THE GSCI® MANUAL
A Guide to the Goldman Sachs Commodity Index

2005 Edition

December 2004

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The GSCI Manual – 2005 Edition

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December 2004

We are pleased to provide you with this 2005 edition of the GSCI Manual, which replaces the GSCI Manual dated December, 2003. The Appendices to this GSCI Manual set forth the composition and weights of the GSCI for 2005, as well as an explanation of the sources of the data used in determining the GSCI for 2005 and other related information.

The only substantive rule change that has been made to the GSCI Manual since the prior edition appears in the definition of the TVM Upper Level and in Section II.5. The TVM (Trading Volume Multiple) is used to measure the liquidity of contracts included in the GSCI in order to ensure that there is sufficient liquidity in these contracts to support anticipated levels of investment. The TVM Upper Limit prevents additional contracts on a GSCI Commodity from entering the GSCI once there is sufficient liquidity. The TVM Upper Limit for Contracts that are currently included in the GSCI was expanded from 200 to 300 in order to further enhance the stability of the underlying Contracts in the index. The TVM Upper Level for new Contracts to enter the index remains at 200. This rule enhances the stability of the index composition by significantly reducing the possibility that Contracts within a commodity group (GSCI Commodity) exit and successfully re-enter the index due to cycles in volume and price. In addition, differentiating the TVM Upper Level for existing and prospective Contracts is consistent with the other GSCI rules which have dual parameters for existing and prospective Contracts.

This edition of the GSCI Manual also includes a change in the Investment Support Level (as set forth in the definition of that term) from $30bn to $40bn to better reflect the significant increase in commodity index investments over the past year. Finally, Section 1.4 lists the current composition of the Policy Committee. These changes will not have a material effect on the composition or calculation of the GSCI at this time. Nevertheless, these changes reflect the fact that Goldman Sachs remains committed to modifying the methodology for determining the composition of, and calculating, the GSCI, as necessary in order to preserve and enhance the utility of the GSCI as a benchmark for commodity market performance and as a tradable index that enables market participants to obtain broad-based exposure to these markets.

This edition of the GSCI Manual, it should be noted, reflects the methodology that will be utilized with respect to the determination and calculation of the GSCI for 2005 and should not be relied upon in connection with any prior years. Further, as explained in this GSCI Manual, the methodology is subject to change in the future.

Goldman, Sachs & Co.

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I INTRODUCTION

I.1 Overview of the GSCI

The GSCI is designed as a benchmark for investment in the commodity markets and as a measure of commodity market performance over time. It is also designed as a "tradable" index that is readily accessible to market participants. In order to accomplish these objectives, the GSCI is calculated primarily on a world production-weighted basis and comprises the principal physical commodities that are the subject of active, liquid futures markets. There is no limit on the number of contracts that may be included in the GSCI; any contract that satisfies the eligibility criteria and the other conditions specified in this GSCI Manual will be included. This feature enhances the suitability of the GSCI as a benchmark for commodity market performance and to reflect general levels of price movements and inflation in the world economy. The GSCI was developed and is calculated by Goldman, Sachs & Co. ("Goldman Sachs").

I.2 The GSCI Manual

The composition of the GSCI, and its value on any given day, as determined and published by Goldman Sachs, are dispositive. This GSCI Manual describes the methodology used by Goldman Sachs in determining such composition and calculating such value. Neither this GSCI Manual nor any set of procedures, however, are capable of anticipating all possible circumstances and events that may occur with respect to the GSCI and the methodology for its composition, weighting and calculation. Accordingly, a number of subjective judgments must be made in connection with the operation of the GSCI that cannot be adequately reflected in this GSCI Manual. All questions of interpretation with respect to the application of the provisions of this GSCI Manual, including any determinations that need to be made in the event of a market emergency or other extraordinary circumstances, will be resolved by Goldman Sachs, in consultation with the Policy Committee (as discussed below) where appropriate. Goldman Sachs and the Policy Committee are committed to maintaining the GSCI as a liquid, tradable index that serves as the best possible benchmark for commodity investing. We also recognize that the detailed rules-based approach contained in the Manual may not at all times be able to reflect the underlying liquidity and condition of a specific market, particularly in periods of extraordinary market volatility or rapid technological change. Therefore, Goldman Sachs, in consultation with the Policy Committee, may determine that a given Contract that satisfies the eligibility criteria set forth in this GSCI Manual should nevertheless be excluded from the GSCI if inclusion of such Contract is inconsistent with, or would undermine, the purposes of the GSCI as a benchmark for commodity market performance and a tradable index, or if inclusion of such Contract in the GSCI would otherwise not be in the best interests of market participants.

