

**Rules for the HS Market Neutral Total Return Index Powered by HOLT™**  
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**Version 1**

# **Rules for the HS Market Neutral Total Return Index Powered by HOLT™ (the “Index”) (the “Rules”)**

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# 1 Introduction

## What is HOLT?

HOLT, a division of Credit Suisse, offers unique insights into corporate performance and valuation. The HOLT methodology has been continuously developed for over 30 years, and aims to convert accounting data into cash, as measured by Cash Flow Return on Investment (CFROI<sup>®</sup>). This is done to more closely reflect a company's true economic performance and enables comparisons across sectors, regions and over time. HOLT is used extensively by corporate and investment managers worldwide. For more details about HOLT please refer to [www.credit-suisse.com/holtmethodology](http://www.credit-suisse.com/holtmethodology).

## Why use HOLT to create an index?

The Index gives easy access to HOLT's best ideas for stocks. The robust platform that supports HOLT's proprietary framework is suited to systematic screening for ideas and insightful perspectives on a stock's relative attractiveness: companies in over 50 countries are comparable across sectors and regions regardless of accounting regime or treatment.

The best of HOLT is captured through the selection of tried and tested factors, which are built into a proprietary scoring model. These factors are divided into three categories: the Operational category identifies companies with appealing corporate performance characteristics; the Valuation category finds stocks that are attractively valued according to HOLT's DCF model and the Momentum category puts the spotlight on stocks that are gaining from positive market sentiment. The factors and categories are scored from 1 to 5, with 5 being the best, and then weighted to give an overall score per company.

The factors and categories used in the screening have proven in back tests to consistently identify stocks that on the long dimension outperform the benchmark and on the short dimension underperform the benchmark.

## How HOLT is used to create an index

Each quarter, a universe of stocks is created which consists of the top 275 North American stocks by market capitalisation, the top 300 European stocks by market capitalisation and liquidity and the top 175 Japanese stocks by market capitalisation (as defined below) out of the HOLT database, which currently includes some 18,000 stocks globally. The HOLT scoring model is then used to rank the 750 stocks and the top 75 (approximately) stocks will constitute the long portfolio and the bottom 75 (approximately) will constitute the short portfolio for that period, subject to region and sector neutrality. The Index is rebalanced quarterly.

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HOLT is a corporate performance and valuation advisory service of Credit Suisse.

