification Date.

In the case of an Offer with terms that allow the holder to submit and then withdraw their acceptance the last day on which the acceptance may be withdrawn will be used to determine the classification of the Offer.

FTSE Russell will review the proposed basis and may amend the classification of the Offer and/or the details of the default action for the proposed classification.

Any default action described in the following table which includes a change in Outstanding Issue Size is subject to the Outstanding Issue Size Change process detailed in Section 2.7.

i. Partial Offer

Description	Default Action
Offers where the offer does not apply to the entire Amount Outstanding of the issue and the maximum amount that could be accepted is such that more than 20% of the original issue size would remain outstanding in all circumstances.	Will remain in the Index and the result of the Offer is reflected in a change in Outstanding Issue Size for the Index constituent.

ii. Exchange Offer

Description	Default Action
Offers where the offer is to exchange the issue for another issue which would be eligible for addition to the Index should the size be sufficient.	<p>Will remain in the Index and the result of the offer is reflected in a change in Outstanding Issue Size for the Index constituent.</p> <p>The issue offered in exchange if eligible for addition (Section 2.2.1) and is above the thresholds in Section 2.6.3.1.2, the issue will be automatically added to the Index.</p> <p>The change in Outstanding Issue Size and the addition, where appropriate, of the offered issue will occur on the same day and at the same value.</p>

iii. Short Offer

Description	Default Action						
Offers where the last day on which the offer can be accepted is less than 5 Weekdays after the date on which the offer becomes known to the Index Management Team.	<p>Will remain in the Index and the result of the offer is reflected in a change in Outstanding Issue Size for the Index constituent.</p> <table border="1"> <thead> <tr> <th>Amount Out. After Offer</th> <th>Index Action</th> </tr> </thead> <tbody> <tr> <td>≤20% of Original Issue Size</td> <td> <p>The Outstanding Issue Size will be amended to reflect the change. The change will be applied at the Offer Price.</p> <p>In most circumstances, an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Offer Price.</p> </td> </tr> <tr> <td>>20% of Original Issue Size</td> <td> <p>The change, if any, will be treated as a regular change in Outstanding Issue Size with the change applied using the Market Price (Bid) on the Effective Date.</p> <p>In some circumstances, an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Market Price (Bid).</p> </td> </tr> </tbody> </table>	Amount Out. After Offer	Index Action	≤20% of Original Issue Size	<p>The Outstanding Issue Size will be amended to reflect the change. The change will be applied at the Offer Price.</p> <p>In most circumstances, an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Offer Price.</p>	>20% of Original Issue Size	<p>The change, if any, will be treated as a regular change in Outstanding Issue Size with the change applied using the Market Price (Bid) on the Effective Date.</p> <p>In some circumstances, an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Market Price (Bid).</p>
Amount Out. After Offer	Index Action						
≤20% of Original Issue Size	<p>The Outstanding Issue Size will be amended to reflect the change. The change will be applied at the Offer Price.</p> <p>In most circumstances, an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Offer Price.</p>						
>20% of Original Issue Size	<p>The change, if any, will be treated as a regular change in Outstanding Issue Size with the change applied using the Market Price (Bid) on the Effective Date.</p> <p>In some circumstances, an issue will no longer be eligible for retention in the Index due to the size test and therefore the action will be to Drop the issue at the Market Price (Bid).</p>						

Short Offer	
Removal Basis (where applicable)	<ul style="list-style-type: none"> Offer Price on Drop Effective Date (≤20% of Original Issue Size) <li style="text-align: center;">OR EoD Market Price on Drop Effective Date (>20% of Original Issue Size)
Removal timeline	<ul style="list-style-type: none"> Drop Announcement Date: the same day as when the Amount Outstanding after the Offer is completed becomes known to the Index Management Team Drop Effective Date: as determined by FTSE Russell

iv. Long Offer

Description	Default Action
Offers where the last day on which the offer can be accepted is 5 Weekdays days or more after the offer becomes known to the Index Management Team.	Will be 'Soft' dropped. 'Soft' dropped issues will be monitored for reinstatement in line with the reinstatement monitoring process detailed in Section 2.6.2.1.
Basis and Timeline	
Removal Basis	<ul style="list-style-type: none"> • EoD Market Price on 'Soft Drop' Effective Date
Removal timeline	<ul style="list-style-type: none"> • Drop Announcement Date: the same day as Drop Notification Date • 'Soft Drop' Effective Date: 2nd Workday following the Drop Notification Date
'Long Offer' Reinstatement	<ul style="list-style-type: none"> • See Section 2.6.2.1

2.6.3.2.3 **Proactive deselection**

There are circumstances where a judgment is required to establish the most appropriate action to take in respect of the possible removal of an issue from the Global Index.

As and when the Index Management Team become aware of such circumstances, the Index Management Team will advise FTSE Russell of the details of the circumstances and FTSE Russell will decide if the issue is to be removed from the Global Index, and, if the issue is to be removed from the Global Index, then FTSE Russell will decide on the date and price of the removal.

The process may or may not include the 'Soft Drop' event (Section 2.6.2.1). If the 'Soft Drop' option is used, the Reinstatement basis will be included in the announcement.

It is not possible to anticipate all circumstances that might require proactive deselection; however, examples of such circumstances are:

- An issue with time limited enhanced conversion terms,
- An issue associated with a complex merger or takeover,
- An issue where a corporate event associated with the Exchange Property might trigger a holder to convert,
- An issue where an event could, on a long-term basis, materially affect the liquidity of either the issue or its underlying.

In addition to these specific circumstances, FTSE Russell may, as described above, decide that it is appropriate for an issue to be removed from the Global Index. In such circumstances FTSE Russell will decide on the date and price of the removal.

2.7 Outstanding issue Size changes

A change in the Outstanding Issue Size can be either classified as a 'Small Adjustment' or as 'Substantial Change'. Either of the classifications can lead to an issue being announced as 'Substantially All Retired'.

All changes of Outstanding Issue Size, whether classified as 'Small' or 'Substantial', are checked using the thresholds for the Drop due to Size in Section 2.6.3.1.2 based the new Outstanding Issue Size effective EoD on Change Notification Date. An issue where the change in the Outstanding Issue Size causes it to fail the conditions in Section 2.6.3.1.2 will be classified as 'Substantially All Retired'.

2.7.1 Small adjustments

Where the Outstanding Issue Size change represents a change in Market Capitalisation that is less than USD100m, the following changes will apply:

Small Adjustment	
Change Basis	<ul style="list-style-type: none"> • EoD Market Price on Change Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Change timeline	<ul style="list-style-type: none"> • Change Notification Date: the day Index Management Team becomes aware of the change (see above) • Change Announcement Date: The same as Change Notification Date • Change Effective Date: 1st Workday following Change Notification Date

2.7.2 Substantial changes

Where the Outstanding Issue Size change represents a change in Market Capitalisation that is USD100m or greater, the following changes will apply:

Substantial Changes	
Change Basis	<ul style="list-style-type: none"> • EoD Market Price on Change Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Change timeline	<ul style="list-style-type: none"> • Change Notification Date: the day Index Management Team becomes aware of the change (see above) • Change Announcement Date: The same as Change Notification Date • Change Effective Date: 5th Workday following Change Notification Date

2.7.3 Substantially All Retired

Where the change in the Outstanding Issue Size causes the issue to fail the Size test in Section 2.6.3.1.2 when re-tested on the 5 Weekdays preceding the Drop Notification Date using the new Outstanding Issue Size, the issue will be removed as follows:

Drop Due to Size	
Removal Basis	<ul style="list-style-type: none"> • EoD Market Price on Drop Effective Date • Price Basis (Section 6.3.2), Price Sources (Section 6.3.3)
Removal timeline	<ul style="list-style-type: none"> • Drop Notification Date: the day Index Management Team becomes aware of the change (see above) • Drop Announcement Date: The same as Drop Notification Date • Drop Effective Date: 2nd Workday following the Drop Notification Date

2.8 Other changes

2.8.1 Technical changes

Issues in the Global Index are subject to Technical Add and Technical Drop when certain features of the issue change. The most common event that may require a technical change is a merger or takeover that results in a change to the Exchange Property of the issue. This may be reflected in the Global Index by the replacement of one MACE ID by a new MACE ID, the physical issue represented by these references remains unchanged.

Any issue subject to a Technical Add/Technical Drop will be included in the Index Status Report.

2.8.2 **Proactive change**

Circumstances may occur such that it may be appropriate for an issue to be replaced in the Global Index with one or more other issues.

In these circumstances, the determination will be made in respect to which issues, if any, to add and/or remove from the Global Index and relevant Sub-Indices, as well as the effective dates and prices to apply to these changes.

Any issue subject to proactive change will be included in the Announcement Section of the Index Status Report.

Section 3

Sub-index maintenance

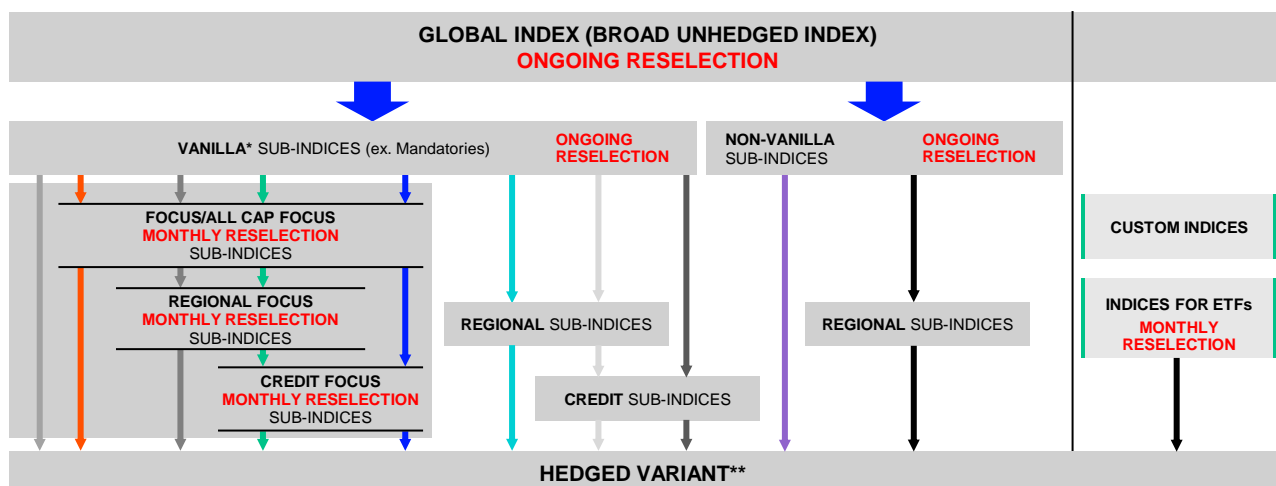
3.1 Overview of sub-indices

All sub-indices are selected from the issues that form the Global Index. As such any issue which is removed from the Global Index via ‘Hard’ or ‘Soft’ drop is simultaneously removed from all Sub-Indices. Issues which are added or reinstated to the Global Index may, or may not, become eligible for addition to a particular Sub-Index, each Sub-index sets out the basis for such additions.