Further, modifications to the methodology used to calculate the GSCI, and consequently this GSCI Manual, may be necessary from time to time. Goldman Sachs reserves the right to make such changes or refinements to the methodology set forth in this GSCI Manual, in consultation with the Policy Committee, as it believes necessary in order to preserve and enhance the utility of the GSCI as a benchmark for commodity market performance and the tradability of the GSCI. Goldman Sachs also reserves the right to take such action with respect to the GSCI as it deems necessary or appropriate in order to address market emergencies or other extraordinary market events or conditions. Wherever practicable, any such changes or actions will be publicly announced prior to their effective date.

Certain of the provisions of this GSCI Manual are expressed in formulaic as well as descriptive terms. In the event of any conflict between the descriptions of these provisions and the corresponding formulae, the descriptions will govern.

This GSCI Manual is divided into five substantive sections: (1) the selection criteria for inclusion of contracts in the GSCI; (2) the methodology for determining the weight of each such contract; (3) the methodology for determining the contract expirations of each contract included in the GSCI; (4) the methodology for determining the normalizing constant used in calculating the value of the GSCI; and (5) the methodology for calculating the value of the GSCI. Together, these elements determine the value of the GSCI on any given day.

I.3 The GSCI and Related Indices

In order to reflect the performance of a total return investment in commodities, five separate but related indices have been developed based on the GSCI — the GSCI Spot Index, which is based on price levels of the contracts included in the GSCI; the GSCI Excess Return Index ("GSCI ER"), which incorporates the returns of the GSCI Spot Index as well as the discount or premium obtained by "rolling" hypothetical positions in such contracts forward as they approach delivery; the GSCI Total Return Index ("GSCI TR"), which incorporates the returns of the GSCI ER and interest earned on hypothetical fully collateralized contract positions on the commodities included in the GSCI; the GSCI Futures Price Index ("GSFPI"), which is intended to serve as a benchmark for the fair value of the futures contracts on the GSCI traded on the Chicago Mercantile Exchange ("CME"); and the GSCI Total Return Securities Index ("GSCI TRSI"), which reflects the total return on a basket of securities indexed to the GSCI TR.

Goldman Sachs has also developed and calculates a number of sub-indices representing components of the GSCI. These include the GSEN (reflecting the energy components of the GSCI), GSNE (all components other than energy), GSAG (agriculture), GSLV (livestock), GSIN (industrial metals) and GSPM (precious metals) as well as other sub-indices. Excess Return and Total Return sub-indices are also calculated and published on each of these market sectors.

Goldman Sachs first began publishing the GSCI, as well as the related indices, in 1991. In addition, although the GSCI was not published prior to that time, Goldman Sachs has calculated the historical value of the GSCI and related indices beginning on January 2, 1970, based on actual prices from that date forward and the selection criteria, methodology and procedures in effect during the applicable periods of calculation (or, in the case of all calculation periods prior to 1991, based on the selection criteria, methodology and procedures adopted in 1991). The GSCI has been normalized to a value of 100 on January 2, 1970, in order to permit comparisons of the value of the GSCI to be made over time.

Futures contracts on the GSFPI, as well as options on such futures contracts, began trading on the CME in July 1992.

Goldman Sachs calculates and publishes the value of the GSCI, the GSFPI, the GSCI ER and the GSCI TR, as well as each of the sub-indices, continuously on each business day, with such values updated every several minutes. The GSCI TRSI is calculated and published once per day. Quotations for each of the indices and sub-indices may be found on Reuters pages GSCI through GSCU. In addition, a number of other data vendors publish GSCI quotations. Goldman Sachs publishes an official daily settlement price for each of the indices and sub-indices on each GSCI Business Day between 4:00 P.M. and 6:00 P.M., New York time. Further, quotations for futures contracts and options on futures contracts on the GSFPI, which are traded on the CME, are published by the CME on a continuous basis and are available through a number of data vendors.