## 2. Composition of the Index

- 2.1 The Index consists of a cash component plus two equally weighted sub-indices (the Long Total Return Index (or “Long Index”) and the Short Total Return Index (or “Short Index”)) calculated on an end-of-day basis, based on the closing prices of their constituents converted into Euros using the WM closing spot rates as reported by Reuters. The Index is calculated based on a cash balance invested at the risk-free rate plus the difference in return between the Long Total Return Index and the Short Total Return Index. The Index has a Base Date of 7 December 1995 with a starting value of 100. The Index contains approximately 75 stocks in the Long Index and an equal number in the Short Index (see section 2.8). WM closing spot rates are rates calculated by The WM Company based on: (i) actual traded rates on the Reuters Dealing 2000-2 network; and (ii) rates contributed to Reuters by other leading market participants; at 16.00 UK time each trading day. WM applies its unique mathematics to those rates to produce independent rates for 156 currencies. The WM closing spot rates are published at around 16.15 UK time each trading day.
- 2.2 The Index is structured in such a way to give investors in the Index long exposure to a cash component, long exposure to the arithmetic mean of the 75 (approximately, see section 2.8) stocks with the best prospects out of the universe according to the HOLT scoring model (the Long Index) and short exposure to the arithmetic mean of the 75 (approximately, see section 2.8) stocks with the worst prospects out of the universe according to the HOLT scoring model (the Short Index), subject to region and sector neutrality.
- 2.3 The Index includes stocks from companies which are listed on a regulated stock exchange in the United States or Canada (hereafter referred to as North America), or in the United Kingdom, France, Germany, Italy, Netherlands or Spain (hereafter referred to as Europe), or in Japan.
- 2.4 **Regions:** There are five regions defined for the purpose of ensuring region and currency neutrality within the Index. These regions are (i) United States; (ii) Canada; (iii) United Kingdom; (iv) Eurozone (consists of France, Germany, Italy, Netherlands and Spain); and (v) Japan.
- 2.5 **Sectors:** There are ten sectors defined for the purpose of ensuring sector neutrality within the Index. These sectors are defined as per the Global Industry Classification System (GICS) and are: (i) Energy; (ii) Materials; (iii) Industrials; (iv) Consumer Discretionary; (v) Consumer Staples; (vi) Health Care; (vii) Financials; (viii) Information Technology; (ix) Telecommunication Services; and (x) Utilities.
- 2.6 **Eligible universe:** From the stocks in the HOLT database, those 275 North American (see section 2.3) stocks with the highest market capitalisation, plus those 300 European (see section 2.3) stocks with the highest liquidity out of the 330 stocks with the highest market capitalisation, plus those 175 Japanese (see section 2.3) stocks with the highest market capitalisation constitute the universe of eligible companies. The eligible universe is determined at each Quarterly Rebalancing Date. In order to qualify for inclusion in the Long Index, stocks should meet some or all of the following overall criteria according to the HOLT scoring model: they must (i) be undervalued; (ii) have good stock market momentum; and (iii) display strong corporate performance. In order to qualify for inclusion in the Short Index, stocks should meet some or all of the following overall criteria according to the HOLT scoring model: they must (i) be overvalued; (ii) have poor stock market momentum; and (iii) display poor corporate performance. The stocks that most closely match these criteria using the HOLT scoring model are selected as constituents of the Long Index and the Short Index as further described in section 2.7.
- 2.7 **Selection:** At each periodic review, the Index constituents will be selected according to the

following procedure:

- (a) The companies within the eligible universe are divided up into region (see section 2.4) and sector (see section 2.5) buckets. Each bucket will contain all companies from that particular region and sector, for example one bucket will contain all Energy companies from the United States. The total possible number of buckets is 50 (because there are five regions and ten sectors).
- (b) All region and sector buckets containing 3 or fewer companies will be identified. The companies in these buckets will not qualify for inclusion in the Index and will be removed from the selection process.
- (c) Within each of the remaining region and sector buckets, the companies will be ranked according to their HOLT score. Each company is then assigned a proportion rank within its region and sector bucket which is calculated as  $\frac{r - 0.5}{w}$  where “r” is the company’s rank (1 being the highest) and “w” is the total number of companies within that region and sector bucket.
- (d) The region and sector buckets are then combined into ten sector buckets, such that each of the new buckets will contain all companies from that particular sector (for example one bucket will contain all Energy companies, irrespective of region).
- (e) Within each of the ten sector buckets, the companies will be ranked according to their HOLT score. Each company is then assigned a proportion rank within its sector bucket which is calculated as  $\frac{r - 0.5}{w}$  where “r” is the company’s rank (1 being the highest) and “w” is the total number of companies within that sector bucket.
- (f) **Long Index:** The stocks of those companies with a proportion rank within their sector bucket of less than or equal to 10% and with a proportion rank within their region and sector bucket of less than or equal to 34% will go into the Long Index composition, subject to 2.7 (g) and 2.7 (h).
- (g) Those stocks which have an average trading volume of less than US dollars 10 million per day over the last six month period will be excluded from the Long Index. This will be determined by or on behalf of the Index Creator (as defined in section 3.6). This is done in order to make sure that the performance of the Index is not negatively affected by price disruptions due to a lack of liquidity.
- (h) Those companies whose stocks are not freely tradable (because the equity and/or foreign exchange market is not free and well developed) may be excluded at the discretion of the Index Creator.
- (i) If a stock in the Long Index is excluded due to 2.7 (g) or 2.7 (h), it will be replaced by the stock of the next highest-ranking company within the same sector bucket that is not already included in the Long Index, as long as its proportion rank within the region and sector bucket is less than or equal to 34% and subject to 2.7 (g) and 2.7 (h). If there is no stock that satisfies these criteria, the stock which is excluded will not be replaced in the Long Index.
- (j) **Short Index:** Once the composition of the Long Index has been determined, the number of stocks in each region and sector bucket is known. For each region and sector bucket, the stocks of the companies with the lowest rankings will be selected for inclusion in the Short Index, starting from the lowest, until as many stocks have been selected as there are in the Long Index for that specific region and sector bucket, subject to 2.7 (h) and 2.7 (k). This is done in order to maintain sector and region neutrality.
- (k) Those stocks which are hard to borrow in the market will be excluded from the Short Index. Stocks which are hard to borrow include stocks with availability below US dollars 30 million in the market or stocks which are highly sought after in the market by borrowers due to the expectation of an event based on public information that is likely to affect availability. This will be determined by or on behalf of the Index Creator.
- (l) If a stock in the Short Index is excluded due to section 2.7 (h) or 2.7 (k), it will be replaced by the stock of the next lowest-ranking company within the same region and sector bucket