Sub-indices can be broadly divided into two categories:

Continuous Reselection Sub-indices – sub-indices reselected on a continuous basis.

Monthly Reselection Sub-indices – sub-indices reselected on a monthly basis in line with the published reselection calendar. [The calendar can be found from this link.](#)



*Those Sub-Indices that were not Vanilla from the start became Vanilla at different times, see a full list of available sub-indices and the relevant Vanilla dates [here](#).

**Some indices do not have a hedged variant.

3.2 Continuous reselection Sub-indices

Eligible issues are checked for eligibility to the continuous reselection Sub-indices at the same time as the issue is added to the Global Index. However, the actual date that an issue is added to such a Sub-Index may not be the same as the date used for addition to the Global Index; the sections below indicate the circumstances under which a different date is used.

In the event that an issue is to be reallocated from one sub-index to another due to the change in Country, Sector, Investment Grade (IG), or Mandatory classification, an effective date for the change is determined and may be different for different Indices or Index groups, for example the Focus Sub-Index changes are ‘delayed’ to align to the next Focus Monthly Review Effective Date.

3.2.1 Regional Sub-Indices (Eligibility and maintenance process)

The Global Index is divided into five key Regions, in addition there are four other Regions for which indices are calculated (see table below).

Eligibility is determined based on the country of underlying. See Section 2.3 for the details of the underlying allocation.

Key Regions	Other Regions
<ul style="list-style-type: none"> • US • Europe • Asia ex-Japan • Japan • Other Markets 	<ul style="list-style-type: none"> • Global ex-US • Eurozone • Asia • Growth Markets

The allocation of an issue may change with time and FTSE Russell may reallocate an issue to a different Country or Region at any time. Section 2.3 set out Country allocation process.

A full list of Countries and the Country to Region allocations is given in the Appendix, Section 6.4.

3.2.2 Vanilla Sub-indices (Eligibility and maintenance process)

Vanilla Sub-Indices are Indices which exclude issues identified as Mandatory.

Issues are identified as Mandatory at the time they are added to the Global Index.

The nature of an issue may change with time and the issue may be reclassified as Mandatory or Vanilla at any time.

Major Groups of Vanilla Sub-Indices	
<ul style="list-style-type: none"> • All Credit Sub-Indices • Europe • Eurozone • Asia ex-Japan • Japan 	<ul style="list-style-type: none"> • Asia • Focus • All Cap Focus • Growth Markets • Other Markets

3.2.3 Credit Sub-Indices

3.2.3.1 Eligibility

To be eligible for addition to the **Investment Grade Indices**, an issue must:

- i. Be a Vanilla issue (see Section 3.2.2 for full details).
- ii. Have an Issue level, Guarantor's Issuer level, or an Issuer level rating of BBB- and above, in the order of precedence stated. If a rating is found at any of the levels, no further ratings are considered.
- iii. Have a maturity date greater than 6 months after the Focus Monthly Review Effective Date following the next Focus Monthly Review Selection Date.

To be eligible for addition to **Sub-Investment Grade Indices**, an issue:

- i. Must be a Vanilla issue (see Section 3.2.2 for full details)
- ii. Must:
 - a. Have an Issue level, Guarantor's Issuer level, or an Issuer level rating below BBB-, in the order of precedence stated. If a rating is found at any of the levels, no further ratings are considered.

OR

 - b. Be unrated.

Only the Moody's and S&P ratings are considered at **Issue Level**. Only the following Issuer level ratings from Moody's or S&P are considered when assessing the **Guarantor or Issuer** credit rating:

Moody's	S&P
<ul style="list-style-type: none"> • LT Issuer Rating • LT Issuer Rating (Domestic) • LT Issuer Rating (Foreign) 	<ul style="list-style-type: none"> • Foreign Currency LT • Local Currency LT

'Shadow' or implied ratings are not accepted.

3.2.3.2 Maintenance process

Credit sub-indices are determined by reference to the eligible credit ratings described in the preceding section.

For issues rated by both services, the lower credit rating at the level used is applied.

The Credit Sub-Indices are obtained by grouping ratings into two separate classes, these are:

1. Investment Grade – BBB- and above.
2. Sub-Investment Grade – Below BBB- and not rated.

Both rating agencies provide several types of ratings for issuers (see previous section), the derivation of the issuer ratings used are given in the Appendix Section 6.5.2.

A table giving the cross reference between rating systems is given in the Appendix Section 6.5.1.

3.2.3.2.1 Issues being added to the Index

For issues that are being added or are proposed to be added to Global Index under Section 2.5; the process of classifying an issue as Investment Grade or Sub-Investment Grade is carried out as part of the Add process and feedback regarding the classification will be taken in conjunction with any other feedback regarding the proposed addition of the issue.

3.2.3.2.2 Changes between Investment and Sub-Investment Grade

A rating change resulting in an issue becoming an Investment Grade one will only be applied to the issues with more than 6 months to maturity. Issues with less than 6 months to maturity will remain in Sub-Investment Grade Sub-Indices.

Time remaining to maturity is calculated from the next upcoming Monthly Reselection Effective Date (even for the non-Focus constituents) following the announcement of the rating change, unless the change is announced after the Selection Date and before the corresponding Monthly Reselection Effective Date, in which case the remaining maturity determination is done from the subsequent Monthly Reselection Effective Date.

The timing of the announcement or application of the rating change to Sub-Indices may vary.

[Convertible Bonds Index calendar can be found from this link](#)

i. For Focus Sub-Indices:

The change in the IG status is announced as soon as it becomes know. Providing the change is announced on or prior to the current reselection cycle's Selection Date, it is applied on the Effective Date of the current Monthly Reselection cycle, otherwise it is differed to the next reselection cycle.

ii. For other Sub-Indices

The change is announced immediately and then applied on the 5th Workday following the announcement.

3.3 Monthly reselected Sub-indices

3.3.1 Focus and All Cap Focus Sub-Indices

3.3.1.1 Global Focus and Global All Cap Sub-Index Overview

The Global Focus Sub-Index is an index derived from the Global Index using Regional Market Capitalisation, Percentage Price, and Premium criteria. It aims to represent a sub-set of the Convertible market by selecting a

sub-set of constituents from the Global Index with a common set of defined characteristics representing issues with what is termed a 'balanced' profile. The derivation process is mechanical.

The Global Focus Sub-Index contains any issue that was either retained in or added to the Global Focus Sub-Index following the latest Focus Monthly Review.

Only the current constituents of the Global Index and Issues announced as a 'firm' Add to the Global Index no later than the last day of the current Focus Monthly Review Selection Period will be reviewed for eligibility and can be part of it.

Any issue that has previously been a constituent of the Global Focus Sub-Index and was removed due to failing the reselection thresholds can be tested during any of the subsequent testing cycles, providing it meets all eligibility criteria.

Other variants of the Global Focus Sub-Index such as Focus Investment Grade (Credit) or Europe Focus (Regional) Sub-Indices are derived from the Global Focus Sub-Index; as such, any changes to the Global Focus Sub-Index are reflected in the Sub-Indices derived from it.

The Global All Cap Focus Sub-Index is an index derived from the Global Index and is created using Percentage Price and Premium criteria.

Other variants of the Global All Cap Focus Sub-Index such as Global All Cap Focus Investment Grade (Credit) or Europe All Cap Focus (Regional) Sub-Indices are derived from the Global All Cap Focus Sub-Index; as such, any changes to the Global All Cap Focus Sub-Index are reflected in the Sub-Indices derived from it.

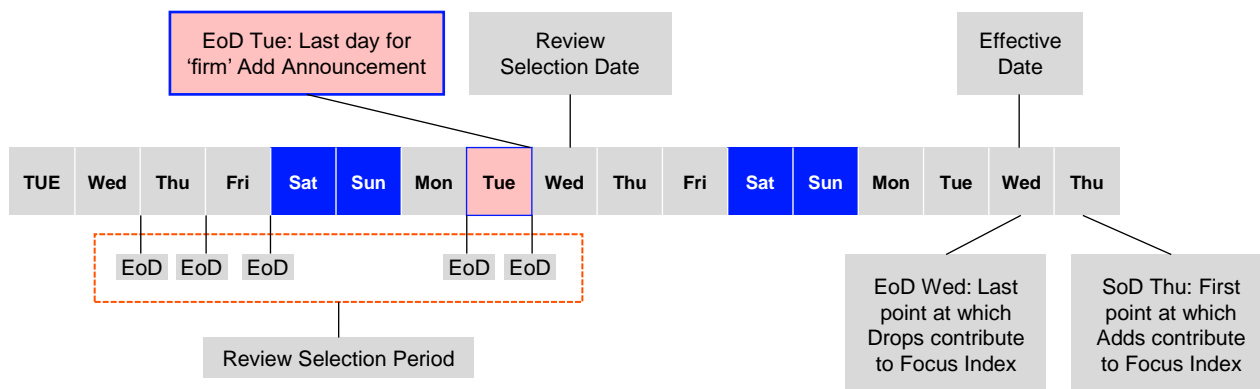
3.3.1.2 Eligibility criteria

To be eligible for consideration for addition to the Global Focus Sub-Index, an issue must:

- i. Be
 - a. a constituent of the Global Index prior to the start of the Focus Monthly Review,
OR
 - b. an issue that has been announced as a 'firm' Add no later than the EOD on the last day of the Focus Monthly Selection Period. The full calendar of the upcoming Monthly Reselections can be found [here](#).
- ii. Be a dated (i.e., non-perpetual) issue.
- iii. Be a Vanilla (i.e., non-mandatory) issue (See Section 3.2.2 for full definition).
- iv. Have a maturity date that is more than six months after the Focus Monthly Review Effective Date for the current Focus Monthly Review.
- v. Not have any of the following actions associated with it:
 - a. Be announced as a Drop from the Global Index on a future date
 - b. Have an offer outstanding for some or all of the issue as of the Focus Monthly Review Selection Date
 - c. Have a merger or takeover offer outstanding on the underlying asset of the issue as of the Focus Monthly Review Selection Date

Should an existing constituent be restructured such that it becomes perpetual or mandatory, it will cease being eligible.