I.4 The Policy Committee

Goldman Sachs has established a Policy Committee to assist it in connection with the operation of the GSCI. The Policy Committee meets on an annual basis and at other times at the request of Goldman Sachs. The principal purpose of the Policy Committee is to advise Goldman Sachs with respect to, among other things, the calculation of the GSCI, the effectiveness of the GSCI as a measure of commodity futures market performance and the need for changes in the composition or methodology of the GSCI. The Policy Committee acts solely in an advisory and consultative capacity; all decisions with respect to the composition, calculation and operation of the GSCI are made by Goldman Sachs. Certain of the members of the Policy Committee may be affiliated with clients of Goldman Sachs. Also, certain of the members of the Policy Committee may be affiliated with entities which from time to time may be invested in the GSCI, either through transactions in the Contracts included in the GSCI, futures contracts on the GSCI or derivative products linked to the GSCI.

The Policy Committee meets on a regular basis once during each GSCI Year. Prior to the meeting, Goldman Sachs determines the commodities and contracts to be included in the GSCI for the next year, as well as the Contract Production Weight for each such contract, in accordance with the general procedures and guidelines set forth in this GSCI Manual. The proposed composition of the GSCI is then circulated to the Policy Committee members in advance of the meeting and is presented and discussed at the meeting. The Policy Committee is also consulted on any other significant matters with respect to the calculation or operation of the GSCI and may, if necessary or practicable, meet at other times during the year as issues arise that warrant Policy Committee consideration.

At present, the Policy Committee consists of the following members:

Peter O'Hagan Chairman of the Committee Managing Director Goldman, Sachs & Co.	Kenneth A. Froot Andre R. Jakurski Harvard Business School Professor of Finance; Director of Research
Steven Strongin Managing Director Goldman, Sachs & Co.	Dan Kelly Vice President, Market Risk and Performance Harvard Management Co.
Laurie Ferber Managing Director Goldman, Sachs & Co.	Jelle Beenen Manager Commodities and Quantitative Strategies Investments PGGM
Richard Redding Director Chicago Mercantile Exchange	Chia Tai Tee Assistant Director Investment Policy and Strategy GIC

Committee Advisors and Coordinator:

Oliver Frankel Committee Advisor Managing Director Goldman, Sachs & Co.	David Gilberg Legal Advisor Sullivan & Cromwell	Heather Shemilt Committee Coordinator Managing Director Goldman, Sachs & Co.

I.5 Definitions

As used in this GSCI Manual, the following terms have the meanings indicated:

"**Active Contract**" — A liquid, actively traded Contract Expiration with respect to a Designated Contract, as defined or identified by the relevant Trading Facility or, if no such definition or identification is provided by the Trading Facility, as defined by standard custom and practice in the industry.

"**Annual Calculation Period**" — The twelve month period ending on August 31 of the calendar year immediately preceding the GSCI Year for which the composition of the GSCI is being determined, provided that, if not all of the necessary data are reasonably available at the time of the annual determination of the composition and weighting of the GSCI, the Annual Calculation Period will be the most recent 12 month period for which such data are available, as determined by Goldman Sachs.

"**Annual Observation Period**" — With respect to each Annual Calculation Period, each of the three twelve month periods consisting of the Annual Calculation Period and the two twelve month periods immediately preceeding.

"**Average Contract Reference Price**" or "**ACRP**"— For any Annual Observation Period and with respect to a particular Contract , the average of the Daily Contract Reference Prices for the First Nearby Contract Expiration on the last day of each month during that Annual Observation Period on which such price is available.

"**Contract**" – Any contract that is traded on or through a Trading Facility and based on the price of a commodity.

"**Contract Business Day**" — A day on which (i) the Trading Facility on or through which a Designated Contract Expiration is traded is scheduled to be open for trading for at least three hours, (ii) such Contract Expiration is available for trading during the hours referred to in clause (i) (as defined by the rules or policies of the Trading Facility, or if not so defined, as defined by Goldman Sachs in its reasonable discretion) and (iii) a Daily Contract Reference Price for such Contract Expiration is published by the Trading Facility. An early closing of the Trading Facility on which a Contract Expiration is traded, or an early closing of trading in such Contract Expiration, will not affect the characterization of a day as a Contract Business Day, provided that the circumstances set forth in (i) through (iii) exist.