that is not already included in the Short Index, as long as its proportion rank within the region and sector bucket is greater than or equal to 66% and subject to 2.7 (h) and 2.7 (k). If there is no stock that satisfies these criteria, the stock which is excluded will not be replaced in the Short Index and the stock of the company with the lowest rank in the same region and sector bucket in the Long Index will be excluded from the Long Index, in order to maintain region and sector neutrality.

- (m) If two stocks are equally ranked, the stock with the higher market capitalisation will be deemed to have the higher rank unless both stocks have a proportion rank in their region and sector bucket greater than 50%, in which case the stock with the lower market capitalisation will be deemed to have the higher rank.
- (n) When a stock has several listings or different share classes outstanding, the Index Creator has discretion as to which stock and/or listing is considered, bearing in mind among other factors the liquidity of the stocks. Normally, the primary listing will be considered. In exceptional cases an ADR or GDR can be included, especially if the ADR or GDR is more liquid than the related stocks. For the purpose of this description, the term “stocks” shall be interpreted to include such securities.
- (o) The procedure described in sections 2.7(a) to (c), is carried out on every Monday to create a selection list. The selection list indicates possible changes in the composition of the Index at the next periodic review. The selection list is used to determine the pair of a constituent that becomes ineligible (see section 6.5).

2.8 **Number of stocks:** Due to the way that the stocks in the Long Index and the Short Index are selected (see section 2.7), the number of stocks in the Long Index and the Short Index can vary from period to period, but will be approximately 75. The number of stocks in the Short Index will always equal the number of stocks in the Long Index.

2.9 **Weighting:** The Index stocks are equally weighted initially and on each Quarterly Rebalancing Effective Date (as defined below). On each Quarterly Rebalancing Effective Date (as defined in section 5.3) the weightings of the Index stocks are each reset to an equal value of  $1/n^{\text{th}}$  of the Index (where n varies from period to period, see section 2.8). The weighting of each stock will be expressed in the number of shares included in the Index. The number of shares required according to the weighting shall generally be rounded off to 13 decimals. The number of shares in the Long Index and the Short Index for each stock will be calculated on the Base Date and recalculated on each Quarterly Rebalancing Effective Date according to the formula as stated in Appendix 2.