3.3.1.3 Reselection process for the Focus and All Cap Focus Sub-Indices



The following process applies to both the Focus and All Cap Focus Sub-Indices except where stated otherwise.

- i. The maintenance process for the Focus Sub-Index takes place monthly in line with the Calendar published [here](#) in advance. Testing periods are based on **Weekdays**, so no holidays are taken into consideration.
- ii. In the event any of the dates require amendments, the announcement will be made in the Index Status Report. See Section 3.3.1.6 for further details.
- iii. All issues eligible for consideration, as defined in section 3.3.1.2, are tested during the Focus Monthly Review Selection Period. Issues, for which the 'firm' Add announcement date (for the Global Index) falls after the start of the Focus Monthly Review Selection Period, are reviewed on the basis of the data from the 'firm' Add announcement date to the end of the Focus Monthly Review Selection Period. See diagram above.
- iv. Issues that are constituents of the Global Focus Sub-Index on the Weekday immediately preceding the first day of the Focus Monthly Review Selection Period are tested for retention in the Global Focus Sub-Index, all other issues are tested for addition using the relevant thresholds. Addition and retention thresholds are defined in Section 3.3.1.4.
- v. For an issue eligible for consideration to be announced as an Add to the Global Focus Sub-Index it must satisfy all of the thresholds below on each of the days it is tested. If the issue falls outside any of the thresholds on any of the days in the Focus Monthly Review Selection Period, then the issue will not be added to the Focus Sub-Index. The thresholds to satisfy are:
 - a. Regional Market Capitalisation (see Section 3.3.1.4.1) – Does not apply to All CAP FOCUS SUB-INDICES.
 - b. Conversion Premium (see Section 3.3.1.4.2)
 - c. Percentage Price (see Section 3.3.1.4.3)
- vi. For any constituent of the Global Focus Sub-Index to be announced as a Drop from the Global Focus Sub-Index, it must separately fail either of the two thresholds listed below on each of the five testing days. The thresholds are:
 - a. Conversion Premium (see Section 3.3.1.4.2)
 - b. Percentage Price (see Section 3.3.1.4.3)
- vii. Any additions or deletions to the Global Focus Sub-Indices are announced the Weekday following the last testing day on Focus Monthly Review Selection Date and are subject to 24-hour revision provision, any changes to the announced reselection results are published the following day. A revision will only be made during the 24-hour revision period if there is a factual error in the data used for the selection or if new information becomes available that would impact the selection.
- viii. Actual implementation of the announced results takes place on the Focus Monthly Review Effective Date which is the 5th Weekday after the announcement of the results.

There is no general provision for additions to or deletions from the Focus Sub-index between Focus Monthly Reviews, however, changes may be made in any of the following circumstances:

- ix. Any issue removed from the Global Index for whatever reason is automatically removed from the Focus Sub-index. This is not particular to the Focus Sub-index but applies to all sub-indices.
- x. Any issue that is in the Focus Sub-index that is replaced in the Global Index by one or more other issues will be advised to FTSE Russell. FTSE Russell will then determine which, if any, of the replacement issues will be added to the Focus Sub-index.
- xi. Circumstances may occur such that, between Focus Monthly Reviews, it may be appropriate for an issue to be added to or removed from the Focus Sub-index. In these circumstances, FTSE Russell will determine the detail of any amendments to the constituents of the Focus Sub-index.

If an issue is added to or removed from the Focus Sub-Index between Focus Monthly Reselections, the change/proposed change will be included in the Index Status Report.

3.3.1.4 Reselection Thresholds

The specific thresholds for retention and addition are set out in the sections below. The thresholds are monitored at each Focus Monthly Review. FTSE Russell may amend any of the threshold values as described in Section 3.3.1.5.

All thresholds are tested using end of day Bid side of the Market Price.

An existing Focus Sub-Index constituent is any issue forming part of the Global Focus Sub-Index the Weekday preceding the first day of the Focus Monthly Review Selection Period.

3.3.1.4.1 Regional Market Capitalisation (DOES NOT APPLY to All CAP FOCUS SUB-INDICES)

The Market Capitalisation for each of the days during the Focus Monthly Review Reselection Period is calculated using the Market Price and FX rates applicable to the relevant day together with the Outstanding Issue Size used for Index calculations on the last day of the Focus Monthly Review Selection Period (see definition for the Market Capitalisation in Section 6.1.8).

This test applies to the issues tested for addition only. To satisfy the test the issue must be greater than or equal to the stated thresholds.

Region	Currency	Threshold	Countries included in the Region
US	USD	500m	US
Europe	EUR	375m	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Turkey, UK
Other	USD	275m	Any country not listed under US, Europe, Asia ex-Japan, or Japan regions.
Asia ex- Japan	USD	275m	China, India, Indonesia, Malaysia, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam
Japan	JPY	22,000m	Japan

The threshold for Market Capitalisation has been varied historically as a result of the prevailing market conditions. The historical values used are shown in Section 3.3.1.4.4 below.

3.3.1.4.2 Conversion premium

Conversion premium is defined in Section 6.1.11.

Constituent Status (test type)	Threshold
An existing Focus Sub-Index constituent (retention)	Meets the threshold if Premium is $\leq 100\%$
NOT an existing Focus Sub-Index constituent (addition)	Meets the threshold if the Premium $< 75\%$

The threshold upper limit for premium has been varied historically as a result of the prevailing market conditions. The historical values used are shown in Section 3.3.1.4.4 below.

3.3.1.4.3 Percentage price

Percentage Price is defined in Section 6.1.7.

Constituent Status (test type)	Threshold (ranges are inclusive)
An existing Focus Sub-Index constituent (retention)	Meets the threshold if Percentage Price is $\geq 60\% \ \& \ \leq 140\%$
NOT an existing Focus Sub-Index constituent (addition)	Meets the threshold if Percentage Price is $> 70\% \ \& \ < 125\%$

The limits for Percentage Price have been varied historically as a result of the prevailing market conditions. The historical values used are shown in Section 3.3.1.4.4 below.

3.3.1.4.4 Reselection thresholds (Historic levels)

The following section contains details of the historical thresholds for the Market Capitalisation, Premium, and Price respectively.

These limits are subject to further revision by FTSE Russell (Section 3.3.1.5 gives details of this process).

The threshold levels have been varied historically because of the prevailing market conditions. The historical values used are shown in the tables below.

Market Capitalisation Threshold History

Region	Currency	Inception – Dec 2009	Jan 2010 – Jan 2013	Feb 2013 – Current
US	USD	650m	600m	500m
Europe	EUR	450m	400m	375m
Asia ex-Japan	USD	300m	300m	275m
Japan	JPY	30,000m	25,000m	22,000m
Other Markets	USD	300m	300m	275m

Premium Threshold History

Date		An existing constituent (retention)	NOT an existing constituent (addition)
Start	End	Premium <=	Premium <
Inception	Oct 2008	100%	75%
Nov 2008	Dec 2009	200%	75%
Jan 2010	Sep 2010	125%	75%
Oct 2010	Current	100%	75%

Percentage Price Threshold History

Date		An existing constituent (retention)		NOT an existing constituent (addition)	
Start	End	Prc. Price ≥	Prc. Price ≤	Prc. Price >	Prc. Price <
Inception	Oct 2008	50%	140%	60%	125%
Nov 2008	Dec 2009	40%	140%	60%	125%
Jan 2010	Dec 2011	50%	140%	60%	125%
Jan 2012	Current	60%	140%	70%	125%

3.3.1.5 Amendment of thresholds by FTSE Russell

The Percentage Price or Premium thresholds used for retention or addition during the Focus Monthly Review Selection together with the Regional Threshold Level may be amended by FTSE Russell.

3.3.1.6 Focus monthly review timetable details.

The Focus Monthly Reselection calendar is available [here](#). The Focus Monthly Review Selection Date and the Focus Monthly Review Effective Date fall on the first and the second Wednesday of each month respectively except where amended. Further, if the 1st January is a Wednesday, then both dates move to the second and third Wednesday in January respectively, the dates for the rest of the year remain unaffected.

The Focus Monthly Review Effective Date is the date on which changes required as a result of the Focus Monthly Review are applied – issues that are to be removed from the Focus Sub-Indices will be removed at the EOD Market Price (Bid) and issues that are to be added to the Focus Sub-Indices will be added at the EOD Market Price (Ask).

The Focus Monthly Review Selection Date is the date on which the constituents of the Focus Sub-index that will be effective from the Focus Monthly Review Effective Date are determined and announced.

The Focus Monthly Review Selection Period is the period during which market prices and related parameters are measured to allow application of the mechanical thresholds.

The Focus Monthly Review Selection Period is the five Weekdays immediately prior to the Focus Monthly Review Selection Date.

Section 4

Equity indices

4.1 **Equity Indices**

For the Global Index and each Sub-Index there are number of related equity indices calculated for research and analysis purposes: Parity and Equity Cash (Since Inception, Year to Date, Quarter to Date, and Year on Year).

Details of the indices can be found in the Equity Indices information sheet [here](#).

Section 5

Index calculation methods

5.1 Regular Index calculation

The basic index calculation method is a Market Capitalisation weighted chain-linked index calculation with income reinvestment (Total Return).

The index is calculated every Weekday to the full precision available to the calculation process; however, the official published values of the index are rounded to two decimal places (one decimal place up to and including 31st December 2007).

The Index is calculated using the input data and other necessary data available each Weekday at the time of calculation.

The Index will not be subject to retrospective calculation except where FTSE Russell determines that it is necessary based on the expert judgement. Retrospective calculation is limited to the previous Weekday's EoD values only.

Any retrospective recalculation that is made will be announced in the Index Status Report and notified to the Independent Oversight committee.

5.1.1 Daily Index calculation

The index is constructed, and the index value is computed, such that the impact of each issue is in proportion to the Market Capitalisation of the issue and where the income periodically due to each issue is fully and continually reflected in the index value.

