### S&P Dow Jones Indices

A Division of S&P Global

# S&P GSCI Risk Premia Indices Methodology

## **Table of Contents**

Introduction	n	3
	Index Objective and Highlights	3
	Index Family	3
	Supporting Documents	4
Index Cons	Index Construction	
	S&P GSCI Curve	5
	Market Disruption Events on A Rebalancing Date	6
	S&P GSCI Momentum	7
	Constituent Selection	7
	Momentum Score Calculation	8
	Calculation of S&P GSCI Momentum TR	9
	S&P GSCI Carry	9
	Slope Score Calculation	10
	Calculation of S&P GSCI Carry TR	11
	Index Calculations	11
Index Main	Index Maintenance	
	Rebalancing	12
	Currency of Calculation and Additional Index Return Series	12
	Base Dates and History Availability	12
Index Gove	ernance	13
	Index Committee	13
Index Polic	ey .	14
	Holiday Schedule	14
	Rebalancing	14
	Unexpected Exchange Closures	14
	Recalculation Policy	14
	Contact Information	14
Index Disso	Index Dissemination	
	Tickers	15
	Index Data	15
	Web site	15
Disclaimer		16

Performance Disclosure/Back-Tested Data Intellectual Property Notices/Disclaimer	

### Introduction

#### Index Objective and Highlights

The S&P GSCI Risk Premia Indices measure the performance of long-short and tilted alternative risk premia strategies across the constituents of the S&P GSCI.

For information on the S&P GSCI, please refer to the S&P GSCI Methodology at www.spglobal.com/spdji.

#### **Index Family**

The S&P GSCI Risk Premia indices include the following sub-indices:

- **S&P GSCI Curve.** The index measures the performance of a long position in the S&P GSCI Forward Excess Return (ER) (e.g., S&P GSCI 3-Month Forward ER) and a short position in the corresponding S&P GSCI Front Month ER to represent a calendar spread.
- S&P GSCI Single Commodity Curve Indices. The indices measure the performance of a long
  position in a S&P GSCI Single Commodity Forward ER (e.g., S&P GSCI Crude Oil 3-Month
  Forward ER) and a short position in the corresponding S&P GSCI Single Commodity Front Month
  ER (e.g., S&P GSCI Crude Oil ER) to represent a calendar spread for each S&P GSCI
  constituent.
- S&P GSCI Curve Equal Weight. The index is a weighted return index composed of the S&P GSCI Single Commodity Curve Indices. The index is composed of component S&P GSCI Single-Commodity Curve indices. On a monthly basis, the index is equal weighted.
- **S&P GSCI Momentum**. The index measures the performance of a long-short strategy in the S&P GSCI, based on risk-adjusted momentum. The index maintains equal weight long positions in the top 50% of S&P GSCI constituent commodities with the highest momentum scores, and the index maintains equal weight short positions in the bottom 50% with the lowest momentum scores, as defined below in *Momentum Score Calculation*.
- **S&P GSCI Sector Momentum**. The index measures the performance of a long-short strategy in the S&P GSCI, which is organized into three equal weighted sectors based on risk-adjusted momentum. The three sectors are agriculture, energy, and metals; each sector is equal weighted. The index represents long positions for S&P GSCI constituent commodities with momentum scores in the top half of each sector and short positions for the S&P GSCI constituents with momentum scores in the bottom half of each sector. (Please see the *Momentum Score Calculation* section below.)
- **S&P GSCI Momentum Tilted.** The index measures the performance of a long-only strategy in the S&P GSCI based on risk-adjusted momentum. The index applies overweight to the S&P GSCI constituent commodities with momentum scores in the top 50%, and the index applies underweight to the S&P GSCI constituent commodities with momentum scores ranking in the bottom 50%. (Please see the *Momentum Score Calculation* section below.)
- S&P GSCI Sector Momentum Tilted. The index measures the performance of a long-only strategy in the S&P GSCI, which is separated into three sectors based on risk-adjusted momentum. The three sectors are agriculture, energy, and metals, and each sector is equal weighted. The index adjusts weights according to constituents' momentum scores, as defined below in *Momentum Score Calculation*. Constituents in the top half of each sector are overweighted, and constituents in the bottom half of each sector are underweighted. However, if there is an odd number of constituents, a constituent with scores outside of the top or bottom half retains its original weight in the S&P GSCI.