### 3 Calculation of the Index

- 3.1 **How the Index and shares in the Index are determined:** The value of the Index is calculated using the official closing prices from the primary exchanges (subject to section 2.7(n)) of all the stocks included in the Index. To convert stock prices into Euros, the WM closing spot rates as reported by Reuters are used. The exact calculation method for the Index including the cash component is described in Appendices 1, 2 and 3.
- 3.2 **Dividend treatment:** The Index is calculated based on a cash balance invested at the risk-free rate plus the difference in return between the Long Index and the Short Index. For purposes of calculating the Long Index, net dividends are accounted for by reinvesting them on a daily basis as described in Appendix 3. For purposes of calculating the Short Index, gross dividends are accounted for by reinvesting them on a daily basis as described in Appendix 3. The ex-dividend date is used to determine the total daily dividends for each day. Special dividends require an index divisor adjustment (as described in section 6) to prevent such distributions from distorting the price index.
- 3.3 **Closing Index Value:** The Index is calculated on an end-of-day basis by the Calculation Agent (as defined in section 3.6) based on each constituent's last available closing price on its primary exchange (subject to section 2.7(n)). The WM closing spot rates as reported by Reuters are used for conversion into Euros. For calculation purposes the Index closes at 5 p.m. New York time. The closing Index value is disseminated by 6.30 p.m. New York time.
- 3.4 As long as at least one constituent stock is being traded on a day, an Index value will be calculated for that day.
- 3.5 **Computational precision:** Index values are rounded to 12 decimals, but will be rounded out to 6 when published. The divisor will go out to 10 decimals, but will be rounded out to 6 when published.
- 3.6 The Index is calculated and maintained by Standard & Poor's (the "Calculation Agent") based on a methodology developed by Credit Suisse Securities (Europe) Limited ("CSSEL" or the "Index Creator").

### 4 Publication of the Index

- 4.1 The closing Index value is published by the Calculation Agent by 6.30 p.m. New York time.
- 4.2 The Calculation Agent retains the right to delay the publication of the Index values, or to suspend or discontinue the publication of the Index values, if it believes that there exist circumstances preventing the correct calculation of the Index.

## 5 Rules for the Periodic Review of the Index

5.1 The objective of the Index Creator with regard to the periodic review is to ensure that the underlying constituents continue to meet the basic principles of the Index (see sections 1 and 2), and that the Index continues to reflect as closely as possible the value of the underlying share portfolio.

5.2 The periodic review of the Index constituents occurs in accordance with the following timetable:

Quarterly Rebalancing Dates: Every last Monday of February, May, August and November (the “Quarterly Rebalancing Dates”). The first Quarterly Rebalancing Date will be the last Monday of November 2007 (26 November 2007) and the second Quarterly Rebalancing Date will be the last Monday of February 2008 (25 February 2008).

5.3 Adjustments in stock weightings and constituents resulting from the periodic review (as well as adjustments in the cash balance – see Appendix 1) become effective after the 4<sup>th</sup> weekday of the month immediately following each Quarterly Rebalancing Date, based on the closing values of the constituents on the 4<sup>th</sup> weekday of that month. Therefore the **effective** dates for periodic review changes are:

Quarterly Rebalancing Effective Dates: Every 5<sup>th</sup> weekday in March, June, September and December (the “Quarterly Rebalancing Effective Dates”). The first Quarterly Rebalancing Effective Date will be the 5<sup>th</sup> weekday of December 2007 (7 December 2007) and the second Quarterly Rebalancing Effective Date will be the 5<sup>th</sup> weekday of March 2008 (7 March 2008).

5.4 In the event that a corporate action takes place in respect of an Index constituent during the period between a Quarterly Rebalancing Date and the corresponding Quarterly Rebalancing Effective Date which results in Index constituents becoming ineligible, the ineligible constituents will be replaced as per below so as that on the Quarterly Rebalancing Effective Date the Index will contain the same number of stocks in the Long Index as in the Short Index.

- (a) If a constituent of the Long Index becomes ineligible it will be removed and replaced as per section 2.7 (i) and subject to 5.4 (b) and 5.4 (c).
- (b) If the replacement stock for the Long Index is from a different region to the ineligible constituent, a change is required in the Short Index to maintain region neutrality. The pair of the ineligible constituent, the highest-ranked constituent in the Short Index in the same region and sector bucket as the ineligible constituent, will be removed and replaced by the stock of the lowest-ranked company in the same region and sector bucket as the replacement stock, that is not already in the Short Index. This is subject to section 2.7 (h) and 2.7 (k) and subject to its proportion rank within its region and sector bucket being greater than or equal to 66%. If there is no stock that satisfies these criteria, the stock will not be replaced in the Short Index and in addition the ineligible constituent will not be replaced in the Long Index.
- (c) If there is no eligible replacement stock for the Long Index, the ineligible constituent will not be replaced in the Long Index and its pair, the highest-ranked constituent in the Short Index in the same region and sector bucket as the ineligible constituent, will be removed, in order to maintain region and sector neutrality.
- (d) If a constituent of the Short Index becomes ineligible it will be removed and replaced as per section 2.7 (l).

