US EQUITY FUTURES ROLLING STRATEGY INDEX

METHODOLOGY

JULY 25, 2014
Overview

The following overview of the US Equity Futures Rolling Strategy Index is a summary and, as such, is necessarily incomplete. This overview should be read in conjunction with, and is qualified in its entirety by, the more detailed description of the US Equity Futures Rolling Strategy Index and its operation that follows in this document.

The US Equity Futures Rolling Strategy Index (the “US Equity Futures Strategy Index” or the “Index”) is a proprietary index designed to provide investors with exposure to the total return (including income from interest accruing at the relevant overnight interest rate (as described below)) of E-mini futures contracts on the S&P 500® Index currently listed for trading on the Chicago Mercantile Exchange (the “CME”). We refer to these E-mini futures contracts as the “US Equity Futures Contracts”. For further information on the US Equity Futures Contracts and the S&P 500® Index, please see the sections below entitled “The E-mini S&P 500® Index Futures Contracts” and “The S&P 500® Index”.

Each US Equity Futures Contract expires on a specific quarter end date (one of March, June, September or December). At any given time, there is more than one listed US Equity Futures Contract on the CME (for example, with expirations of September 2014, December 2014, March 2015, June 2015 and September 2015), and the Index will include the first nearby US Equity Futures Contract that has not reached expiration or a roll period (the September 2014 contract in the example). As the first nearby US Equity Futures Contract comes to its expiration on the third Friday of the relevant month (September), it will be replaced by the next US Equity Futures Contract (December 2014 in our example), which is known as the second nearby futures contract. This replacement process is referred to as “rolling”. Rolling will be carried out during the three CME exchange business days starting from, and including, the third to last CME exchange business day prior to the last trade date of the expiring US Equity Futures Contract (i.e., the third to last CME exchange business day prior to the third Friday of the expiration month) to, and including, the last CME exchange business day prior to the last trade date of such expiring US Equity Futures Contract. Such period is referred to as the “roll period”. For further information on the roll methodology, please refer to the section entitled “Roll Methodology” below.

The Index is calculated in United States dollars on a total return basis and the value of the Index (the “Index Value”) is calculated on each CME exchange business day (as defined in “Daily Strategy Value Calculation”).

Goldman Sachs International (the “Index Sponsor”) has retained S&P Opco, LLC (a subsidiary of S&P Dow Jones Indices LLC) to serve as calculation agent (the “Calculation Agent”) for the Index. In the event the Index Committee (as described below) appoints a replacement Calculation Agent, a public announcement will be made via press release.

Unless otherwise indicated, any public announcement contemplated by this Methodology shall be posted at:

http://www.GS.com/index-methodologies

We are not incorporating by reference such website or any other website or any materials from any website into this index methodology.

US Equity Futures Strategy Index – Various Roles

The US Equity Futures Strategy Index is sponsored by Goldman Sachs International but is calculated by the Calculation Agent. The US Equity Futures Strategy Index operates in accordance with a set of pre-determined rolling methodologies and set of formulae, and the Calculation Agent does not exercise any
discretion with respect thereto except in limited cases where a US Equity Futures Contract Valuation Price is not published or otherwise unavailable. The US Equity Futures Strategy Index is, therefore, not a managed index. As the Index Sponsor, Goldman Sachs International is not acting as an investment adviser or performing a discretionary management role with respect to the US Equity Futures Strategy Index and, as a result, has no fiduciary duty to any person in respect of the US Equity Futures Strategy Index. The Index Committee may exercise discretion, however, in a limited number of exceptional circumstances, including, without limitation, where the S&P 500® Index is rebased or otherwise adjusted or modified or where a US Equity Futures Contract Valuation Price is not published or otherwise unavailable.

**US Equity Futures Strategy Index Starting Value**

The US Equity Futures Strategy Index has been given a starting value of 100 as of December 31, 1991, which is the base date ("Base Date").

**Daily Strategy Value Calculation**

The US Equity Futures Strategy Index is a U.S. dollar denominated index and is calculated on each day on which the CME is open for trading (a "CME exchange business day"). The value of the US Equity Futures Strategy Index on each CME exchange business day will be calculated as the product of (i) the value of the US Equity Futures Strategy Index as of the immediately preceding CME exchange business day multiplied by (ii) the sum of (x) the daily return ratio of the value of the US Equity Futures Contracts (calculated as described below) on such CME exchange business day plus (y) the overnight interest rate for the immediately preceding CME exchange business day multiplied by the applicable day count fraction based on the number of calendar days in the calculation period.