- **S&P GSCI Carry.** The index measures the performance of a long-short strategy in the S&P GSCI index based on the slope of the futures curve. Slope is measured between the front-month and 12-month futures prices. The index maintains an equal weight long position in the 50% (by count) of S&P GSCI constituent commodities with the lowest Slope Scores, and the index maintains an equal weight short position in the 50% (by count) with the highest Slope Scores, as defined in *Index Construction*. If there is an odd number of constituents, the index takes no position in a constituent that is in neither the top nor the bottom half by count.
- S&P GSCI Sector Carry. The index measures the performance of a long-short strategy in the S&P GSCI index, which is separated into three sectors based on the slope of the futures curve. The three sectors are agriculture, energy, and metals, and the sectors are equal weighted. Slope is measured between the front-month and the 12-month futures prices. The index maintains an equal weight long position in the 50% (by count) of S&P GSCI constituent commodities with the lowest Slope Scores of each sector, and the index maintains a short position for the 50% (by count) of S&P GSCI constituent commodities with the lowest Slope Scores of each sector. If there is an odd number of constituents, the index takes no position in a constituent that is in neither the top nor the bottom half.
- S&P GSCI Carry Tilted. The index measures the performance of a long-only strategy in the S&P GSCI index based on the slope of the futures curve. Slope is measured between the frontmonth and the 12-month futures prices. The index applies overweight to the 50% (by count) of S&P GSCI constituent commodities with the lowest Slope Scores, and the index applies underweight to the 50% (by count) of S&P GSCI constituent commodities with the highest Slope Scores. A constituent that is neither overweighted nor underweighted retains its original weight in the S&P GSCI.
- S&P GSCI Sector Carry Tilted The index measures the performance of a long-only strategy in the S&P GSCI index, which is separated into three sectors based on the slope of the futures curve. The three sectors are agriculture, energy, and metals, and each sector is equal weighted. Slope is measured between the front-month and the 12-month futures prices. The index adjusts weights according to constituents' Slope Scores. The constituents with the lowest Slope Scores of each sector are overweighted, and the constituents with the highest Slope Scores of each sector are underweighted. If a sector contains an odd number of constituents, a constituent that is not in the top or the bottom half retains its original weight in the S&P GSCI.

#### **Supporting Documents**

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
Commodity Index Mathematics	Commodity Index Mathematics
Methodology	Methodology
S&P Dow Jones Indices' Commodities Indices	Commodities Indices Policies & Practices
Policies & Practices Methodology	Commodities maices Folicies & Fractices

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

### **Index Construction**

#### **S&P GSCI Curve**

The index level is calculated as follows:

$$Index_t = Index_R * \left[ 1 + Weight_F * \frac{GSCIFwd_t}{GSCIFwd_R} + Weight_D * \frac{GSCI_t}{GSCI_R} \right]$$

where:

 $Index_t = S\&P GSCI Curve ER on date t.$ 

 $Index_R$  = S&P GSCI Curve ER on date R.

 $GSCIFwd_t = S\&P GSCI x$ -Month Forward ER on date t (e.g., S&P GSCI 3-Month Forward ER).

 $GSCIFwd_R = S\&P GSCI x$ -Month Forward ER on date R.

 $GSCI_t$  = S&P GSCI ER on date t.

 $GSCI_R$  = S&P GSCI ER on date R.

R = Last rebalancing date preceding date t.