- 5.5 Constituent changes will be made after the Quarterly Rebalancing Date without prejudice to the right of the Index Creator to take into account the event of take-overs or other extraordinary circumstances. All changes become effective on the Quarterly Rebalancing Effective Date.
- 5.6 The selection follows the procedure set out in section 2.7.
- 5.7 Adjustments in the stocks and weightings in the Index shall not change the Index value.

**6 Rules for the Operational Adjustment of the Index**

- 6.1 In addition to the periodic reviews, the Index is continually reviewed for changes to the Index composition necessitated by extraordinary corporate actions – e.g. mergers, takeovers, spin-offs, delistings and bankruptcy filings - involving constituent stocks. The aim of the Calculation Agent when making operational adjustments is to ensure that the basic principles of the Index (see sections 1 and 2) are maintained and that the Index continues to reflect as closely as possible the value of the underlying portfolio.
- 6.2 Operational adjustments of the selection and/or weighting of the stocks included in the Index may not change the Index value.
- 6.3 **Operational adjustments:** Changes to the Index composition due to corporate actions or constituent eligibility changes might require adjustments to the Long Index Divisor or the Short Index Divisor or to the allocated number of shares, as follows:

<b>Constituent change</b>	<b>Adjustment</b>
Constituent Removal	When a constituent and its pair (see sections 6.4 and 6.5) are removed from the Index, the proceeds from the constituent being removed from the Long Index will be reinvested into the Long Index and the proceeds from the constituent being removed from the Short Index will be reinvested into the Short Index. This requires a divisor change for both the Long Index and the Short Index.
Spin-off*	<p>Subtract the following from the price of the parent company:</p> $\left( \frac{\text{Spinoff stock price}}{\text{Share exchange ratio}} \right)$ <p>Adjust the number of shares (Shares<sup>i</sup>) (as defined below) such that the constituent’s weighting is not changed as a result of the spin-off. (No divisor change)</p>
Special Cash Dividend	Price of stock making the special dividend payment is reduced by the per share special dividend amount after the close of trading on the day before ex-date. A divisor adjustment is made for the relevant Index (Long or Short) to ensure the Index level after the price adjustment is equal to the Index level before the price adjustment.
Stock Split	In the event of a stock split the number of shares in the stock concerned will be multiplied by the factor used for the split at that time. (No divisor change)





## **7 Final Provisions**

- 7.1 This document is published by CSSEL. CSSEL is authorised by the Prudential Regulation Authority (“**PRA**”) and regulated by the Financial Conduct Authority (“**FCA**”) and the Prudential Regulation Authority. Notwithstanding that CSSEL is so regulated the rules of the PRA or FCA are not incorporated into this document.
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- 7.4 The current Rules for the Index, including the formulae and procedures for its calculation and construction, are set in section 2 and the following sections of this document and in the Appendices attached hereto. Section 1 of this document contains a general introduction to HOLT and does not form part of the Rules.
- 7.5 CSSEL is described as Index Creator under the Rules. CSSEL may transfer or delegate to another entity, at its discretion, the authority associated with the role of Index Creator under the Rules.
- 7.6 Standard and Poor’s, a division of The McGraw-Hill Companies, Inc. (“**S&P**”) is described as the Calculation Agent under the Rules. The Calculation Agent is responsible for compiling and calculating the Index pursuant to and on the basis of the Rules. S&P is appointed as Calculation Agent pursuant to a contract with CSSEL, which contract may be terminated subject to and in accordance with its terms, and CSSEL retains the discretion to appoint an alternative Calculation Agent in lieu of S&P. S&P expressly disclaims all liability for any inaccuracy in share prices, calculations and the publication of the Index, the information used for making adjustments to the Index and the actual adjustments.
- 7.7 More generally, CSSEL as Index Creator retains the final discretion as to the manner in which the Index is calculated and constructed. Furthermore, CSSEL as Index Creator is the final authority on the Index and the interpretation and application of the Rules.
- 7.8 CSSEL as Index Creator may supplement, amend (in whole or in part), revise or withdraw these Rules at any time. Such a supplement, amendment, revision or withdrawal may lead to a change in the way the Index is calculated or constructed and may affect the Index in other ways. Without prejudice to the generality of the foregoing, CSSEL as Index Creator may determine that a change to the Rules is required or desirable in order to update the Rules or to address an error, ambiguity or omission. Such changes, for example, may include changes to eligibility requirements or construction and weighting Rules. The Rules may change without prior notice.
- 7.9 CSSEL as Index Creator may apply the Rules in such manner as it, in its discretion considers reasonable and in doing so may rely upon such sources of information (including as to stock