**Daily Return Ratio of the Value of the US Equity Futures Contracts:** On each CME exchange business day (other than during the roll period as described below), the daily return ratio of the value of US Equity Futures Contracts is calculated as the quotient of (a) the US Equity Futures Contract Valuation Price on the relevant CME exchange business day divided by (b) the US Equity Futures Contract Valuation Price on the immediately preceding CME exchange business day. During each roll period, the daily return ratio of the values of the US Equity Futures Contracts is calculated as the quotient of (a) the US Equity Futures Contract Valuation Price of the second nearby US Equity Futures Contract on such CME exchange business day divided by (b) the US Equity Futures Contract Valuation Price of the second nearby US Equity Futures Contract on the immediately preceding CME exchange business day, rather than the first nearby US Equity Futures Contract to the extent the Index’s investment has been rolled over.

**US Equity Futures Contract Valuation Price:** The US Equity Futures Contract Valuation Price on each CME exchange business day is the official daily settlement price per US Equity Futures Contracts quoted by the CME on such CME exchange business day.

**Overnight Interest Rate:** The overnight interest rate used for purposes of calculating the value of the US Equity Futures Strategy Index is the overnight interest rate as published on Global Insight DRI page USD-FEDERAL-FUNDS-H15, which follows the ACT/360 day count fraction convention (meaning the actual number of days in the relevant period divided by 360). If this overnight interest rate is not published or is otherwise unavailable for any CME exchange business day, then the last available overnight interest rate published on such page will be used as the overnight interest rate for such CME exchange business day.

**Unavailability of US Equity Futures Contract Valuation Price:** The Calculation Agent will not, however, calculate the value of the US Equity Futures Strategy Index, or will calculate such value pursuant to a different methodology (as described below under "Price of US Equity Futures Contracts Unavailable – Unavailable Within the Roll Period"), as the case may be, at any time where the US Equity Futures Contract Valuation Price for the first nearby and/or the second nearby US Equity Futures Contracts, as applicable, is not published or is otherwise unavailable as further described below.
Publication of Changes to the Methodology

Changes to the Methodology made by the Index Committee will be publicly announced at least 60 CME exchange business days prior to their effective date. Adjustments made by the Calculation Agent in response to the unavailability of the US Equity Futures Contract Valuation Price will be publicly announced as promptly as is reasonably practicable.

Index Committee

An Index Committee is responsible for overseeing the Index and the Methodology, while the Calculation Agent is responsible for the day to day implementation of the Methodology, for the calculation of the Index, including responding to events as described under “Price of US Equity Futures Contracts Unavailable”, and for publication of the Index Value. The Index Committee is committed to maintaining the Index as a liquid, tradable index. The Index Committee is currently comprised of three full-time employees of The Goldman Sachs Group, Inc. or one or more of its affiliates.

The Index Committee may exercise limited discretion with respect to the Index, as contemplated by the Methodology. Any such changes or actions are publicly announced as promptly as is reasonably practicable and normally at least five CME exchange business days prior to their effective date. The Calculation Agent may from time to time consult the Index Committee on matters of interpretation with respect to the Methodology and when the price of the US Equity Futures Contracts are unavailable. Because the Index Committee considers information about changes to the Index and related matters that may be potentially market moving and material, all Index Committee discussions, including those with the Calculation Agent, are confidential. The Index Committee will determine the successor of any of its members.

Roll Methodology

Each US Equity Futures Contract has an expiration on specified quarter end dates (March, June, September or December). At any given time, the US Equity Futures Strategy Index will include the first nearby US Equity Futures Contract. As the first nearby US Equity Futures Contract comes to expiration, it is be replaced by the second nearby US Equity Futures Contract. For example, a US Equity Futures Contract may specify a June expiration. As time passes, the contract expiring in June is replaced by a US Equity Futures Contract with a September expiration during the relevant roll period. This process is referred to as “rolling”.