"**Contract Daily Return**" or "**CDR**" — On any given GSCI Business Day, the amount determined by dividing the Total Dollar Weight Obtained on such Day by the Total Dollar Weight Invested on the immediately preceding GSCI Business Day, minus one, reflecting the percentage change in the Total Dollar Weight of the GSCI.

"**Contract Expiration**" — A date or term specified by the Trading Facility on or through which a Contract is traded as the date or term on, during or after which such Contract will expire, or delivery or settlement will occur. The contract expiration may, but is not required to, be a particular contract month.

"**Contract Production Weight**" or "**CPW**"— With respect to each Designated Contract, an amount calculated according to the rules in chapter III, based on world production and trading volume, provided that, when calculating the composition of the GSCI, the CPW of any Contract that is part of a prospective index composition shall be determined on the basis of such prospective index composition. The final CPWs are rounded to seven digits of precision.

"**Contract Roll Weight**" or "**CRW**" — With respect to the calculation of the GSCI on any given GSCI Business Day other than during a Roll Period, and for each Designated Contract Expiration, a factor of 1.0 if such Designated Contract Expiration is the First Nearby Contract Expiration and zero for all other Designated Contract Expirations. During a Roll Period, the Contract Roll Weight for the First Nearby Contract Expiration or the Roll Contract Expiration will be either 1.0, 0.8, 0.6, 0.4, 0.2, or zero, determined in accordance with the procedure set forth in section VI.2(c) of this GSCI Manual, depending on the portion of the First Nearby Contract Expiration that has been rolled into the Roll Contract Expiration, and will be zero for all other Designated Contract Expirations.

"**Daily Contract Reference Price**" or "**DCRP**"— With respect to each Contract Expiration and Contract Business Day, the price of the relevant Contract, expressed in U.S. dollars, that is generally used by participants in the related cash or over-the-counter market as a benchmark for transactions related to such Contract. The Daily Contract Reference Price may, but is not required to, be the price (i) used by such Trading Facility or related clearing facility to determine the margin obligations (if any) of its members or participants or (ii) referred to generally as the reference, closing or settlement price of the relevant Contract. If a Trading Facility publishes a daily settlement price for a particular Contract Expiration, such settlement price will generally serve as the Daily Contract Reference Price for such Contract Expiration unless, in the reasonable judgment of Goldman Sachs, in consultation with the Policy Committee, such settlement price does not satisfy the criteria set forth in this definition. The Daily Contract Reference Price of a Contract may be determined and published either by the relevant Trading Facility or by one or more third parties.

"**Designated Contract**" — A particular Contract included in the GSCI for a given GSCI Period, based on the eligibility criteria set forth in chapter II of this GSCI Manual. All references to the term “Designated Contract” in this GSCI Manual shall be deemed to include all Designated Contract Expirations with respect to the Contract in question.

"**Designated Contract Expiration**" — A Contract Expiration with respect to a Designated Contract that has been designated by Goldman Sachs, in consultation with the Policy Committee, for inclusion in the GSCI.

"**Dollar Weight**" — On any given GSCI Business Day and with respect to any Designated Contract, the product of the following with respect to each of the First Nearby Contract Expiration and the Roll Contract Expiration of such Contract: (i) the CPW of such Contract, multiplied by (ii) the Daily Contract

Reference Price for the appropriate Contract Expiration or Expirations (the First Nearby Contract Expiration or the Roll Contract Expiration) on such day, multiplied by (iii) the Contract Roll Weight of the appropriate Contract Expiration.