prices, rates of exchange, corporate actions and dividend payments) as it, in its discretion, considers reasonable.

- 7.10 CSSEL as Index Creator does not warrant or guarantee the accuracy or timeliness of calculations of Index values and does not warrant or guarantee the availability of an Index value on any particular date or at any particular time. If the Calculation Agent is unable to calculate the Index in accordance with the Rules it is obliged to inform CSSEL as Index Creator as soon as possible.
- 7.11 CSSEL as Index Creator (including its officers, employees and delegates) shall not be under any liability to any party on account of any loss suffered by such party (however such loss may have been incurred) in connection with anything done, determined or selected (or omitted to be done, determined or selected) by it in connection with the Index and Rules. Without prejudice to the generality of the foregoing, CSSEL as Index Creator shall not be liable for any loss suffered by any party as a result of any determination or calculation it makes (or fails to make) in relation to the construction or the valuation of the Index and the application of the Rules and, once made, CSSEL as Index Creator shall not be under any obligation to revise any determination or calculation made by it for any reason.
- 7.12 The Rules shall be governed by and construed in accordance with English law.

## Appendix 1

### Market Neutral Total Return Index Calculation Method

The Index is calculated according to the following formula:

$$\text{Index}_t = \left( \prod_{n=t_{RD}+1}^t (1 + r_n) + \frac{\text{Long Total Return Index}_t}{\text{Long Total Return Index}_{RD}} - \frac{\text{Short Total Return Index}_t}{\text{Short Total Return Index}_{RD}} - \frac{BC_t}{365.25} \times (t - t_{RD}) \right) \times \text{Index}_{RD}$$

where:

$\text{Index}_t =$	Index value on day t
$\text{Index}_{RD} =$	Index value on day $t_{RD}$
$r_n =$	$\text{EONIA}_n \times \text{dcf}_n$
$\text{EONIA}_n =$	The Euro Overnight Index Average (EONIA) rate applicable on day n, as published on Reuters Page EONIA, multiplied by $\text{dcf}_n$ . If a rate is not published, the most recent published rate will be used
$\text{dcf}_n =$	The day count fraction between day n and between the previous day when an Index value was calculated (Actual/360)
$\text{Long Total Return Index}_t =$	Long Total Return Index value on day t
$\text{Short Total Return Index}_t =$	Short Total Return Index value on day t
$\text{Long Total Return Index}_{RD} =$	Long Total Return Index value on day $t_{RD}$
$\text{Short Total Return Index}_{RD} =$	Short Total Return Index value on day $t_{RD}$
$BC_t =$	Annualised borrow cost on day t
$t_{RD} =$	The last weekday before the immediately preceding Quarterly Rebalancing Effective Date (or if day t is a Quarterly Rebalancing Effective Date, the immediately preceding weekday)
$t - t_{RD} =$	The number of calendar days from day $t_{RD}$ (excluding) to day t (including)

The initial value of  $\text{Index}_{RD}$  is 100 (= Base Index value on 7 December 1995 (=Base Date))

The initial value of  $\text{Long Total Return Index}_{RD}$  is 100 (= Base Long Index value on Base Date)

The initial value of  $\text{Short Total Return Index}_{RD}$  is 100 (= Base Short Index value on Base Date)

**Borrow cost:** At each Quarterly Rebalancing Date, the Index Creator determines the borrow cost for that period (from the corresponding Quarterly Rebalancing Effective Date until the next Quarterly Rebalancing Effective Date), based on the cost of borrowing the stocks in the Short Index in the market. The borrow cost will then be fixed for that period.