 $Weight_F = 100\%$ 

 $Weight_D = -100\%$ 

#### Calculation of the Treasury Bill Return

On any given calendar day, the Treasury Bill Return (TBR) is equal to:

$$TBR_{d} = \left[ \frac{1}{1 - \frac{91}{360} \times TBAR_{d-1}} \right]^{\frac{1}{91}} - 1$$

where:

 $TBAR_{d-1}$  = The Treasury Bill Rate available on the preceding S&P GSCI business day.

#### Calculation of S&P GSCI Curve Total Return (TR)

Index 
$$TR_d = Index TR_{d-1} * (1 + CDR_d + TBR_d) * (1 + TBR_d)^{days}$$

where:

days = Number of non-S&P GSCI business days since the preceding S&P GSCI Business Day.

#### Contract Daily Return (CDR) in Formulaic Terms

$$CDR_d = \frac{TDWO_d}{TDWI_{d-1}} - 1$$

**Calculation of the Contract Daily Return.** On any S&P GSCI Business Day, the Contract Daily Return is equal to the ratio of the Total Dollar Weight Obtained (TDWO) on such Day and the Total Dollar Weight Invested (TDWI) on the preceding S&P GSCI Business Day, minus one.

#### Market Disruption Events on A Rebalancing Date

If a market disruption event (MDE) takes place on a rebalancing date, an MDE offset adjustment is calculated and added to the index on the next business day. This process is repeated until there are no further market disruption events.

MDE offset adjustments are calculated for both contracts of the MDE-impacted commodity to maintain a balanced spread—even if only one of the commodity's contracts in the spread index is disrupted. For example, if LCQ5 in the S&P GSCI is disrupted and LCZ5 in the S&P GSCI 3-Month Forward is not, S&P Dow Jones Indices will calculate MDE adjustments for both contracts, and the index calculation is as follows:

$$Index_{t} = Index_{R} * \left[1 + Weight_{F} * \frac{GSCIFwd_{t}}{GSCIFwd_{R}} + Weight_{D} * \frac{GSCI_{t}}{GSCI_{R}}\right] + MDE_{Adj}$$

where:

 $MDE_{Adj}$  = The sum of the MDE Offset Adjustments for the pair of MDE-impacted contracts. Below is  $MDE_{Adj}$  in formulaic terms:

$$MDE_{Adj} = \sum (AHP - THP) * (Price_t - Price_R)$$

The actual hedged position (AHP) of the MDE-impacted contract is determined as follows:

$$AHP_{c} = \frac{CWeight * Index_{R-1}}{CIndex_{R-1}} * HP_{t-1}$$

where:

 $AHP_c$  = Actual hedged position of the MDE-impacted contract c.

CWeight = Weight of the component index (S&P GSCI or S&P GSCI Forward) in the Forward Spread Index (100% for the long position and -100% for the short position).

 $Index_{R-1}$  = S&P GSCI Curve on the previous rebalancing date.

 $CIndex_{R-1}$  = Component index in the Curve Index on the previous rebalancing date.

 $HP_{t-1}$  = Hedged position of the MDE-impacted contract c as of the previous business day.

The theoretical hedged position (THP) of the MDE-impacted contract is determined as follows:

$$THP_{c} = \frac{CWeight * Index_{t-1}}{CIndex_{t-1}} * HP_{t-1}$$

where:

 $THP_c$  = Theoretical hedged position of the MDE-impacted contract c.

 $Index_{t-1} = S\&P GSCI Curve on the previous business day.$ 

CIndex<sub>t-1</sub> = Component index (S&P GSCI or S&P GSCI Forward) in the Curve Index on the previous business day.

 $HP_{t-1}$  = Hedged position of the MDE-impacted contract c as of the previous business day.

The hedged position (*HP*) of the MDE-impacted contract is determined as follows:

$$HP_c = \frac{CIndex_{t-1}}{TDW_{t-1}} * CRW_t * CWF_t$$

where:

 $HP_c$  = Hedged position of the MDE-impacted contract c.

CIndex<sub>t-1</sub> = Component index (S&P GSCI or S&P GSCI Forward) within the Forward Spread index on date *t-1*.