In order to derive:

V^t The value of the index on day t . Index values are only computed for Weekdays and, if day t is a Friday, then day $t + 1$ will be the following Monday

The values required are:

D_i^t The dirty cash value of one unit of the i^{th} issue in the index on day t .

C_i^t The cash value of any income that becomes due for one unit of the i^{th} issue in the index on day t .

S_i^t The issue size outstanding at SoD in units of the i^{th} issue in the index on day t .

X_i^t The exchange rate used to convert the cash price of the i^{th} issue in the index on day t to the index currency.

F^t The index factor on day t .

n^t The number of issues in the index on day t .

The value of the index is given by:

$$V^t = \frac{\sum_{i=1}^{n^t} (D_i^t + C_i^t) \times S_i^t \times X_i^t}{F^t}$$

The value of F will remain unchanged until there is a change to the constituents of the index, there is a change to the issue size of one or more of the constituents or until an income event occurs for an issue in the index.

The above equation assumes that income is generated in the same currency as the price. In exceptional cases, the income currency is different to the price currency, in which case the equation is modified as shown below:

$$V^t = \frac{\sum_{i=1}^{i=n^t} (D_i^t \times S_i^t \times X_i^t + C_i^t \times S_i^t \times Xc_i^t)}{F^t}$$

Where Xc_i^t is the exchange rate used to convert the income cash value to the index currency.

For simplicity, the remaining equations in this section assume that the income currency is the same as the price currency, although in practice the index is computed on the more general basis shown above.

5.1.2 Treatment of Income events

The principle is that the index should, at all times, reflect the income stream of constituent issues.

On a day-to-day basis, the index reflects the income element of constituent issues by using the Dirty Price for computation. Thus, if all issues in the index were priced at constant Clean Prices on successive days, the index would increase to reflect the increase of accrual on each issue.

The key date for the handling of income events is the Ex-income Date. The Ex-income Date is the first trade date on which trading takes place for delivery of the security, such that the buyer does not become entitled to the income.

On the Ex-income Date for a particular security, the contribution to the index value from the security is composed of 2 elements:

- i. The Dirty Price for the issue multiplied by the number of units outstanding and converted to the index currency divided by the index factor.
- ii. The income received per unit of the issue multiplied by the number of units outstanding and converted to the index currency divided by the index factor.

If the index is considered as a theoretical portfolio, this approach equates to holding the income as cash for the duration of the Ex-income Date and re-investing the cash at the end of day prices across the index in proportion to the Market Capitalisation of the issues.

At the end of the Ex-income Date, the income is re-invested in the index. This re-investment does not alter the value of the index and therefore the end of day value of the index before re-investment:

$$\frac{\sum_{i=1}^{i=n^t} ((D_i^t + C_i^t) \times S_i^t \times X_i^t)}{F^t}$$

Must be equal to the end of day value after the re-investment,

$$\frac{\sum_{i=1}^{i=n^t} (D_i^t \times S_i^t \times X_i^t)}{F_{new}^t}$$

The new index factor is therefore,

$$F_{new}^t = F^t \times \frac{\sum_{i=1}^{i=n^t} (D_i^t \times S_i^t \times X_i^t)}{\sum_{i=1}^{i=n^t} ((D_i^t + C_i^t) \times S_i^t \times X_i^t)}$$

For convertible indices, the gross income is used for the calculation. For equity indices, the income used may be net or gross depending on the market, details for each market are given in Section 6.6.

5.1.3 Treatment of changes of constituents or weightings

When changing the constituents of the index by adding or deleting issues, or by changing the size of an issue, the principle is that the immediate effect of the addition is to leave the index unchanged.

Given that the value of the index before the addition will be:

$$V^t = \frac{\sum_{i=1}^{i=n^t} (D_i^t \times S_i^t \times X_i^t)}{F^t}$$

and, that the value of the index after the addition will be:

$$V^t = \frac{\sum_{i=1}^{i=new_n^t} (new_D_i^t \times new_S_i^t \times new_X_i^t)}{new_F^t}$$

Where:

- $new_D_i^t$ The revised dirty cash value of one unit of the i^{th} issue in the index on day t
- $new_S_i^t$ The revised issue size outstanding in units of the i^{th} issue in the index on day t
- $new_X_i^t$ The exchange rate used to convert the cash price of the i^{th} issue in the index on day t to the index currency.
- new_F^t The revised index factor on day t
- new_n^t The revised number of issues in the index on day t

Then

$$new_F^t = F^t \times \frac{\sum_{i=1}^{i=new_n^t} (new_D_i^t \times new_S_i^t \times new_X_i^t)}{\sum_{i=1}^{i=n^t} (D_i^t \times S_i^t \times X_i^t)}$$

Changes are always made using the final values for prices on a particular day. Thus, whilst a change has been implemented on a particular day, the first day on which the changes will affect the index value is the following day.

The conventional approach is to refer to the first day on which a change will affect the value of the index as being the date on which the change was implemented, although this is not strictly true. The conventional terminology is used throughout this document.

5.2 FX Hedged Index calculation

5.2.1 FX Hedged methodology

A simple hedge strategy is to sell forward currency of equal value to the securities held in any currency other than the base currency of the fund. It is this strategy that the FX Hedged methodology is intended to closely imitate.

The strategy is not intended to hedge any effects associated with cross-currency issues (i.e., where currency of the bond and the currency of the underlying are different).

The performance of a fund adopting this approach will be the performance of the securities in their native currencies, plus the impact of the forward currency transaction.

The impact of the forward currency transaction over a specific period in isolation is the difference between the base currency amount required to purchase the securities and the amount of base currency that will be received when the forward is closed out.

5.2.2 FX Hedged implementation in the Index

The calculation is applied on a per security basis for each day the index is calculated (each Weekday) for all issues where the issue's currency differs to the Index currency.

To provide a realistic estimate of the impact of an effective 1-day forward rate one-month deposit rates for the currencies are used as set out below, the mid-market rates are used for the calculations.

The impact of the FX forward for a period of n days as a percentage of the position value is calculated as:

$$\% \text{ Impact of FX forward} = (DR_{hc} - DR_{cc}) \times n/365$$

Where

- DR_{hc} 1-month deposit rate for FX Hedge currency, mid-market rate from the previous Weekday. Where depo rate information is not available, a value of zero is used.

- DR_{cc} 1-month deposit rate for constituent (local) currency, mid-market rate from the previous Weekday. Where depo rate information is not available, a value of zero is used.
- n either 1 day or 3 days, depending on whether a weekend is involved in the calculation.

The performance of the constituent in base currency is adjusted to account for FX moves during the day as:

$$\% \text{ Adjusted Performance} = RP \times FX_{SoD} / FX_{EoD}$$

Where

- RP % Raw Performance on the day in constituent's local currency
- FX_{SoD} Start of Day mid-market FX rate of the constituent currency per unit of base currency (equal to the prior Weekday's FX_{EoD})
- FX_{EoD} End of Day mid-market FX rate of the constituent currency per unit of base currency.

The % hedged performance per constituent is:

$$\% \text{ Hedged Performance}_{const} = \% \text{ Adjusted Performance} + \% \text{ Impact of FX forward}$$

The performance of the overall hedged index is the sum of:

$$\% \text{ Performance of the Hedged Index} = \sum_1^c \% \text{ Hedged Performance}_{const} \times W_{SoD}$$

Where

- W_{SoD} Percentage weight in Index of a constituent at Start of Day.
- c Number of constituents in the index on the day of calculation.

The performance of the overall hedged index is then used to generate an index value.

5.3 Concentration factors

5.3.1 Concentration levels

Concentration Factors are used to limit the impact of specific issues in a given index.

Concentration Factors are used for most indices.

For each index where Concentration Factors are used, a Concentration Level is used to calculate the Concentration Factor to be applied to each issue in the index. The Concentration Level is the percentage of the Market Capitalisation of the index to which the influence of a single issuer or underlying or a Specified Instrument Type is limited by application of the Concentration Factors.

FTSE Russell will determine which indices will use Concentration Factors and, for those indices, the Concentration Level to apply.

Any changes that are made to the list of which indices will use Concentration Factors and, for those indices, the Concentration Level to apply will be announced in the Index Status Report.

The table below sets out the Concentration Level used for each index group, the Concentration Level is used for all indices based on that selection of issues, regardless of the calculation currency or calculation method.

Index Group	Underlying/Issuer Concentration Level*	Structured Exchangeable Concentration Level**
Global	2%	5%
Global Vanilla	2%	5%
Global All Cap Focus	2%	5%
Global ex US	3%	5%
US	3%	5%
US All Cap Focus	3%	5%

Index Group	Underlying/Issuer Concentration Level*	Structured Exchangeable Concentration Level**
Global Focus	4%	5%
Global Investment Grade	4%	5%
US Vanilla	4%	5%
Europe All Cap Focus	4%	5%
Asia All Cap Focus	4%	5%
Europe	5%	5%
Eurozone	5%	5%
Asia	5%	5%
Growth Markets	5%	5%
Global Focus ex US	5%	5%
Global All Cap Focus Investment Grade	5%	5%
Global Focus Investment Grade	6%	5%
US Focus	6%	5%
Asia ex-Japan	6%	5%
Asia Focus	6%	5%
Japan	8%	5%
Europe Focus	8%	5%
Asia ex Japan All Cap Focus	8%	5%
Japan All Cap Focus	8%	5%
Eurozone Focus	10%	5%
Europe Investment Grade	10%	5%
Asia ex-Japan Focus	10%	5%
US Investment Grade	10%	5%
Europe All Cap Focus Investment Grade	10%	5%
Japan Focus	15%	5%
Europe Focus Investment Grade	15%	5%
US Focus Investment Grade	No Limit	No Limit
Japan Investment Grade	No Limit	No Limit
Other Markets	No Limit	No Limit

Note: * Concentration Level values are effective as of August 2019. ** Structured Exchangeables (Specified Instrument Type) Concentration Level values are effective as of [EFFECTIVE DATE OF REVISION 9 – TO BE CONFIRMED].

The Concentration Level used for each index group is reviewed at each Focus Monthly Review. FTSE Russell will determine any amendments to Concentration Levels.