From the Base Date to 7 September 2007, the annualised borrow cost assumed is 0.50%.

**Cash balance:** The first term in the formula above multiplied by  $\text{Index}_{RD}$  reflects the cash component of the Index and is based on a cash balance invested at the risk-free rate. On the Base Date the cash balance is equal to 100. At each quarterly rebalancing, the cash balance is either increased or decreased to reflect the return of the Index since the previous rebalancing, i.e. the cash balance is adjusted for the interest earned on the previous cash balance plus the profit/loss from the investment in

the Long Index and the Short Index (i.e. the difference in return between the Long Index and the Short Index) minus the borrow cost.

In order to calculate the Index, a total return index for the Long Index and a total return index for the Short Index need to be calculated. In order to calculate a total return index, first a price index needs to be calculated. This is done according to the equations in Appendix 2. Appendix 3 will go into the exact formulae used to calculate each total return index.

## Appendix 2

### Price Index Calculation Method for the Sub-Indices

In order to be able to calculate a total return index, a price index needs to be calculated first. The calculation for the price index for the Long Index is the same as that for the Short Index. The price index is calculated according to the following equations:

$$\text{LongIndex}_t = \frac{\sum_{i=1}^n \text{Price}_t^i \times \text{Shares}_t^i}{\text{Divisor}_t} \quad \text{ShortIndex}_t = \frac{\sum_{i=1}^n \text{Price}_t^i \times \text{Shares}_t^i}{\text{Divisor}_t}$$

where:

$\text{LongIndex}_t$	=	Long Index value on day t
$\text{ShortIndex}_t$	=	Short Index value on day t
$\text{Divisor}_t$	=	Divisor on day t
n	=	Number of stocks in the Index
$\text{Price}_t^i$	=	The official closing price of stock i on day t in Euros (the official closing price of non-Euro stocks will be converted from the local price using the WM closing spot rates as reported by Reuters)
$\text{Shares}_t^i$	=	Number of shares of stock i in the Index on day t

The initial divisor,  $\text{Divisor}_0$ , is determined as follows:

$$\text{Divisor}_0 = \frac{\sum_{i=1}^n \text{Price}_0^i \times \text{Shares}_0^i}{\text{Base Value}}$$

where:

$\text{Divisor}_0$	=	Initial divisor at base date (=7 December 1995)
Base Value	=	100 (= Base Index value on 7 December 1995)
$\text{Price}_0^i$	=	The official closing price of stock i at base date in Euros (the official closing price of non-Euro stocks will be converted from the local price using the WM closing spot rates as reported by Reuters)
$\text{Shares}_0^i$	=	Number of shares of stock i in the Index at base date

On each Quarterly Rebalancing Effective Date,  $\text{Shares}^i$  is set so that each constituent has a weight of

$$\frac{1}{n} :$$

$$\text{Shares}^i = \frac{\frac{1}{n} \times \sum_{i=1}^n \text{Price}_{\text{RD}}^i}{\text{Price}_{\text{RD}}^i}$$

where:

$\text{Price}_{\text{RD}}^i$	=	The official closing price of stock i the last business day before Rebalancing Effective Date in Euros (the official closing price of non-Euro stocks will be converted from the local price using the WM closing spot rates as reported
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by Reuters)

Any changes to the Index composition (on the Quarterly Rebalancing Dates and due to corporate actions) require adjustments to the divisor in order to maintain Index series continuity. Divisor changes are made according to the following formula:

$$\text{Divisor}_{\text{postadj}} = \text{Divisor}_{\text{pre adj}} \times \frac{\sum_{i=1}^n \text{Price}_{\text{postadj}}^i \times \text{Shares}_{\text{postadj}}^i}{\sum_{i=1}^n \text{Price}_{\text{pre adj}}^i \times \text{Shares}_{\text{pre adj}}^i}$$

