

Refinitiv Convertible Indices

Qualified Global Convertible Index Methodology

Revision 3 – 22 June 2015

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1. Introduction

Defined terms used in this document have the meaning ascribed to them in Base Index unless otherwise defined.

The Refinitiv Qualified Global Convertible Index is referenced in this document as “Index”, the Refinitiv Global Convertible Index is referenced in this document as the “Base Index”.

The Methodology for the selection and maintenance of the Base Index is contained in the Refinitiv Convertible Indices Methodology (<https://www.refinitiv.com/en/financial-data/indices/convertible-indices>).

2. Selection method

2.1 Overview

The Index is a sub-index of the Base Index. As such, issues may only be a constituent of the Index if they are a constituent of the Base Index.

The constituents of the Index will be reviewed during the monthly reselection process at which point issues may be added to or dropped from the constituents (Section 2.2).

The constituents of the Index may be amended between the monthly reselection points (Section 2.3).

2.2 Monthly Reselection Process

2.2.1 Monthly Reselection process - timetable

The key dates for the monthly reselection process are:

- Index Review Selection Date
- Index Review Effective Date

The Index Review Effective Date will be the second Wednesday in each month. However, for January, if the 1 January is a Wednesday then the date will be moved to the third Wednesday in the month.

However, for any month containing a Quarterly Index Reselection Effective Date for the Base Index the Index Review Effective Date will be the same as the Quarterly Index Reselection Effective Date for the Base Index.

The Index Review Selection Date will be 7 calendar days prior to the Index Review Effective Date.

The Index Review Reference Point is the Index calculation carried out at EoD immediately preceding the Index Review Selection Date and it is the data as of this point which is used for the monthly reselection process.

2.2.2 Monthly Reselection process - timetable

On the Index Review Selection Date all issues that are constituents of the Base Index at that time are considered for inclusion in the Index. Any issue that has been announced as an addition to the Base Index with an add date prior to or on the Index Review Effective Date is also considered for inclusion in the Index.

Issues that meet both the type criteria (Section 2.2.4) and the size criteria (Section 2.2.5) will be included in the Index.

Issues that are constituents of the Index at the Index Review Reference Point are not subject to the size criteria and will be included in the Index provided they meet the type criteria.

The issues selected by this process will form the Index immediately after EoD on the Index Review Effective Date.

2.2.3 Monthly Reselection process - pricing

Issues that are selected for inclusion in the Index as of the Index Review Effective Date that were not included in the Index immediately prior to that point will be added at the Offer Price at EoD on the Index Review Effective Date.

Issues that are not selected for inclusion in the Index as of the Index Review Effective Date that were included in the Index immediately prior to that point will be dropped at the Bid Price at EoD on the Index Review Effective Date.

In the event that an issue which is a constituent of the Index is dropped from the Base Index as of Index Review Effective Date then the pricing used for the Base Index will be used for the Drop from the Index.

If the event that an issue which is being added to the Base Index as of EoD on the Index Review Effective Date is also being added to the Index at that point, then the pricing used for the Base Index will be used for the Add to the Index.

2.2.4 Type Criteria

Issues which meet any of the following criteria will not be considered for inclusion in the Index:

- Issues with Mandatory conversion at maturity
- Perpetual issues
- Issues which are issued in the form of a Preferred Share
- Issues for which the only tranche in issue is a 144A tranche
- Issues that are not constituents of the Index and which have been announced as a Drop from the Base Index at the Index Review Reference Point

The basis for determining these criteria will be the information available to the Index Manager on the Index Review Selection date. In the event that information is incomplete or conflicting the Index Manager will determine the status of the issue, with a presumption to retain the issue status as previously determined unless there is a clear reason to change the status.

2.2.5 Size Criteria

Issues will be considered for inclusion in the Index if the Outstanding Issue Size, when rounded to the nearest 1m in the relevant currency, equals or exceeds the levels stated in the table below.

Region	Currency	Threshold
US	USD	350m
Europe	EUR	375m
Asia ex-Japan	USD	275m
Japan	JPY	22,000m
Other Markets	USD	275m

The Region for each issue will be the Region assigned to the issue in the Base Index.

The Outstanding Issue Size is defined as the face value of the amount of the issue that remains outstanding at the Index Review Reference Point converted, if required, to the threshold currency using the EoD FX rates at the Index Review Reference Point.