Concentration Factors are used to ensure the following conditions are satisfied following the calculation of Concentration Factors:

1. The total Market Capitalisation of issues from a single issuer does not exceed a specified amount set for that index.
2. The total Market Capitalisation of issues that convert into a particular underlying does not exceed a specified amount set for that index.
3. The total Market Capitalisation of the Specified Instrument Type does not exceed a specified amount set for that index.

There is only one Concentration Factor for each issue in a particular index. This concentration factor is comprised of Underlying/Issuer and any Specified Instrument Type applicable.

The calculation of Concentration Factors may be carried out for an entire index or may be carried out for a selection of one or more issues.

FTSE Russell may determine the Concentration Factor to be used for a specific issue in a particular index.

Mandatory convertibles are not included in the computation of the total capitalisation issued by an issuer but are included in the computation of the overall index capitalisation.

The issuer related to the Exchange Property of each issue is normally a straightforward determination, however, where necessary, FTSE Russell will determine the issuer to be allocated for the purposes of these calculations.

Any changes or proposed changes to the issuer associated with the Exchange Property of an issue will be announced in the Index Status Report.

Any Specified Instrument Type is based on the instrument type definition stated in Section 6.1.19 of the Methodology.

For issues that are being added or are proposed to be added to Global Index under the Addition to the Global Index Section 2.5, the process of identifying the issue as being of the Specified Instrument Type and the issuer to be associated with the Exchange Property is carried out as part of the Issue Add process and feedback regarding the identification/association will be taken in conjunction with any other feedback regarding the proposed addition of the issue.

5.3.2 **Concentration Factor changes**

The method used to calculate Concentration Factors is set out in section 5.3.3 below.

Concentration Factors are recalculated for each index, where applicable, on a monthly basis on the Focus Monthly Review Effective Date. See [here](#) for the list of Concentration Level Reset Dates.

Concentration Factors are recalculated for specified issues when an issue is added to or dropped from an index. In these circumstances, the issues for which the Concentration Factors are recalculated is limited to the Related Issues (Section 5.3.3) of the issue or issues being added or dropped.

During the daily index calculation, a check is carried out to determine if any issuer or underlying or a Specified Instrument Type exceeds 125% of the Concentration Level applying to the index/Specified Instrument Type, such occurrences are recorded. The default position is NOT to re-calculate between the Monthly Concentration Level Reset Dates.

FTSE Russell may require a re-calculation of the Concentration Factors to be carried out for specified issues or indices or a Specified Instrument Type(s) or may defer a specific calculation of Concentration Factors.

5.3.3 Concentration Factor calculation

The process for calculating the Concentration Factors is iterative as the application of any factor will change the weighting of all other issues in the index.

The calculation follows the same sequence whether the Concentration Factors for the whole index or the Concentration Factors for specific issues are being recalculated.

For recalculation of the Concentration Factors for the **whole index**, the Relevant Issues are all of the constituents of the index.

For recalculation of specified issues, **in case of an Add or a Drop**, the Relevant Issues are the Related Issues based on the specified issues required for the recalculation.

Related Issues are determined by initially selecting all issues with the same issuer (except for Mandatories), underlying or a Specified Issue Type(s) as any of the specified issues.

Then the process adds to Related Issues any additional bonds not already defined as Related Issues which have the same underlying, issuer (except for Mandatories) or Specified Issue Type as any of the issues already defined as Related Issues. This process is repeated until no further Related Issues are found.

Further, this process means that even if none of the issues that initiated the recapping process are known to be of the Specified Issue Type(s), but any of the Related Issues are identified as such, the recapping process will include the Specified Issue Type(s) captured by the Related Issues process.

As of Revision 9, only one Specified Issue Type is included in the capping process (Structured Exchangeables as defined in Section 6.1.18).

Once Related Issues are determined, the sequence of operations for the calculation is as follows:

- a. Remove all of the Concentration Factors.
- b. For any issues where FTSE Russell has set an override value for the Concentration Factor, apply the Concentration Factor and remove those issues from the list of Relevant Issues.
- c. **Underlying iteration:**
 - i. Calculate the total Market Capitalisation of the index using the Concentration Factors already set in step b) and then calculate the Threshold Capitalisation as the product of the Market Capitalisation and the Concentration Level.
 - ii. For each underlying represented in the Relevant Issues, calculate the aggregate Market Capitalisation of all Relevant Issues with that underlying. If the value exceeds the Threshold Capitalisation, then adjust the Concentration Factor used for each of the Relevant Issues with that underlying by the ratio of the Threshold Capitalisation divided by the aggregate Market Capitalisation of all Relevant Issues with that underlying.
- d. **Repeat steps c(i) and c(ii) until no material change is made.**
- e. **Issuer Iteration:**
 - i. Calculate the total Market Capitalisation of the index using the Concentration Factors already set and then calculate the Threshold Capitalisation as the product of the Market Capitalisation and the Concentration Level.
 - ii. For each issuer represented in the Relevant Issues, calculate the aggregate Market Capitalisation of all Relevant Issues from that issuer. If the value exceeds the Threshold Capitalisation, then adjust the Concentration Factor used for each of the Relevant Issues from that issuer by the ratio of the Threshold Capitalisation divided by the aggregate Market Capitalisation of all Relevant Issues from that issuer.

- f. **Repeat steps e(i) and e(ii) until no material change is made.**
- g. **Specified Instrument Type iteration:**
 - i. Calculate the total Market Capitalisation of the index using the Concentration Factors already set and then calculate the Threshold Capitalisation as the product of the Market Capitalisation and the Concentration Level.
 - ii. For each and every member of the Specified Instrument Types represented in the Related Issues, calculate the aggregate Market Capitalisation of all Issues in a given Specified Instrument Type. If the value exceeds the Threshold Capitalisation for a given Specified Instrument type, then adjust the Concentration Factor used for each of the Issues from that Specified Instrument Type by the ratio of the Threshold Capitalisation divided by the aggregate Market Capitalisation of all Issues of a given Specified Instrument Type.
- h. **Repeat steps g(i) and g(ii) for a given and each of the Specified Instrument Type(s) represented in the Related Issues until no material change is made.**
- i. **Repeat steps (c) to (g) until no material change is made in either d, f, or h.**

The materiality test used is that if the aggregate Market Capitalisation is no more than US\$10 above the Threshold Capitalisation then the change is not material.

5.3.4 **Concentration Factor usage**

The product of the Concentration Factor set at any particular calculation and the Outstanding Issue Size for a particular issue at the time of the calculation is the Maximum Allowed Size for that issue for the period until the next calculation of Concentration Factors affecting that issue.

The actual issue size used in index calculation will be the lower of the Outstanding Issue Size and the Maximum Allowed Size.

An issue that is not subject to the application of a Concentration Factor will use the Outstanding Issue Size as the actual issue size in index calculations.

Section 6

Glossary and further information

6.1 Definitions and derivations

6.1.1 Overview

This section contains details of the definitions, derivations, and sources of a number of key parameters (including input data) used in the construction and calculation of the indices.

6.1.2 Exchange Property

The Exchange Property for a convertible is the equity and/or any other value that is received on conversion of the issue.

Issues where the exchange property consists of an amount of cash where the cash value is directly linked to the market value of an equity or basket of equities, are regarded as being convertible directly into the equities for the purposes of calculations in respect of the indices.

6.1.3 Naming methodology

The names used to describe issue in the Global Index follow specific conventions:

Convertible type	Naming method	Example
Convertible	Underlying name, coupon, maturity year	Celesio 2.5% 2018
Preferreds	Underlying name, dividend cash value per year, maturity year	Omnicare 'B' \$2 2033
Perpetual	Underlying name, coupon, type	Health Care REIT \$3.25 Perpetual
Exchangeable	Underlying name, (Issuer name), coupon, maturity year	Daimler (Aabar) 4% 2016

6.1.4 Issue Price

The Issue Price for an issue is the price at which an issue is first sold to general investors. Issues which are re-offered at a price lower than the originally published issue price will be allocated the re-offered price as the Issue Price. Some issues, particularly Japanese issues are quoted with a headline issue price which is paid by the underwriter and then an offer price, which is the price at which the issue is offered to the market. In this case the Issue Price is set to the offer price.

6.1.5 Original Issue Size

If there is any doubt as to the appropriate price to be used for the Issue Price, the Index Management Team will refer the issue to the specialist content team. The Index Management Team, in conjunction with the specialist content team, will determine the Issue Price to be used for the issue.

The Original Issue Size is the size of the issue when launched; including any option to increase that was exercised, and including any subsequent tap issues.

6.1.6 Initial Issue Proceeds & Outstanding Issue Proceeds

$$\text{Initial Issue Proceeds} = \text{Issue Price} \times \text{Original Issue Size}$$

$$\text{Outstanding Issue Proceeds} = \text{Initial Issue Proceeds} \times \frac{\text{Outstanding Issue Size}}{\text{Original Issue Size}}$$

6.1.7 Accreted Issue Proceeds and Percentage Price

The Accreted Issue Proceeds is a measure of the capitalisation of an issue which varies through the life of an issue to reflect the impact of discount issue or premium redemption terms.

By way of example, the TJX Companies 0% 2021 issue was launched in 2001 at an issue price of 67.165%, with issue proceeds of US\$347,578,875, the issue matures in 2021 at a price of 100% with redemption proceeds of US\$517,500,000. The Accreted Issue Proceeds tracks the change from the issue proceeds to the redemption proceeds through the life of an issue.

The derivation of this value is as follows:

$$\text{Accreted Issue Proceeds} = \text{Dirty Accreted Issue Price} \times \text{Original Issue Size}$$

$$\text{Dirty Accreted Issue Price (DAIP)} = \text{Accreted Issue Price} + \text{Allowance for Accrued}$$

Allowance for Accrued is the accrued interest for transactions on the relevant trade date. For issues subject to contractual accrued this is the contractual accrued. For issues that trade with accrued in the price (Dirty Price) this value is a notional value calculated using an accrual method appropriate to the market.

$$\text{Accreted Issue Price} = IP \times (CY^{EL})$$

$$CY = \left(\frac{RP}{IP} \right)^{1/IT}$$

Where

IP Issue Price as defined in Section 6.1.4

RP Redemption Price

CY Capital Yield*

EL Elapsed Life is the number of years since issue date

IT Issue Term is the number of years from Issue Date to final redemption

*For issues where the Redemption Price is not a fixed value at issue (e.g., Floating principal issues) or where the Redemption Price is not defined (e.g., Perpetual Issues) or where the Redemption Price is zero (e.g., Mandatory issues) or where the Redemption Price is in a currency different to the Issue Price, then Capital Yield is set to a value of 1.