$\text{Divisor}_{\text{postadj}}$  = Divisor after changes are made to the Index

$\text{Divisor}_{\text{pre adj}}$  = Divisor before changes are made to the Index

$\text{Price}_{\text{postadj}}^i$  = The official closing price of stock i after Index changes in Euros (the official closing price of non-Euro stocks will be converted from the local price using the WM closing spot rates as reported by Reuters)

$\text{Price}_{\text{pre adj}}^i$  = The official closing price of stock i prior to Index changes in Euros (the official closing price of non-Euro stocks will be converted from the local price using the WM closing spot rates as reported by Reuters)

$\text{Shares}_{\text{postadj}}^i$  = Number of shares of stock i in the Index after Index changes

$\text{Shares}_{\text{pre adj}}^i$  = Number of shares of stock i in the Index prior to Index changes

When changes to the number of shares are made (e.g. in the case of a spin-off), the weight of the constituent should not change. As an example:

$$\text{Weight}^{\text{Old}} = \frac{\text{Shares}^{\text{Old}} \times \text{Price}^{\text{Old}}}{\sum_{i=1}^n \text{Price}^i} = \text{Weight}^{\text{New}},$$

therefore

$$\text{Shares}^{\text{New}} = \frac{\text{Shares}^{\text{Old}} \times \text{Price}^{\text{Old}}}{\text{Price}^{\text{New}}}$$

## Appendix 3

### Total Return Index Calculation Method for the Sub-Indices

For purposes of calculating the Long Total Return Index and the Short Total Return Index, dividends are accounted for by reinvesting them on a daily basis (daily compounding) according to the following formulae:

$$\text{Long Total Return Index}_{t+1} = \text{Long Total Return Index}_t \times \frac{(\text{Long Index}_{t+1} + \text{DIV}_{t+1}^{\text{Net}})}{\text{Long Index}_t}$$

$$\text{Short Total Return Index}_{t+1} = \text{Short Total Return Index}_t \times \frac{(\text{Short Index}_{t+1} + \text{DIV}_{t+1}^{\text{Gross}})}{\text{Short Index}_t}$$

Long Total Return Index<sub>t</sub> = Close of the Long Total Return Index on day t  
 Long Index<sub>t</sub> = Close of the Long Index on day t as outlined in Appendix 2  
 DIV<sub>t</sub><sup>Net</sup> = Total net cash dividends (ordinary) for the Long Index on day t expressed in Index points

Short Total Return Index<sub>t</sub> = Close of the Short Total Return Index on day t  
 Short Index<sub>t</sub> = Close of the Short Index on day t as outlined in Appendix 2  
 DIV<sub>t</sub><sup>Gross</sup> = Total cash dividends (ordinary) for the Short Index on day t expressed in Index points

$$\text{DIV}_t^{\text{Net}} = \frac{\sum_{i=1}^n \text{Net Dividend}_t^i \times \text{Shares}_t^i}{\text{Divisor}_t} \quad \text{DIV}_t^{\text{Gross}} = \frac{\sum_{i=1}^n \text{Gross Dividend}_t^i \times \text{Shares}_t^i}{\text{Divisor}_t}$$

Net Dividend<sub>t</sub><sup>i</sup> = If it is the ex-dividend date for stock i: the net dividend of stock i in Euros (converted from the local currency using the WM closing spot rates as reported by Reuters), else 0.

Gross Dividend<sub>t</sub><sup>i</sup> = If it is the ex-dividend date for stock i: the gross dividend of stock i in Euros (converted from the local currency using the WM closing spot rates as reported by Reuters), else 0.

Shares<sub>t</sub><sup>i</sup> and Divisor<sub>t</sub> are as per Appendix 2.

Net dividend: The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. The Long Total Return Index approximates the minimum possible dividend reinvestment. The rates applied are the current effective rates.