Roll Period: Rolling will be carried out during the three CME exchange business days starting from, and including, the third to last CME exchange business day prior to the last trade date of the first nearby US Equity Futures Contract to, and including, the last CME exchange business day prior to the last trade date of such US Equity Futures Contracts. Such period is referred to from time to time as the “roll period”. On each CME exchange business day of the roll period, one third of the notional investment in the first nearby US Equity Futures Contract will be rolled into the second nearby US Equity Futures Contract, and the prices at which the US Equity Futures Contracts are rolled will be based on the US Equity Futures Contract Valuation Prices for each of the first nearby and second nearby US Equity Futures Contracts. Rolling will, however, be carried out pursuant to a different methodology when at any time during the roll period the US Equity Futures Contract Valuation Prices for either or both of the first nearby and second nearby US Equity Futures Contracts are not published or are otherwise unavailable as further described below.

Price of US Equity Futures Contracts Unavailable

Unavailable Outside of the Roll Period: If, on any CME exchange business day that does not fall within the roll period, the US Equity Futures Contract Valuation Price for the first nearby US Equity Futures Contract is not published or is otherwise unavailable, then the Calculation Agent will not calculate any value for the US Equity Futures Strategy Index but will publish the last available value.
In such an instance, if, on the immediately following CME exchange business day, the US Equity Futures Contract Valuation Price for the first nearby US Equity Futures Contract is available, the daily return ratio of the value of the US Equity Futures Contracts will be calculated as the *quotient* of (a) the US Equity Futures Contract Valuation Price on that immediately following CME exchange business day *divided* by (b) the last available US Equity Futures Contract Valuation Price; *provided, however*, that, for the avoidance of doubt, if such immediately following CME exchange business day is the first day of the roll period and the US Equity Futures Contract Valuation Price for the second nearby US Equity Futures Contract is not published or is otherwise unavailable on that immediately following CME exchange business day, then, as further described below, the Calculation Agent will not calculate any value for the US Equity Futures Strategy Index but will publish the last available value.

**Unavailable Within the Roll Period:** If the US Equity Futures Contract Valuation Price is not published or is otherwise unavailable for either or both of the first nearby and second nearby US Equity Futures Contracts at any time during the roll period, then that rolling will be carried out pursuant to the following alternative rolling methodology:

- **Case 1:** If (a) the US Equity Futures Contract Valuation Price is not published or is otherwise unavailable on the *first CME exchange business day of the roll period* for either or both of the first nearby and second nearby US Equity Futures Contracts and (b) the US Equity Futures Contract Valuation Price is available on the second CME exchange business day of the roll period for both the first nearby and second nearby US Equity Futures Contracts, then:
  - one half of the notional investment in the first nearby US Equity Futures Contract will be rolled into the second nearby US Equity Futures Contract on that second CME exchange business day of the roll period; *and*
  - if the US Equity Futures Contract Valuation Price is also available on the third CME exchange business day of the roll period for both the first nearby and second nearby US Equity Futures Contracts, then the second half of the notional investment in the first nearby US Equity Futures Contract will be rolled over into the second nearby US Equity Futures Contract on that third CME exchange business day of the roll period; *but*
  - if the US Equity Futures Contract Valuation Price is not published or is otherwise unavailable on such third CME exchange business day of the roll period for either or both of the first nearby and second nearby US Equity Futures Contracts, then rolling of any remaining portion of the notional investment in the first nearby US Equity Futures Contract will be carried out as set out below under Case 4.

- **Case 2:** If the US Equity Futures Contract Valuation Price is not published or is otherwise unavailable on both the *first and second CME exchange business days of the roll period* for either or both of the first nearby and second nearby US Equity Futures Contracts, then:
  - if the US Equity Futures Contract Valuation Price is available on the third CME exchange business day of the roll period for both the first nearby and second nearby US Equity Futures Contracts, then the entire notional investment in the first nearby US Equity Futures Contract will be rolled into the second nearby US Equity Futures Contract on the third CME exchange business day of the roll period; *but*
  - otherwise, the rolling of any remaining portion of the notional investment in the first nearby US Equity Futures Contract will be carried out as set out below under Case 4.

- **Case 3:** If the US Equity Futures Contract Valuation Price is available on the first CME exchange business day of the roll period for both of the first nearby and second nearby US Equity Futures Contracts (on which day one-third of the notional investment in the first nearby US Equity Futures Contract is rolled over into the second nearby US Equity Futures Contract), but the US Equity Futures Contract Valuation Price is not published or is otherwise unavailable on the *second CME exchange*...
business day of the roll period for either or both of the first nearby and second nearby US Equity Futures Contracts, then the remaining two-thirds of the notional investment in the first nearby US Equity Futures Contract will be rolled into the second nearby US Equity Futures Contract on the third CME exchange business day of the roll period, unless the US Equity Futures Contract Valuation Price is not published or is otherwise unavailable on such third CME exchange business day of the roll period for either or both of the first nearby and second nearby US Equity Futures Contracts (in which case the rolling of any remaining portion of the notional investment in the first nearby US Equity Futures Contract will be carried out as set out below under Case 4).