The **Percentage Price** is the price of an issue normalised to allow for a meaningful comparison of the issue's price with the prices of other constituents, regardless of its issuance format (accreting vs non accreting), maturity stage, or its pricing units.

$$\text{Percentage Price} = \frac{DP}{DAIP}$$

Where

DP Dirty Price = Clean Price + Allowance for Accrued

DAIP Dirty Accreted Issue Price – see definition earlier in this section

6.1.8 Market Capitalisation

$$\text{Market Capitalisation} = \text{Dirty Price} \times \text{Outstanding Issue Size}$$

6.1.9 Face Value

The Face Value of an issue is the nominal value of the issue. For bonds, this is normally clearly stated in the prospectus and is the basis for the percentage pricing used in many markets. For preferred convertible issues, the Face Value is normally the liquidation preference.

If the Face Value is not clear from the issue documentation, the Index Management Team will refer the issue to the specialist content team. The Index Management Team, in conjunction with the specialist content team, will determine the Face Value to be used for the issue.

6.1.10 Parity

The Parity value of an issue is the value of the Exchange Property due to the holder of the issue on conversion of a single unit of the issue. Conventionally, Parity is converted to be in the same currency and units as the price of the issue. See details of the FX rates used for conversion in Section 6.3.4.2.

When an issue is priced at Parity, then the security price used will be the security price such that the consideration paid is equal to the Parity, thus if the security trades on a Clean Price basis, then the Clean Price will be the Parity less the Accrued.

For Bond + Warrant structures, the calculation of Parity reflects the liquidation value of the complete unit to be consistent with the approach used for other Index constituents.

The calculation method takes into account the Exercise Price of the warrant and also the bond value.

The bond value is based on the market price of the straight bond element of the unit for this calculation. If this price is not readily available, par value of the bond will be used.

The calculation for each bond is therefore:

$$Parity = LV \times FX_{unit}$$

$$LV = (MP_{BND} \times FX) + V_{sh.r} - EP$$

Where

LV Liquidation Value

MP_{BND} Market Price of straight Bond only, if relevant market price for the straight bond is not available par value of the bond is used.

FX_{stock} FX Rate to convert to Stock Currency

$V_{sh.r}$ Value of Shares Received

EP Exercise Price per Unit

FX_{unit} FX Rate to convert to Unit currency

6.1.11 Premium (Conversion Premium)

Premium is the percentage by which a clean security price exceeds the Parity.

6.1.12 Traded Value

Traded Value is the value of turnover reported on an exchange or trade reporting platform for an issue.

When traded value is not in the same currency as Outstanding Issue Proceeds, the Traded Value is converted to the relevant currency on a daily basis using the EoD FX rates used for index calculation on that day.

Traded Value data obtained from TRACE is subject to the following limitations:

1. Trades marked 1MM+ on TRACE represents trades in excess of 1,000,000 nominal and are recorded for the purposes of Traded Value calculations as 1,000,000 nominal.
2. Trades marked 5MM+ on TRACE represents trades in excess of 5,000,000 nominal and are recorded for the purposes of Traded Value calculations as 5,000,000 nominal.
3. New Issues may, in some circumstances, not report through TRACE on the first day of trading. In those circumstances, no Traded Value from TRACE will be recorded against the issue for that day.

As such, the values used for assessing liquidity may understate the actual value traded.

6.1.13 Day Types

Calendar day – any day of the week.

Weekday – any day from Monday to Friday irrespective of any bank, market, or other holidays.

Workday – a Weekday that is not a UK bank holiday.

6.1.14 Guarantor

A Guarantor, for the purposes of this methodology, is an entity explicitly identified in the issuance documents as providing an unconditional guarantee of the issuer’s obligations for the entire life of the issue.

As such, ‘Keepwell’ agreements and ‘Standby Letters of Credit’ are not normally regarded as being equivalent to a Guarantor.

In circumstances where the status of an entity that might be considered a Guarantor is not clear, FTSE Russell will determine the status.

6.1.15 Mandatory Issues

A mandatory issue is an issue where conversion into the Exchange Property is compulsory at maturity.

6.1.16 Preferred Issues

A convertible preferred stock (Pref) is an issue where a holder is permitted conversion into the Exchange Property after a specified date under the specified conditions.

6.1.17 Perpetual Issues

A perpetual issue is an issue where the Redemption Price and Maturity Date are not defined.

6.1.18 Structured Exchangeables (Specified Instrument Type)

A Structured Exchangeable bond is a bond issued by a financial institution, where the issuer (or its affiliate(s) or proxy(ies)) also act(s) in a capital market capacity for the issue, structured to reflect the performance of the exchange property named and settled primarily in cash upon conversion or redemption. If there is any doubt as to the nature of the issue under consideration, FTSE Russell will determine the instrument type.

6.1.19 Specified Instrument Type

A sub-set of instruments in an index that are determined to be of a specific type, as defined in Section 6.1 of the Methodology.

6.1.20 Financial Institution

A Financial Institution is any legal entity with TRBC classification of:

TRBC	Name
ECONOMIC SECTOR	Financials
BUSINESS SECTOR	Banking & Investment Services
INDUSTRY GROUP	Banking Services
INDUSTRY	Banks
ACTIVITY	Banks (NEC)

If there is any doubt on or there is no TRBC classification of the issuing entity, FTSE Russell will determine the classification.

6.1.21 Base Date and Base Value

The Base Date for the Global Index is 30 September 1998 and Base Value is a 100.

6.1.22 Drop Types – ‘Hard Drop’, ‘Soft Drop’

‘Hard Drop’ is a drop that removes an issue from the Global Index without an immediate option to be added back.

A 'Soft Drop' is a drop that removes an issue from the Global Index with the option of automatic reinstatement if, after the impact of the trigger event is determined, the issue meets the reinstatement criteria.

6.2 Qualifying Prices

6.2.1 Overview

The number of Qualifying Prices is used as a guide to liquidity.

To be a Qualifying Price for an issue, a price must meet a number of conditions which are set out in the section below.

6.2.2 Qualifying Price Conditions

6.2.2.1 Absolute Conditions

To be a Qualifying Price, a price must meet all of the following conditions:

- i. The price must be from a source that provides prices that are available to be used by the LSEG Pricing Service (LPS) in the determination of the Closing Price,
- ii. The price must be no older than one week,
- iii. The price must have a non-zero bid and a non-zero offer,
- iv. The price must have a positive, non-zero spread,
- v. The price must have a spread less than or equal to 2% of Face Value,
- vi. The price must have a spread less than or equal to 3% of the Bid.

6.2.2.2 Relative Condition

In addition to the absolute conditions above, the mid prices of all the Qualifying Prices for an issue must fall within one Standard Spread.

A Standard Spread is the lesser of 2% of Face Value and 3% of the lowest mid-price of any Qualifying Price.

6.3 Pricing

6.3.1 Overview

Over the counter (OTC) market for Convertible Bonds is considered sufficiently active for the purpose of determining the Indices when the daily activity in the market allows the LSEG Pricing Service (LPS) to establish a representative market level for convertible bonds in general and the Global Index constituents in particular.

The Market Prices generated from the automated price feeds will be used for all end of day pricing of issues required for calculation of the Index.

FTSE Russell may determine that a different price source or a price determined by FTSE Russell should be used either for a single calculation point or for an extended period, if there is a clear reason to believe that the automated price is not representative.

6.3.2 Price Basis

The basis used for pricing convertibles in the Index is:

- i. For issues being added or reinstated to the Global Index or any Sub-Index at the calculation point – the **Offer (Ask)** price.
- ii. For issues being retained in the Global Index or any Sub-Index at the calculation point as well as the volume changes – the **Bid** price.
- iii. In some circumstances an issue may be removed from the Global Index at the Parity value. In such circumstances, the equity price prevailing at the end of the 'Hard' or 'Soft' Drop Effective Date will be used to compute – the **Parity**.

- iv. For issues being 'Hard' or 'Soft' dropped from the Global Index or any Sub-Index at the calculation point – the **Bid** price.

6.3.3 Price and Rates Sources

The Convertible Prices, Price for Equities, FX, and Interest Rates are obtained as follows:

6.3.3.1 Prices for Convertible Bonds (inc. Amendment Process)

- i. For issues where a LSEG Pricing Service (LPS) Closing Price is available, the LSEG Pricing Service (LPS) Closing Price will be used.
- ii. For issues where a LSEG Pricing Service (LPS) Closing Price is not available, the closing price from a Recognised Convertible Exchange will be used.

6.3.4 For issues where neither a LSEG Pricing Service (LPS) Closing Price nor a closing price from a Recognised Convertible Exchange is available, then the previous day's LSEG Pricing Service (LPS) /Exchange price will be used.

- iii. FTSE Russell will determine the price to be used if steps (i) – (iii) do not yield the price.

When a price from a Recognised Convertible Exchange is used, the Index Management Team will determine the appropriate exchange to use for a particular issue. If there is uncertainty as to the appropriate exchange to use, FTSE Russell will determine the appropriate exchange to use.

If an amendment is required:

The amended price is determined in conjunction with LSEG Pricing Service (LPS). If LSEG Pricing Service (LPS) no longer prices the issue and the prices for the event is determined by FTSE Russell the following actions will take place:

a. For an amendment to an Add price:

The issue will be dropped from the Index at the prevailing market price and then immediately reinstated at a different price. The difference between the prices will generate the required amendment.

b. For an amendment to a Drop price:

The issue will be reinstated to the index for a single day and the Add and Drop prices will be selected to provide the required amendment.

c. For an amendment to a price used for a change to amount outstanding:

The amount outstanding will be restored to the prior amount outstanding for one day in order to make the adjustment. The start and end of day prices for that day will be selected to provide the required amendment.

6.3.4.1 Prices for Equities

The prices for equities are sourced from the exchange feeds. The price used for the Index calculation is the last trading price. Where an equity trades on a number of exchanges, the Index Management Team will determine which exchange or exchanges are appropriate for a particular issue at any particular time. If there is uncertainty as to the appropriate exchange to use, FTSE Russell will determine the appropriate exchange to use.