Issues that are constituents of the Index at the Index Review Reference Point are not subject to this test.

2.3 Changes to constituents between monthly reselections

2.3.1 Adds and Drops

Issues will not be added to the Index between monthly reselections.

Issues that are dropped from the Base Index that are constituents of the Index will be dropped from the Index on the same date and at the same price as they are dropped from the Base Index. Issues dropped in this manner will be dropped, in general, at the Bid Price.

Technical Adds and Drops will be applied to the Index at the same time as they are applied to the Base Index, these operations are necessary when the nature of the security changes such that a different reference is required for the issue, the physical asset represented by the entries remains unchanged during this process.

2.3.2 Changes to Outstanding Issue Size

Changes to the Outstanding Issue Size which reduce the Outstanding Issue Size will be applied to the Index at the same time as these changes are applied to the Base Index.

Changes to the Outstanding Issue Size which increase the Outstanding Issue Size will not be applied to the Index at the same time as these changes are applied to the Base Index. These changes will be applied at the monthly reselection on Index Review Effective Date

For the avoidance of doubt, should an issue be subject to an increase in Outstanding Issue Size followed by a decrease in Outstanding Issue Size between monthly reselections then the change will not be applied to the Index unless the resultant Outstanding Issue Size is less than the Outstanding Issue Size applicable to the Index at that time.

3. Calculation of Index

3.1 Pricing of Constituents

Constituents of the index will be priced at the same values as used for the Base Index with the exception of issues being added to the Index at the monthly reselection when the pricing guidelines in Section 2.2.3 apply.

3.2 Overview of Calculation Approach

3.2.1 Income

Income received by Index issues will not be reinvested in the Index immediately.

Income received by issues will be retained as cash in the currency of receipt in the index calculation and will be credited to the relevant cash balance on the ex-income date.

Income will include any cash distribution due to holders of the issue.

The amount of cash credited to the cash balance will be the same amount as would be reinvested under the Base Index Methodology.

3.2.2 Changes to Outstanding Issue Size

Changes to Outstanding Issue Size will generate an increase in the relevant cash balance equal to the value of securities represented by the change.

3.2.3 Issues dropped between monthly reselections

When issues are dropped between monthly reselections the relevant cash balance will be increased by the value of the issue at the time of removal from the Index.

3.2.4 Cash balances

Cash balances will not be credited with interest.

Cash balances will be reinvested in the index at EoD on the Focus Monthly Review Effective Date using the FX rates for index calculation at that point.

3.3 Detail of Index Calculation

The index calculation will be carried out in the same manner as the index calculation of the Base Index with the exception of the treatment of events which generate cash in the Index and the treatment of cash at the monthly reselection cash, which are treated as set out in the sections below.

3.3.1 Daily index calculation

The daily index calculation is as shown below.

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 .
- B^t The combined value of all cash balances on day t , each held in the currency of receipt and converted to the index currency using the relevant Eod FX rate for index calculation.
- S_i^t The issue size outstanding 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:

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

The value of F will remain unchanged except in any the following circumstances:

- A change to the constituents of the index that is not reflected solely as a change in the cash balances
- A change to the issue size of one or more of the constituents that is not reflected solely as a change in the cash balances
- The Focus Monthly Review Effective Date when the cash balances are re-invested in the Index

The derivation of the new value for the index factor in each of these circumstances is shown below. Where:

- new_B^t The combined value of all cash balances on day t , each held in the currency of receipt and converted to the index currency using the relevant Eod FX rate for index calculation. This value will be the same as B^t except in the case when cash balances are re-invested when new_B^t will be set to zero.
- $new_S_i^t$ The issue size outstanding in units of the i^{th} issue in the index on day t following the change in circumstances for which the factor is to be adjusted.
- new_F^t The index factor on day t following the change in circumstances for which the factor is to be adjusted.
- new_n^t The number of issues in the index on day t following the change in circumstances for which the factor is to be adjusted.