- **Case 4:** In any situation where the US Equity Futures Contract Valuation Price for either or both of the first nearby and second nearby US Equity Futures Contracts is not published or is otherwise unavailable on the third CME exchange business day of the roll period (including where such price is not published or is otherwise unavailable on both the first and third CME exchange business days of the roll period only, on both the second and third CME exchange business days of the roll period only or on all three CME exchange business days of the roll period), then any remaining amount of the notional investment in the first nearby US Equity Futures Contract will be rolled into the second nearby US Equity Futures Contract on the last trade date of the first nearby US Equity Futures Contract, which is the CME exchange business day immediately following the third CME exchange business day of the roll period. On such last trade date, rolling will be effected by using the special opening quotation for the first nearby US Equity Futures Contract and the first traded price for the second nearby US Equity Futures Contract, provided that if, on such last trade date, the special opening quotation for the first nearby US Equity Futures Contract and/or the first traded price for the second nearby US Equity Futures Contract is not published or otherwise unavailable, then the first nearby US Equity Futures Contract will be sold at the US Equity Futures Contract Valuation Price for such first nearby US Equity Futures Contract on the last reference day (as defined below) and the second nearby US Equity Futures Contract will be bought at the US Equity Futures Contract Valuation Price for such second nearby US Equity Futures Contract on the last reference day.

On each CME exchange business day on which rolling does not occur because the US Equity Futures Contract Valuation Price is not published or is otherwise unavailable for either or both of the first nearby and second nearby US Equity Futures Contracts (such day, a “no-roll CME exchange business day”; for the avoidance of doubt, a no-roll CME exchange business day may include any CME exchange business day of the roll period), the Calculation Agent will not calculate any value for the US Equity Futures Strategy Index but will publish the last available value.

If, on any CME exchange business day immediately following such no-roll CME exchange business day, the US Equity Futures Contracts are rolled over pursuant to the alternative methodology described above, then the Calculation Agent will apply alternative calculation methods to compute the level of the US Equity Futures Strategy Index on such CME exchange business day, which can be summarized as follows:

On such CME exchange business day immediately following such no-roll CME exchange business day, the level of the US Equity Futures Strategy Index will be computed as the product of:

- the value of the US Equity Futures Strategy Index as of the last CME exchange business day on which the US Equity Futures Contract Valuation Prices for both of the first nearby and second nearby US Equity Futures Contracts were available (such day, the “last reference day”); multiplied by

- the sum of:
  
  (i) the daily return ratio reflecting either:

  (a) if such CME exchange business day falls within the roll period, the weighted performance of the first nearby US Equity Futures Contract and the weighted
performance of the second nearby US Equity Futures Contract from the last reference day to such CME exchange business day; or

(b) if such CME exchange business day is a last trade date of the first nearby US Equity Futures Contract, the product of (x) the weighted performance of the first nearby US Equity Futures Contract from the last reference day up to the rolling effected as of the opening of the market on such last trade date, (y) the weighted performance of the second nearby US Equity Futures Contract from the last reference day up to the rolling effected as of the opening of the market on such last trade date and (z) the performance of the second nearby US Equity Futures Contract, including the second nearby contracts into which any remaining portion of the first nearby US Equity Futures Contract are rolled over on such last trade date, calculated based on the opening price and the official daily settlement price of the second nearby US Equity Futures Contract on such last trade date (for the avoidance of doubt, if the official daily settlement price of the second nearby US Equity Futures Contract is not published or is otherwise unavailable on such last trade date, then the Calculation Agent will not calculate any value for the US Equity Futures Strategy Index but will publish the last available value),

plus

(ii) the overnight interest rate for the calculation period.

Publication

The value of the US Equity Futures Strategy Index is published on the Bloomberg page FRSIUSE<Index> (or any successor page).