6.3.4.2 FX Rates

WMR Closing Spot Rates are used as the basis for FX rates used for Index calculations. **The Index uses the Bid and Ask rates to USD to calculate a mid-rate to USD which is used for Index calculations.** Where cross-rates are required for calculation purposes, these rates are calculated from the mid rates calculated by the Index.

Prior to 11th December 2015 the FX rates used for Index calculation were taken from LSEG as of 16:30 UK time.

6.3.4.3 Interest Rates

Interest rates required for the calculation of FX hedged indexes are taken from LSEG; the mid rates are used for calculation.

6.3.5 Price and Rates Timings

The prices and rates captured by the automated feeds are selected to reflect the most recent reliable value for each component of the Index calculation. Individual securities may be treated differently if FTSE Russell determines that the general approach is generating unsatisfactory prices (Section 6.3.3.1 applies).

6.3.5.1 General Basis for Convertibles

The general basis for convertibles is shown in the table below:

Price Type	Source
LSEG Pricing Service (LPS) Closing Price	The prices provided by LSEG Pricing Service (LPS) in the following regional price files (estimated delivery times in brackets): Asia px_asia_6pm_govcorp (18:45 Tokyo time) EMEA px_emea_6pm_govcorp (18:45 London time) US px_amer_4pm_govcorp (16:45 New York time)
Asian and European exchange traded convertibles	More than 1 hour after the stated close of the exchange, however, the exchanges only transmit trades from regular trading and therefore last trade will be last trade during a regular session.
US Exchange traded issues	Most recent price collected when the exchange sends the "end of trading" message.

6.3.5.2 General Basis for Equities

The general basis for equities is shown in the table below.

Price Type	Source
Asian and European Equity	More than 1 hour after the stated close of the exchange, however the exchanges only transmit trades from regular trading and therefore last trade will be last trade during a regular session.
US Equity	Most recent price collected when the exchange sends the "end of trading" message.

6.3.5.3 General Basis for Rates

The general basis for rates is shown in the table below.

Rate Type	Source
FX Rates	WMR Closing Spot Rates, normally calculated at 16:00 UK time.
Interest Rates (1 Month Deposit Rates)	LSEG Market Data feed.

6.3.6 Recognised Exchanges

6.3.6.1 Equity Exchanges

A Recognised Exchange for equity trading is any exchange that provides trading and price data on equities and is available as an exchange feed through LSEG market data systems.

6.3.6.2 Convertible Exchanges

A Recognised Convertible Exchange for convertible trading is any exchange that provides trading and price data on convertibles and is widely recognised as an exchange which provides a viable market in a particular issue.

1. In general, the Luxembourg Exchange is not regarded as a Recognised Convertible Exchange as it does not provide a trading forum.
2. In general, the Singapore Exchange is not regarded as a Recognised Convertible Exchange for issues that are not local issues as it does not provide a trading forum.

FTSE Russell will decide if a particular exchange is a Recognised Convertible Exchange for a particular issue.

6.3.7 **LSEG Pricing Service (LPS) Closing Price**

The LSEG Pricing Service (LPS) is an independent, global evaluated pricing source covering over 2.5 million fixed income securities, derivatives, and bank loans. Coverage spans all major financial markets and prices are available at multiple times daily. LSEG Pricing Service (LPS) evaluations, which provide detailed transparency and market insight, are designed to support asset managers, custodian banks, mutual fund administrators, and risk managers.

The LSEG Pricing Service (LPS) Closing Price is taken from the regional price files listed in Section 6.3.5. The regional price files contain both bid and offer prices.

6.4 Country and Region Details

6.4.1 Allocation of Country to Region

The allocation of an issue to a Country is determined as set out in 2.3.

The relationship between Country and Region is shown in the table below.

The US and Japan are also regarded as Regions for the purposes of Sub-Indices creation.

Country to Region allocation table:

Country	Global	Global ex US	US	Europe	Asia	Other Markets	Euro-zone	Asia ex Japan	Growth Markets	Japan
Argentina	x	x				x			x	
Australia	x	x				x				
Austria	x	x		x			x			
Bahamas	x	x				x				
Belgium	x	x		x			x			
Bermuda	x	x				x				
Brazil	x	x				x			x	
Canada	x	x				x				
Cayman Islands	x	x				x				
China	x	x			x			x	x	
Denmark	x	x		x						
Egypt	x	x				x			x	
Finland	x	x		x			x			
France	x	x		x			x			
Germany	x	x		x			x			
Ghana	x	x				x			x	
Greece	x	x		x			x			
Hungary	x	x		x					x	
India	x	x			x			x	x	
Indonesia	x	x			x			x	x	
Ireland	x	x		x			x			
Israel	x	x				x			x	
Italy	x	x		x			x			
Japan	x	x			x					x
Liechtenstein	x	x		x						
Luxembourg	x	x		x			x			
Malaysia	x	x			x			x	x	
Mauritius	x	x				x			x	
Mexico	x	x				x			x	
Netherlands	x	x		x			x			
New Zealand	x	x				x				
Norway	x	x		x						
OTHER	x	x				x				
Pakistan	x	x			x			x	x	

Country	Global	Global ex US	US	Europe	Asia	Other Markets	Euro-zone	Asia ex Japan	Growth Markets	Japan
Philippines	x	x			x			x	x	
Poland	x	x		x					x	
Portugal	x	x		x			x			
Russia	x	x		x					x	
Singapore	x	x			x			x	x	
South Africa	x	x				x			x	
South Korea	x	x			x			x	x	
Spain	x	x		x			x			
Sweden	x	x		x						
Switzerland	x	x		x						
Taiwan	x	x			x			x	x	
Thailand	x	x			x			x	x	
Turkey	x	x		x					x	
UK	x	x		x						
United Arab Emirates	x	x				x			x	
US	x		x							
Vietnam	x	x			x			x		

6.5 Credit Rating detail

6.5.1 Rating Equivalence table

The equivalence between rating schemes for the purposes of allocating issues as Investment Grade or Sub Investment Grade is shown in the table below.

		S&P	Moody's			S&P	Moody's
Investment Grade	1	AAA	Aaa	Sub Investment Grade	11	BB+	Ba1
	2	AA+	Aa1		12	BB	Ba2
	3	AA	Aa2		13	BB-	Ba3
	4	AA-	Aa3		14	B+	B1
	5	A+	A1		15	B	B2
	6	A	A2		16	B-	B3
	7	A-	A3		17	CCC+	Caa1
	8	BBB+	Baa1		18	CCC	Caa2
	9	BBB	Baa2		19	CCC-	Caa3
	10	BBB-	Baa3		20	CC	Ca
				21	C	C	
				22	D		

6.5.2 Issuer Rating derivation

The issuer ratings used when determining the classification of each issue for the credit sub-indices in accordance with Section 3.2.3 are obtained from the LSEG GovCorp database which is maintained by the LSEG Ratings Team using data from relevant rating agencies.

The rating agencies considered for the purposes of the Index are Moody's and S&P.

The GovCorp data fields used are from the 'party' table for the issuer/guarantor and are populated from the data available from the rating agencies using the following procedures:

Moody (mdy_issuer_rating_cd)	S&P (sp_issuer_long_rating_cd)
<p>This field is populated using the Moody rating designations listed below only.</p> <ul style="list-style-type: none"> • LT Issuer Rating • LT Issuer Rating (Domestic) • LT Issuer Rating (Foreign) 	<p>This field is populated using the S&P rating designations listed below only.</p> <ul style="list-style-type: none"> • Foreign Currency LT • Local Currency LT
<p>In the event that more than one of these is provided by the rating agency, then the most recent is used to populate the field. If both Foreign and Domestic are updated at the same time, then the Foreign rating is dominant.</p>	<p>In the event that more than one of these is provided by the rating agency, then the most recent is used to populate the field. If both Foreign and Local are updated at the same time, then the Foreign rating is dominant.</p>

6.6 Equity Dividend treatment

Gross dividends are used for all equity markets.

6.7 Index calendar

The Index Calendar lists the key dates for the Focus Monthly Review and can be found [here](#).

The Index Calendar will be amended by from time to time. Any amendments will be announced in the Index Status Report which is published on all Weekdays.

Section 7

Index publication and communication of index events

7.1 Index publication

The Indices are published overnight on an EOD basis for each Weekday via a number of delivery mechanism such as e-mail, FTP, Eikon terminals, LSEG data feeds, Bloomberg terminals, and other redistributors.

Calculation of the Indices takes place on or shortly after 10pm GMT and relies on a timely availability of the input data for each of the constituents, as well as the timely availability of other necessary data. The input data used is verifiable. The quality of the input data is assured via a combination of Pricing Sources as detailed in Section 6.3.3.1.

In case of any delays with the delivery of input data or other necessary data for the publication of the Index, FTSE Russell will notify relevant groups of such a delay while investigating and resolving the incident with the support of the Index Technical Support Team. In case of a significant delay in obtaining the input or other necessary data for the publication of the Index values, the Index Management Team may delay the calculation and publication of the Indices until the morning of the following Weekday to allow time for remedial actions.

FTSE Russell may, using expert judgement, determine that it is necessary to use all or some of the input and/or necessary data other than what is available on the day via the Data Sources. In such circumstances the User Base will be notified.

7.2 Amendments to reports

Reports that include information that relates to future events are subject to revision if additional information becomes available.

SoD reports are subject to revision during the day of publication in respect of SoD prices, in particular, Add prices.

If reports are subject to revision, then FTSE Russell will, at its sole discretion, decide what action to take. Revised reports may not be published.

Section 8

Sub-Indices (Definitions)

8.1 Sub-Indices groupings

For convenience, the sub-indices are arranged in groups:

1. Headline, Global, Regional, Credit, Focus Indices

The Headline group includes those indices that are most frequently used and contains indices from the other groups. The Global group contains those indices with a Global geographic coverage, some of which are also present in other groups.

The Sub-Indices tables are available from [here](#).