 $TDW_{t-1}$  = Total Dollar Weight of the component index (S&P GSCI or S&P GSCI Forward) which includes the MDE-impacted contract.

 $CRW_t$  = Contract Roll Weight on date t.

 $CWF_t$  = Contract Weight Factor on date t.

For information on the treatment of an MDE on a non-rebalancing date, please refer to S&P Dow Jones Indices' Commodities Indices Policies & Practices Methodology.

#### **S&P GSCI Momentum**

#### **Constituent Selection**

All S&P GSCI constituents are eligible for inclusion in the S&P GSCI Momentum indices.

#### 1. S&P GSCI Momentum

- **S&P GSCI Momentum** maintains an equal weight long (short)-position for the top 50% (bottom 50%) of S&P GSCI constituents according to momentum score. For example, based on 24 constituents, the commodities with the highest 12 scores are classified as the top 50%, and commodities with the lowest 12 scores are classified as the bottom 50%. An aberrant constituent, i.e., one that is not in the top 50% or bottom 50% will be allocated a zero weight.
- S&P GSCI Sector Momentum maintains a long position for the commodities whose
  momentum scores rank in the top half of each sector and a short position for the commodities
  with momentum scores that rank in the lower half of each sector. In each sector, all
  commodities are equally weighted—except for the weights of those commodities that do not
  rank in the top or the bottom half of each sector if/when a sector contains an odd number of
  constituents. The aberrant constituent is allocated a zero weight. The three sectors are
  agriculture, energy, and metals. After each sector is arranged, the index is constructed such
  that the sectors are equally weighted.

#### 2. S&P GSCI Momentum - Tilted

#### • S&P GSCI Momentum - Tilted:

- In the S&P GSCI, constituents are categorized into the top 50% and the bottom 50%: with the top 50% representing the constituents with the highest momentum scores and the bottom 50% representing the constituents with the lowest momentum scores.
- A 10% weight is divided evenly among the top constituents, and with the extra weight, each constituent is overweighted to its original weight in the S&P GSCI.
- A 10% weight is divided evenly among the bottom 50% of constituents, and each constituent is underweighted by the extra weight from its original weight in the S&P GSCI<sup>1</sup>.
- In a situation where there is an odd number of constituents, the constituent that is neither in the top 50% nor the bottom 50% (i.e., an aberrant constituent) will maintain the same weight as that of the S&P GSCI.

#### • S&P GSCI Sector Momentum - Tilted:

o In each sector of the S&P GSCI, the constituents are categorized into the top 50% and bottom 50%: with the top 50% representing the constituents with the highest momentum scores and the bottom 50% representing the constituents with the lowest momentum scores. The top half of constituents from each sector is then combined to

<sup>&</sup>lt;sup>1</sup> The minimum weight of a constituent is 0.10%. If the minimum weight is reached, the extra weight is totaled and deducted equally from other constituents, thus ensuring that the total weight deducted from all the constituents is still 10%.

- form the top half of the index's constituents, and the bottom half of constituents from each sector is combined to form the bottom half of the index's constituents.
- A 10% weight is divided evenly among the top half of the index's constituents, and by the extra weight, each constituent is overweighted to its original weight in the S&P GSCI.
- A 10% weight is divided evenly among the bottom half of the index's constituents, and by the extra weight, each constituent is underweighted from its original weight in the S&P GSCI<sup>2</sup>.
- Should a sector contain an odd number of constituents, the weights of those constituents that do not belong to the top or bottom half stay the same as that of S&P GSCI.
- The three sectors are Energy, Metals and Agriculture.