"**Eligible GSCI TR-Indexed Security**" — Any security that, on any GSCI Business Day, satisfies all of the following requirements, in the reasonable judgment of Goldman Sachs: (i) the security is issued and outstanding and is not held by Goldman Sachs or its affiliates in a principal capacity (with the exception of securities issued by third parties and held by Goldman Sachs or its affiliates for investment purposes); (ii) the security is a zero-coupon, U.S.-dollar denominated security that is publicly traded pursuant to an effective registration statement filed under the U.S. Securities Act of 1933 or any comparable laws or regulations of a non-U.S. jurisdiction, or is traded pursuant to Rule 144A of the U.S. Securities and Exchange Commission or any comparable laws or regulations of a non-U.S. jurisdiction; (iii) the payment required to be made by the issuer under the terms of the security at maturity is linked to the change in the value of the GSCI TR on a one-to-one basis (without taking into consideration any fees associated with the management of the GSCI TR-linked payment); and (iv) the security has been issued and/or underwritten by Goldman Sachs or an affiliate and Goldman Sachs or an affiliate acts as a market-maker with respect to such security. In addition, a security meeting the foregoing criteria will qualify as an Eligible GSCI TR-Indexed Security for so long as and to the extent that the final GSCI TR price on which the payment amount of such security is based remains undetermined.

"**Eligible Portfolio**" — On any GSCI Business Day, a portfolio consisting of all of the Eligible GSCI TR-Indexed Securities as of the close of the previous GSCI Business Day.

"**Eligible Security Price**" or "**ESP**" — For any GSCI Business Day, the value of each Eligible GSCI TR-Indexed Security shall be equal to the mean of bids and offers posted by Goldman Sachs for such security on the relevant page of Reuters or Bloomberg, or otherwise made available to market participants by Goldman Sachs as of the GSCI Settlement Time.

"**FIA Reports**" — The "Monthly Volume Report" and the "International Report" published by the Futures Industry Association.

"**First Nearby Contract Expiration**" — In connection with the calculation of the GSCI on any given GSCI Business Day, the first available Designated Contract Expiration (after the date or term on or during which the calculation is made), provided that the Roll Period with respect to such Designated Contract Expiration has not yet been completed. After the completion of the Roll Period with respect to a Designated Contract, the Designated Contract Expiration that was the Roll Contract Expiration becomes the First Nearby Contract Expiration. Notwithstanding the foregoing, with respect to any Designated Contract the last trading day of which may occur on or before the eleventh GSCI Business Day of the month, the First Nearby Contract Expiration shall mean the second available Designated Contract Expiration (after the date or term on or during which the calculation is made) subject to adjustment for the Roll Period as set forth in the immediately preceding two sentences.

"**GSCI**" — The Goldman Sachs Commodity Index, known under the proprietary name "GSCI".

"**GSCI Business Day**" — A day on which the offices of Goldman Sachs in New York are open for business.

"**GSCI CME Futures Contracts**" — The futures contracts on the GSFPI, which are listed for trading on the CME.

"**GSCI Commodity**" — A commodity or group of commodities, which, based on such factors as physical characteristics, trading, production, use or pricing, is determined by Goldman Sachs, in consultation with the Policy Committee, to be sufficiently related to constitute a single commodity and on which there are one or more Contracts.

"**GSCI ER**" — The GSCI Excess Return Index, which is the accretion of the Contract Daily Return, indexed to a normalized value of 100 on January 2, 1970.

"**GSCI Period**" — The period beginning on the fifth GSCI Business Day of the calendar month in which new CPWs (determined in accordance with the procedure set forth in section III.4) first become effective, and ending on the GSCI Business Day immediately preceding the first day of the next following GSCI Period.

"**GSCI Settlement Time**" — The time of day on each GSCI Business Day as of which the daily calculation of the GSCI for such GSCI Business Day will be made. The GSCI Settlement Time is currently between 4:00 P.M. and 6:00 P.M., New York time.

"**GSCI Spot Index**" — The index that reflects the price levels of the Designated Contracts and the CPW of each such Contract, and is calculated in the manner set forth in chapter VI of this GSCI Manual.

"**GSCI TR**" — The GSCI Total Return Index, which incorporates the returns of the GSCI ER and the Treasury Bill Return.

"**GSCI TRSI**" — The GSCI Total Return Securities Index, which reflects the total return on the Eligible Portfolio consisting of all Eligible GSCI TR-Indexed Securities and is calculated on any GSCI Business Day in accordance with the procedures set forth in this GSCI Manual.