The value of the index will be

$$\frac{new_B^t + \sum_{i=1}^{i=new_n^t} (D_i^t * new_S_i^t * X_i^t)}{new_F^t}$$

The value of the index is unchanged by the change in circumstances and therefore

$$V^t = \frac{B^t + \sum_{i=1}^{i=n^t} (D_i^t * S_i^t * X_i^t)}{F^t} = \frac{new_B^t + \sum_{i=1}^{i=new_n^t} (D_i^t * new_S_i^t * X_i^t)}{new_F^t}$$

And thus

$$new_F^t = \frac{new_B^t + \sum_{i=1}^{i=new_n^t} (D_i^t * new_S_i^t * X_i^t)}{B^t + \sum_{i=1}^{i=n^t} (D_i^t * S_i^t * X_i^t)}$$

3.3.2 Daily index calculation – cash balances

3.3.2.1 Income events – Cash Balance Treatment

The Base Index daily index calculation is

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

Where

C_i^t is the cash value of income that becomes due for a unit of the i^{th} issue in on day t .

D_i^t for an issue with income that becomes due on day t reflects the “ex-income” status of the issue either by way of adjustment of the contractual accrued or in market pricing for issues that trade “Dirty”.

The corresponding calculation for the index is:

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

In the calculation for the index, B^t includes the cash value of all income due to constituents that are “ex-income” on day t .

3.3.2.2 Constituent changes – cash balance treatment

When an issue is dropped from the Index the impact is to change the cash balance. Issues are dropped at the EoD price on the Drop Effective Date.

The cash balance is not increased on the Drop Effective Date as the issue remains a constituent at the time of the calculation; however, the cash balance is updated immediately following the calculation using the EoD price and size of the issue. The cash is held in the currency of pricing of the issue until the following Focus Monthly Review Effective Date.

3.3.2.3 Outstanding Issue Size changes – cash balance treatment

When the Outstanding Issue Size decreases the impact is to change the cash balance. The change is applied at EoD on the Change Effective Date.

The cash balance is not increased on the Change Effective Date as the issue size remains unchanged at the time of the calculation; however, the cash balance is updated immediately following the calculation using the EoD price and the size of the change. The cash is held in the currency of pricing of the issue until the following Focus Monthly Review Effective Date.

In the event that the Outstanding Issue Size increases the impact of the change is to require a new index factor to be calculated as described in Section 3.3.1 above

3.4 Concentration Factors

The Index is subject to a Concentration Level of 4%.

The calculation of the Concentration Factors to be applied to each issue will be calculated in accordance with the Base Index Methodology with the following exceptions:

- The concentration Factors will not be adjusted for constituent changes or Outstanding Issue Size changes between the Focus Monthly Review Effective Date and the following Focus Monthly Review Effective Date.
- The daily check to determine if any issuer or underlying exceeds 125% of the Concentration Level applying to the index will not be applied to the Index.

However, should the market capitalisation of a single component of the Index represent more than 25% of the Index market capitalisation at an Index calculation the concentration factors for that issue will be reset to take effect at the following index calculation using the methodology set out in the Base Index Methodology. In addition, the concentration factors for any issues with a related issuer or underlying asset may be adjusted during this operation.

3.5 Regional Components of the Index

Index values will be calculated for the following regional components of the Index.

- US regional component
- Global ex-US component

The US regional component will comprise all issues in the Index which are allocated to the US region in the Base Index.

The Global ex-US regional component will comprise all issues in the Index which are not included in the US regional component of the Index.

The Concentration Factors applied to the constituents of each regional component will be the same as those applied to the Index.

3.6 Historical Index Data

Data prior to 10 September 2014 has been calculated based on historic data.

Historic data for the period 11 December 2008 – 9 September 2014 was calculated when the Index was launched in September 2014. This historic data was calculated using the Methodology as set out above.

Historic data for the period 14 April 2003 – 10 December 2008 was calculated in June 2015 to provide an indication of performance in that period.

The calculation basis of the Base Index varied during the back calculation period and the back calculation has been carried out on the same basis as that used historically for the Base Index. The principal differences are listed below:

- Prior to 1 Jan 2008 the back calculation is based on Offer prices for Adds, Drops and daily valuations.
- Prior to July 2008 capping was not applied to the Index.

In addition, one selection rule for the Index is varied during the back calculation:

Prior to 17 Dec 2007 the Index selection rule which states that “Issues for which the only tranche in issue is a 144A tranche” are excluded is amended to be “Issues for which the only tranche in issue prior to 17 Dec 2007 is a 144A tranche” are excluded.

The back calculation has been carried out to generate the same index value and constituents at Close on 11 December 2008 as the index calculation carried out at inception in order to provide a continuation of the history.