#### **Momentum Score Calculation**

Momentum value is calculated for each of the S&P GSCI single commodity ER indices in the index universe on each of the rebalancing reference dates. The momentum value is determined as follows:

1. **S&P Momentum Indices.** The momentum value is computed as the 12-month price change in local currency.

$$\text{Momentum Value} = {\binom{price_{M}}{price_{M-12}}} - 1$$

here:

price<sub>M</sub> = Average of five days' prices of the S&P GSCI single commodity ER indices prior to the rebalancing reference dates

 $price_{M-12}$  = Average of five days' prices of the S&P GSCI single commodity ER indices prior to the 12 months preceding the rebalancing reference dates

The momentum value is further adjusted by the security's volatility so as to arrive at the riskadjusted momentum value.

Risk-Adjusted Momentum Value = 
$$\frac{{}^{\textit{MomentumValue}_i}}{\sigma_i}$$

where:

 $\sigma$  = Standard deviation of the daily price returns for the same 12-month period used in Step 1 above.

The momentum value is adjusted by the security's volatility. For a given positive price change over the course of the evaluation period, lower volatility improves the adjusted momentum value. For a given negative price change over the course of the evaluation period, higher volatility improves the adjusted momentum value. When many securities in a given index universe undergo negative price changes during a relevant evaluation period, the volatility adjustment may result in the selection of constituents with higher negative price changes.

<sup>&</sup>lt;sup>2</sup> The minimum weight of a constituent is 0.10%. If the minimum weight is reached, the extra weight is totaled and deducted equally from the other constituents, thus ensuring that the total weight deducted from all the constituents is still 10%.

3. Percentile-scores are calculated as follows:

$$Pi = \frac{Ri}{(N+1)}$$

where:

Pi= Constituent percentile score

Ri= Constituent Momentum Value rank

N= Number of constituents

Note that higher-ranking constituents are the constituents allocated higher percentile scores.

Percentile scores are then transformed into a new set of Z-scores using the inverse of the normal cumulative distribution function with a mean of zero and a standard deviation of 1.

#### Calculation of S&P GSCI Momentum TR

Index  $TR_d = Index TR_{d-1} * (1 + CDR_d + TBR_d) * (1 + TBR_d)^{days}$  where:

days = Number of non-S&P GSCI business days since the preceding S&P GSCI Business Day.

#### **S&P GSCI Carry**

All S&P GSCI constituents are eligible for inclusion in the S&P GSCI Carry indices. Because 12M contract prices are not applicable to calves under one year of age, Feeder Cattle (FC) as a commodity is excluded from Slope calculation. FC is excluded from the S&P GSCI Carry indices and retains its original weight in the S&P GSCI Carry – Tilted indices.

#### 1. S&P GSCI Carry

- S&P GSCI Carry maintains long(short)-positions for the top 50% (bottom 50%) of S&P GSCI constituents according to Slope Scores. For example, based on 23 constituents, the commodities with the lowest eleven scores are classified as the top 50%, and commodities with the highest eleven scores are classified as the bottom 50%. An aberrant constituent, i.e., one that is not in the top 50% or bottom 50% will be allocated a zero weight.
- S&P GSCI Sector Carry maintains long positions in the commodities with Slope Scores that rank in the top half of each sector and short positions for the commodities with Slope Scores that rank at the bottom half of each sector. In each sector, all commodities are equally weighted—except for the weights of those commodities that do not rank in the top or bottom half of each sector if/when a sector contains an odd number of constituents The aberrant constituent is allocated a zero weight. The three sectors are agriculture, energy, and metals. After each sector is arranged, the index is constructed such that the sectors are equally weighted.

#### 2. S&P GSCI Carry - Tilted

- S&P GSCI Carry Tilted:
  - o In the S&P GSCI Index, all constituents—except for FC—are categorized into the top 50% and the bottom 50%: with the top 50% representing the constituents with the lowest Slope Scores and the bottom 50% representing the constituents with the highest Slope Scores.
  - A 10% weight is divided evenly among the top constituents, and each constituent is overweighted by the extra weight to its original weight in the S&P GSCI Index.

- A 10% weight is divided evenly among the constituents at the bottom, and each constituent is underweighted by the extra weight from its original weight in the S&P GSCI Index.<sup>3</sup>
- In situations where there is an odd number of constituents, the constituent that is neither in the top 50% nor the bottom 50% will maintain the same weight as that of the S&P GSCI.
- FC will maintain its original weight (i.e., the same weight as the S&P GSCI).