"**GSCI Year**" — The period beginning on the fifth GSCI Business Day of each calendar year and ending on the fourth GSCI Business Day of the following calendar year.

"**GSFPI**" — The GSCI Futures Price Index, which serves as a benchmark for the fair value of the GSCI CME Futures Contracts.

"**Interim Calculation Period**" – With respect to any Monthly Observation Date, the three month period ending on the last day of the month immediately preceding the date on which such Monthly Observation Date is scheduled to occur (without giving effect to any delay in such Monthly Observation Date).

"**Investment Support Level**" or "**ISL**" — The targeted amount of investment in the GSCI and related indices, expressed in U.S. dollars, that Goldman Sachs, in consultation with the Policy Committee, reasonably believes may need to be supported by liquidity in the relevant Designated Contracts, based on the estimated aggregate outstanding level of investment in GSCI-related investments. The Investment Support Level will not necessarily reflect the actual levels of such investment and may include amounts estimated to have been invested in similar indices, as well as any amount that is reasonably expected to be invested in the GSCI or related or similar indices within the next twelve-month period. The Investment Support Level is currently set at 40 billion U.S. dollars.

"**Limit Price**" — On any Contract Business Day, a Daily Contract Reference Price for the First Nearby Contract Expiration or the Roll Contract Expiration with respect to a particular Designated Contract that represents the maximum or minimum price for such Contract Expiration on such Day, as determined by the rules or policies of the relevant Trading Facility (if any).

"**Monthly Observation Date**" — The earliest day in each calendar month (except for the month in which the composition of the GSCI for the next GSCI Year is determined) on which, as determined in the reasonable judgment of Goldman Sachs, the data necessary to perform the calculations and make the determinations required pursuant to Section III.6 of this GSCI Manual are available or, if such day is not a GSCI Business Day, the next following GSCI Business Day, provided that, if, in the reasonable judgment of Goldman Sachs, such data are not available on or before the last day of such month, the Monthly Observation Date may be delayed.

"**Normalizing Constant**" or "**NC**" — The divisor determined in the manner set forth in chapter V of this GSCI Manual that is used in calculating the value of the GSCI on any given GSCI Business Day in order to assure the continuity of the GSCI over time and to enable comparisons to be made between the values of the GSCI at various times.

"**Overall Trading Window**" or "**OTW**" — With respect to any Contract, the period of time during which such Contract is available for trading.

"**Percentage Dollar Weight**" — With respect to any Designated Contract, the Dollar Weight of such Contract divided by the TDW.

"**Percentage TQT**" — With respect to each Designated Contract, an amount equal to the TQT of such Contract divided by the aggregate of the TQTs of all the Designated Contracts on the same GSCI Commodity. If there is only one Designated Contract on a GSCI Commodity, its Percentage TQT will be equal to one.

"**Reference Dollar Weight**" — With respect to any Contract, the product of (i) the CPW of such Contract, multiplied by (ii) the applicable Average Contract Reference Price.

"**Reference Percentage Dollar Weight**" — With respect to any Contract, the quotient of (i) the Reference Dollar Weight of such Contract, divided by (ii) the sum of the Reference Dollar Weights of all Designated Contracts, provided that, when calculating the composition of the GSCI, the Reference Percentage Dollar Weight of any Contract that is part of a prospective index composition shall be determined on the basis of such prospective index composition.

"**Roll Contract Expiration**" — With respect to each Designated Contract and the calculation of the GSCI on any given GSCI Business Day, the Roll Contract Expiration shall be the Contract Expiration that will be the First Nearby Contract Expiration on the first GSCI Business Day of the month next succeeding the month during which the calculation is made.

"**Roll Period**" — With respect to any Designated Contract, the period of five GSCI Business Days beginning on the fifth GSCI Business Day of each calendar month and ending on the ninth GSCI Business Day of such month, provided that the Roll Period with respect to any Designated Contract will be adjusted in accordance with the procedure set forth in section VI.2(d) if any of the circumstances identified in such section exist on any such GSCI Business Day.

"**Security Outstanding Amount**" or "**SOA**" — For each GSCI Business Day and for each Eligible GSCI TR-Indexed Security, the face amount (in the case of a debt security), number of securities (in the case of a warrant certificate) or other similar measure of such security, as determined by Goldman Sachs at the GSCI Settlement Time.