Section 9

Methodology changes

The effective dates for revisions of the Methodology are:

Revision	Effective date
3	8 October 2014 , however Sections 2.2-2.4 were applied to the Q3 2014 Reselection process (effective data 8 October 2014) Section 2.5.4 was effective as of 16 September 2014
4	2 December 2014
5	25 November 2015 , however the change to the source for FX Rates (Section 6.3.3) is effective as of the Index calculation at end of day on 11 December 2015.
6	30 December 2016 (updated Index Calendar only)
7	2 September 2019 The final Quarterly Reselection was Q1 2019, effective 10 Apr 2019.
8	1 January 2020 Transition to RBSL under EU BMR; minor clarifications for Revision 7.
8.5	28 June 2021 <ol style="list-style-type: none"> General Eligibility criteria amendment with item (viii) (Section 2.2.1) Amended eligibility for the named groups of issues (New section 2.2.6) Amendment of the Reinstatement Process to handle 'no explicitly stated outcome' events (Section 2.6.2.1) Drop Due to Size/Drop Due to Price amended with conditional testing period extensions (Sections 2.6.3.1.2 & 2.6.3.1.3) Non-material change <ol style="list-style-type: none"> The ESG Disclosure – moved to Section 10 Percentage Price Definition moved to section 6.1.7 and expanded Added Structured Exchangeables, Specified Instrument Type, and Financial Institution definitions to section 6.1.18, 6.1.19 and 6.1.20 respectively.
9	1 November 2021 <ol style="list-style-type: none"> Added Structured Exchangeables capping application details throughout section 5.3 Non-material change <ol style="list-style-type: none"> Tables in Section (2.2.2, 2.6.3.1.2, 3.3.1.4.1, 6.4.1) have been amended to include Turkey
10	1 June 2022 Non-material changes <ol style="list-style-type: none"> Sections throughout the document have been re-arranged, amended, and simplified to enhance the accessibility and clarity of the document as well as the index construction process in place. Diagrams have been amended with additional reference details to enhance accessibility and clarity of the index construction process in place. Section 10 was added to list instances of the expert judgement permitted under the Methodology. The ESG Disclosure moved to section 11. 1 Jan 2024 Non-material changes <ol style="list-style-type: none"> The Methodology is rebranded to align with the transition to FTSE Russell All references to REPS are removed to reflect the new name of the LSEG Pricing Service (LPS)

Revision	Effective date
	<ul style="list-style-type: none">3. Index Operations Team is now referred to as Index Management Team4. ESG reference5. Governance Section
11	2 Dec 2024 Non-material changes <ul style="list-style-type: none">1. The Methodology is updated to align with transition to administration by FTSE Russell

Section 10

Further information (Contact details)

General queries should be directed to CB_Index_Reporter@Iseg.com

Section 11

Expert judgment permitted under the methodology

The Methodology permits the following instances of expert judgment. For full details, see the relevant section specified.

1. Amend the actions and/or action timeline to accommodate market events and/or conditions (Section 2.1)
2. Determine an appropriate action/timing of an action where such determination is required (Section 2.1)
3. Determine most appropriate action to apply, if more than one is triggered (Section 2.1)
4. Determine eligibility of an issue for inclusion in case of eligibility criteria uncertainty. (Section 2.2.1)
5. Amend default Country of an issue where appropriate (Sections 2.3)
6. Set an issue as 'Monitor for Add' under certain circumstances (Section 2.4.1)
7. Set an issue as a 'Potential Add' under certain circumstances (Section 2.5.1)
8. Decline an Add under certain circumstances (Section 2.4.2)
9. Reset a declined Add to 'Potential Add' (Section 2.5.1)
10. Extend Reinstatement monitoring (Sections 2.6.2.1).
11. Extend duration of the testing period in case of an adverse market-wide event (Sections 2.6.3.1.2, 2.6.3.1.3)
12. Proactively Deselect an issue under certain circumstances (Section 2.6.3.2.3)
13. Proactively Change an issue under certain circumstances (Section 2.8.2)
14. Add or remove an issue from the Focus Sub-Indices between the formal reselections (Section 3.3.1.3 (xi))
15. Handle an issue replacement for the Focus Sub-Indices (Section 3.3.1.3 (x))
16. Amend testing thresholds for the Focus Sub-Indices (Section 3.3.1.4, 3.3.1.5)
17. Determine if the Index requires a re-statement (Section 5.1)
18. Determine the Concentration Factors application, including the Concentration Level at index or an individual security level or re-calculation of the Concentration. (Section 5.3.1, 5.3.2)
19. Determine the issuer for the Exchange Property where necessary (Section 5.3.1)
20. Determine the status of a Guarantor entity under certain circumstances. (6.1.14)
21. Determine a Structured Exchangeable or Financial Institution classification under certain circumstances (Sections 6.1.18, 6.1.19)
22. Determine an alternative price source or a price under certain circumstances or where the Methodology explicitly require such determination (Section 2.6.3.1.5, 6.3.1, 6.3.3.1)
23. Determine the appropriate exchange to use for pricing equities (Section 6.3.5)
24. Determine a Recognised Convertible Exchange for a particular issue (Section 6.3.6.2)

25. Determine when to use of some of the input and/or necessary data other than what is available on the day via the Data Sources (Section 7.1).
26. Determine viable data and/or Data Source(s) during severe technical problems, extreme market events, or a widespread loss of liquidity (Section 12.7).

Section 12

Appendix

12.1 Index governance

FTSE International Limited (“FIL”) is the Administrator of the Convertible Bond Indices benchmark family. FIL is incorporated in England and Wales and is a wholly owned subsidiary of London Stock Exchange Group plc (“LSEG”).

FIL is authorised and regulated in the UK by the Financial Conduct Authority (“FCA”), FCA Reference Number 796803. FIL is an Authorised Benchmark Administrator as listed on the FCA Benchmark Register.

As Administrator, FIL is responsible for collecting input data, determining and publishing the benchmarks, and for all aspects of governance, oversight, compliance, and integrity of the benchmarks.

[FTSE Russell Benchmark Oversight Committee](#)

An independent Oversight Committee is responsible for oversight of all aspects of the provision of the FTSE Convertible Indices, including reviewing the indices definition and the Methodology at least annually, overseeing any changes to the Methodology, cessation of the indices, and overseeing the administrator’s control framework, management, and operation of the Indices.

12.2 Market feedback

12.2.1 User base

‘The User Base’ is not a formal group but consists of any user or recipient of index information largely made up of the recipients of the Index Status Report.

12.2.2 Market feedback

The governance of the FTSE Convertibles Index differs from the general FTSE Index Governance Frameworks as it includes the ability of the ‘User Base’ to provide feedback.

FTSE Russell may request feedback as needed.

Maintenance and calculation of the index requires timely, accurate, and complete information on the issues that are constituents of the index or are potential constituents of the index.

It is recognised that, on occasions, market participants will have information that is relevant to index operations that may not have been considered, and the methodology includes several processes to allow this information to be utilised whilst maintaining the integrity of the index.

It is anticipated that feedback will be received from recipients of the Index Status Report (Section 7), although any feedback received will be considered. The Index Status Report includes details of proposed Adds, Drops, and other relevant events.

When considering feedback from the User Base, FTSE Russell will seek to independently validate any information provided in the feedback, where required. FTSE Russell will use feedback in conjunction with all other available information to decide the appropriate action.

12.3 Complaints, Operational Enquiries and Price Challenges

12.3.1 FTSE Russell’s complaints procedure can be accessed using the following link: [FTSE Russell Benchmark Determination Complaints Handling Policy](#)

- 12.3.2 A Price Challenge is a request from a user or a stakeholder to verify and confirm the accuracy of one or more of the published Benchmark rates, inputs to those rates (if publicly available), or whether a specific benchmark determination is representative of market value.
- 12.3.3 Operational enquiries do not meet the definition of a compliant and include Benchmark Price Challenges. However, FTSE Russell may decide to treat an operational enquiry or a series of operational enquiries as a formal complaint.
- 12.3.4 Operational enquires must be submitted to FTSE Russell by e-mail and should contain as much information as possible, including your name, your title, the institution you represent, your e-mail address and telephone number, to enable the operational enquiry to be investigated in a timely manner.
- 12.3.5 The e-mail address to raise any benchmark related price challenge and operational enquiries is: CB_Index_Feedback@lseg.com

12.4 Purpose of the document

This document, issued by FTSE International Limited in its capacity as Administrator for the FTSE Convertible Indices, specifies the Methodology for the FTSE Convertible Indices.

12.5 Intended readership

The intended readership of this Methodology are the stakeholders of the benchmark.

12.6 Methodology review and change procedure

The Methodology is reviewed on at least an annual basis. Additional review may be conducted at the Administrator's discretion. Reviews will include an analysis of the underlying market the Benchmark seeks to represent, including but not limiting to, liquidity, market events and any changes to conventions that might affect the quality or viability of the Benchmark, the effectiveness and the compliance of the Methodology.

The independent Oversight Committee will provide input into reviews and reviews are approved by the appropriate FTSE Russell Committee.

Back-testing shall take place at least at each annual review of the Methodology and following any material change of the Methodology. The Methodology shall include an assessment of the back-testing results, including processes to ensure that systemic anomalies highlighted by back-testing are identified and properly addressed.

Back-testing results

No significant issues were found under the back-test for the period of 2024-07-01 to 2024-10-31.

Changes to the Methodology shall be made in accordance with the FTSE Russell Benchmark Methodology Change Policy. The policy can be viewed [here](#).

12.7 Potential limitations of the Benchmark

FTSE Convertible Indices are calculated using readily available input data delivered by LSEG Pricing Service (LPS) with other necessary data delivered by LSEG data feeds (the 'Data Sources'). Further details are available in Sections 6.3 and 7.1.

Determination of FTSE Convertible Indices depends on the timely availability of the input and other necessary data from said Data Sources on a Weekday basis.

Any partial inadequacies in input data are mitigated via succession of Pricing Sources as detailed in Section 6.3.3.1.

Severe technical problems, extreme market events, or a widespread loss of liquidity may lead to a complete loss of one or more of the Data Sources which will affect the delivery of the data to FTSE Russell.

In such circumstances, FTSE Russell will exercise expert judgement to determine the viable data and/or Data Source(s) necessary to calculate the Indices. FTSE Convertible Indices would not necessarily be representative of the market segments they aim to represent under such conditions.

12.8 Access to the methodology

Methodologies for all public Indices such as Global, Qualified, Qualified Monthly Hedged, and Monthly Europe Focus are made available on the dedicated Convertible Indices website [here](#).

12.9 FTSE Russell organisational policies

12.9.1 FTSE Convertible Indices are subject to the following FTSE Russell organisational policies:

[Index Series Decommissioning Statement](#),

[Benchmark Administration Governance and Conflicts of Interest Management](#) and

[Policy for Benchmark Methodology Changes](#)

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