#### • S&P GSCI Sector Carry - Tilted:

- o In each sector of the S&P GSCI Index, the constituents—with the exception of FC— are categorized into the top 50% and the bottom 50%: with the top 50% representing the constituents with the lowest Slope Scores, and the bottom 50% representing the constituents with the highest Slope Scores. The top half of constituents from each sector is then combined to form the top half of the index's constituents, and the bottom half of constituents from each sector is combined to form the bottom half of the index's constituents
- A 10% weight is divided evenly among the top half of constituents of the index, and each constituent is overweighted by the extra weight to its original weight in the S&P GSCI Index.
- A 10% weight is divided evenly among the bottom half of constituents of the index, and each constituent's original weight in the S&P GSCI Index.<sup>3</sup> is underweighted by the extra weight.
- If a sector contains an odd number of constituents, the weights of the aberrant constituents stay the same as the weight of the S&P GSCI index.
- o FC will maintain its original weight (i.e., the weight of the S&P GSCI).
- The three sectors are Energy, Metals and Agriculture.

#### **Slope Score Calculation**

Slope value is calculated for each of the S&P GSCI constituent commodities in the index universe on each of the rebalancing reference dates. The slope value is determined as follows:

$$Slope \ Score = \frac{futures_{12} - futures_0}{futures_0*(time_{12} - time_0)}$$

where:

futures<sub>0</sub> =Average of five days' prices of the S&P GSCI constituent commodity's near-month future prior to the rebalancing reference dates
 futures<sub>12</sub> =Average of five days' prices of the S&P GSCI constituent commodity's 12-month forward future prior to rebalancing reference dates
 time<sub>0</sub> =Number of days from the current day to the final trading day of the near-month future
 time<sub>12</sub> = Number of days from the current day to the final trading day of the 12-month forward

future = Number of days from the current day to the final trading day of the 12-month forward

For each S&P GSCI single commodity futures contract, the near-month futures contract is the one held in the S&P GSCI based on the current day's S&P GSCI Contract Calendar. The 12-month forward futures contract is the one whose final trading day is 12 months after the final trading day of the near-month futures contract. In the rare case that the 12-month forward futures contract has not started trading, both the near-month futures and the 12-month forward futures are rolled to the immediately preceding futures expiration.

<sup>&</sup>lt;sup>3</sup> The minimum weight of a constituent is 0.10%. If the minimum weight is reached, the extra weight is totaled and deducted equally from other constituents, thus ensuring that the total weights deducted from all the constituents is still 10%.

#### Calculation of S&P GSCI Carry TR

Index  $TR_d = Index TR_{d-1} * (1 + CDR_d + TBR_d) * (1 + TBR_d)^{days}$  where:

days = Number of non-S&P GSCI business days since the preceding S&P GSCI Business Day.

#### **Index Calculations**

The indices are calculated in U.S. dollars.

### **Index Maintenance**

#### Rebalancing

The indices rebalance after the close of the month's end when all the relevant futures markets are open for official trading. If any one of the relevant futures markets is not open, the indices rebalance on the immediately preceding day when all the relevant futures markets are open for official trading.

The rebalancing reference date is one business day, as determined by the Chicago Mercantile Exchange (CME) holiday calendar, prior to the rebalancing date. All data required to rebalance the indices is obtained as of the rebalancing reference date. If any data on the rebalancing reference date is not available, the latest data available prior to the rebalancing reference date is used.

All days reflect the interval after the close.

Rebalancing Schedule				
Rebalancing Frequency	Monthly			
Announcement Date	T-1			
Rebalancing Reference Date	T-1			

#### **Currency of Calculation and Additional Index Return Series**

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to the following: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to the <a href="Mailto:S&P DJI">S&P DJI</a> Methodology & Regulatory Status Database.