Historical Data

The Base Date for the Index is a date earlier than that on which the Calculation Agent began calculating the Index. Therefore, historical information provided from the Base Date to the date on which the Calculation Agent began calculating the index is hypothetical and is provided as an illustration of how the Index would have performed during the period had the Calculation Agent begun calculating the Index on the Base Date using the Methodology. This data does not reflect actual performance, nor was a contemporaneous investment model run of the Index.

Historical levels of the Index are calculated with reference to the US Equity Futures Contract Valuation Prices determined based on the latest available data published by the CME.

US Equity Futures Strategy Index Calculation Formulae

The formulae for the calculation of the US Equity Futures Strategy Index are presented below. Investors, however, should be aware that these formulae do not reflect the alternative rolling and calculation methodologies applied when the value of the relevant US Equity Futures Contracts is not published or is otherwise unavailable (as further described above).
\[ TRI_t = (r_t + \frac{i_{t-n}}{360}) \cdot TRI_{t-n}; \]

\[
\begin{align*}
    r_t &= \frac{c \cdot P_{1,t}}{c \cdot P_{1,t-n}}, \\
    \text{when NOT in the 3-day roll period} \\
    r_t &= (1 - \frac{m-1}{3}) \cdot \frac{c \cdot P_{1,t}}{c \cdot P_{1,t-n}} + \frac{m-1}{3} \cdot \frac{c \cdot P_{2,t}}{c \cdot P_{2,t-n}} \\
    \text{when on the } m^{th} \text{ day of the roll period, } m = 1, 2, 3
\end{align*}
\]

Where

- \( t \) = The relevant CME exchange business day;
- \( TRI_t \) = The value of US Equity Futures Strategy Index as of day \( t \);
- \( i_{t-n} \) = Overnight interest rate as of \( (t - n) \);
- \( n \) = The number of actual calendar days between \( t \) and the immediately preceding CME exchange business day \( (t - n) \);
- \( r_t \) = Daily price return of the value of the US Equity Futures Contracts on \( t \);
- \( cP_{1,t} \) = US Equity Futures Contract Valuation Price of the first nearby US Equity Futures Contract on \( t \); + provided that, for the avoidance of doubt, once the rolling has been effected in accordance with the above roll methodology and there is no remaining amount to be rolled, the first nearby US Equity Futures Contract shall mean the US Equity Futures Contracts into which the notional investment has been rolled; and
- \( cP_{2,t} \) = US Equity Futures Contract Valuation Price of the second nearby US Equity Futures Contract on \( t \).

Note: All calculations are based on seven significant figures (rounded at the eighth significant figure), and the value is published up to two decimal places (rounded at the third decimal place).

**Adjustment; Rebasement**

Investors should be aware that if the terms of the US Equity Futures Contracts are modified or the S&P 500® Index is rebased or otherwise adjusted or modified, the Index Committee may take such steps as it considers appropriate in response to such modification, rebasement or adjustment.

**THE E-MINI S&P 500® INDEX FUTURES CONTRACTS**

The E-mini S&P 500® Index futures contracts underlying the US Equity Futures Strategy Index are quarterly three-month contracts to buy or sell standardized trading “units”. At the time the US Equity Futures Strategy Index invests in them, the futures contracts will have a term to maturity of approximately three months. One trading unit of E-mini S&P 500® Index futures contracts equals US$50 multiplied by the S&P 500® Index (price return version). The E-mini S&P 500® Index futures contract closest to expiration at any given time is known as the “first nearby” futures contract, and the E-mini S&P 500® Index futures contract that is second closest to expiration at any given time is known as the “second nearby” futures contract.

**The S&P 500® Index**

According to S&P Dow Jones Indices, which created the S&P 500® Index in 1957, the S&P 500® is widely regarded as the best single gauge of large cap U.S. equities. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization. Additional
information on the S&P 500® Index is available through a variety of media sources and at http://us.spindices.com/indices/equity/sp-500. None of these media materials, the S&P website nor any of the material it includes is incorporated by reference herein.

Licensing Information

Goldman Sachs International is the sole licensing agent for the Index. Questions about licensing the Index can be directed to the individuals listed under “Contact Information” below.

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The Index relies on information published by the exchange regarding the price of the US Equity Futures Contracts as well as other matters. The Calculation Agent and Index Sponsor make no warranty as to the correctness of that information and take no responsibility for the accuracy of such data or the impact of any inaccuracy of such data on the levels of the US Equity Futures Strategy Index.