For information on various index calculations, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at <a href="https://www.spglobal.com/spdji">www.spglobal.com/spdji</a>.

#### **Base Dates and History Availability**

Index history availability, base dates, and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P GSCI Curve 3 Month	02/16/2021	12/31/1999	12/31/1999	100
S&P GSCI Curve 3 Month Equal Weight	02/16/2021	12/31/1999	12/31/1999	100
S&P GSCI Momentum	02/16/2021	10/31/2007	10/31/2007	100
S&P GSCI Sector Momentum	02/16/2021	10/31/2007	10/31/2007	100
S&P GSCI Momentum - Tilted	02/16/2021	10/31/2007	10/31/2007	100
S&P GSCI Sector Momentum - Tilted	02/16/2021	10/31/2007	10/31/2007	100
S&P GSCI Carry	05/24/2021	10/31/2007	10/31/2007	100
S&P GSCI Sector Carry	05/24/2021	10/31/2007	10/31/2007	100
S&P GSCI Carry – Tilted	05/24/2021	10/31/2007	10/31/2007	100
S&P GSCI Sector Carry – Tilted	05/24/2021	10/31/2007	10/31/2007	100

### **Index Governance**

#### **Index Committee**

An S&P Dow Jones Indices Index Committee maintains the indices. The Index Committee meets regularly. At each meeting, the Index Committee reviews any significant market events. In addition, the Index Committee may revise index policy covering rules for timing of rebalancing or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

## **Index Policy**

#### **Holiday Schedule**

The indices calculate when the CME is open.

#### Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

#### **Unexpected Exchange Closures**

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Commodity Indices Policies & Practices Methodology.

#### **Recalculation Policy**

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Commodity Indices Policies & Practices Methodology.

#### **Contact Information**

For any questions regarding an index, please contact: index\_services@spglobal.com.

### **Index Dissemination**

Index levels are available through S&P Dow Jones Indices' Web site at <a href="www.spglobal.com/spdji">www.spglobal.com/spdji</a>, major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

#### **Tickers**

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the <a href="S&P DJI Methodology & Regulatory Status Database">S&P DJI Methodology & Regulatory Status Database</a> for a complete list of indices covered by this document.

Index	Return Type	Ticker
	Spot Return	SPGC3M
S&P GSCI Curve 3 Month (USD)	Excess Return	SPGC3MP
	Total Return	SPGC3MT
	Spot Return	SGC3MEW
S&P GSCI Curve 3 Month Equal Weight (USD)	Excess Return	SGC3MEWP
	Total Return	SGC3MEWT
S&P GSCI Momentum (USD)	Excess Return	SPGMOMUP
SAP GSCI Momentum (GSD)	Total Return	SPGMOMUT
S&P GSCI Sector Momentum (USD)	Excess Return	SPGMSNUP
SAP GSCI Sector Momentum (GSD)	Total Return	SPGMSNUT
S&P GSCI Momentum - Tilted (USD)	Excess Return	SPGMTUP
SAF GSCI Womentam - Titled (GSD)	Total Return	SPGMTUT
S&P GSCI Sector Momentum – Tilted (USD)	Excess Return	SPMTSNUP
SAF GSCI Sector Momentum – Tilled (GSD)	Total Return	SPMTSNUT
S&P GSCI Carry (USD)	Excess Return	SPGCARUP
SAF GSCI Carry (GSD)	Total Return	SPGCARUT
S&P GSCI Sector Carry (USD)	Excess Return	SPGCASUP
SAF GSCI Sector Carry (GSD)	Total Return	SPGCASUT
S&P GSCI Carry - Tilted (USD)	Excess Return	SPGCATUP
Jak Goor Carry - Tilled (USD)	Total Return	SPGCATUT
S&P GSCI Sector Carry - Tilted (USD)	Excess Return	SPGCSTUP
SAF GOOI Sector Carry - Tilled (USD)	Total Return	SPGCSTUT

#### **Index Data**

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