"**Total Dollar Value Traded**" or "**TDVT**" — For any Annual Observation Period or Interim Calculation Period and with respect to a given Contract, the TQT of such Contract over such period (and annualized), as the case may be, multiplied by the Average Contract Reference Price for such period of such Contract.

"**Total Dollar Weight of the GSCI**" or "**TDW**" — On any given GSCI Business Day, the sum of the Dollar Weights of all Designated Contracts.

"**Total Dollar Weight Invested**" or "**TDWI**" — On any given GSCI Business Day, an amount equal to the Total Dollar Weight of the GSCI on the immediately preceding GSCI Business Day.

"**Total Dollar Weight Obtained**" or "**TDWO**" — On any given GSCI Business Day, the amount obtained from an investment in the GSCI on the immediately preceding GSCI Business Day of the TDWI. The TDWO for a given GSCI Business Day is calculated as the Total Dollar Weight of the GSCI for such Day, using the CPWs and Contract Roll Weights in effect on the immediately preceding GSCI Business Day and the Daily Contract Reference Prices used to calculate the GSCI on the GSCI Business Day on which the calculation is made.

"**Total Dollar Weight Ratio**" or "**TDWR**" — The ratio calculated by dividing (i) the Total Dollar Weight of the GSCI on the fourth GSCI Business Day of the relevant month, calculated based on the CPWs that will be in effect for the GSCI Period beginning on the next GSCI Business Day, by (ii) the Total Dollar Weight of the GSCI on such day, calculated based on the CPWs in effect for the GSCI Period ending on such day.

"**Total Quantity Traded**" or "**TQT**" — With respect to any Contract, the total quantity traded in such Contract during the relevant Annual Calculation Period or Interim Calculation Period (and annualized), as the case may be, expressed in physical units.

"**Trading Facility**" — The exchange, facility or platform on or through which a particular contract is traded. A Trading Facility may, but is not required to, be a contract market, exempt electronic trading facility, derivatives transaction execution facility, exempt board of trade or foreign board of trade, as such terms are defined in the U.S. Commodity Exchange Act and the rules and regulations promulgated thereunder.

"**Trading Volume Multiple**" or "**TVM**" — With respect to any Contract, the quotient of (i) the product of (A) the TQT of such Contract, multiplied by (B) the sum of the products of (x) the CPW of each Contract that is included in the GSCI or, when calculating a prospective index composition, that is part of such prospective index composition, multiplied by (y) the corresponding Average Contract Reference Price, divided by (ii) the product of (A) the Investment Support Level for the relevant GSCI Year multiplied by (B) the CPW of such Contract. In formulaic terms

$$\mathrm{TVM}_c = \frac{\mathrm{TQT}_c \times \sum_k \left(\mathrm{CPW}_k \times \mathrm{ACRP}_k\right)}{\mathrm{ISL} \times \mathrm{CPW}_c}$$

"**Treasury Bill Rate**" or "$\mathbf{TBAR_{d-1}}$" — On any GSCI Business Day *d*, the 91-day auction high rate for U.S. Treasury Bills, as reported on Telerate page 56, or any successor page, on the most recent of the weekly auction dates prior to such GSCI Business Day *d*.

"**Treasury Bill Return**" — A daily rate of return calculated in accordance with the procedure set forth in section VI.4(a) of this GSCI Manual and based on (i) the Treasury Bill Rate, (ii) a year of 360 days, and (iii) a period of 91 days.

"**TVM Reweighting Level**" or "**TVMRL**" — The minimum TVM level that must be achieved as a result of a calculation of the CPW for each Designated Contract on the relevant GSCI Commodity, in accordance with the procedure set forth in sections III.4 and III.5 of this GSCI Manual. The TVM Reweighting Level is the same for all Designated Contracts and is currently set at 50.

"**TVM Threshold**" or "**TVMT**"— The TVM level, specified by Goldman Sachs in consultation with the Policy Committee, which triggers a recalculation of the CPWs for all Designated Contracts on a given GSCI Commodity in accordance with the procedure set forth in section III.4 of this GSCI Manual, if the TVM of any such Contract falls below such level. The TVM Threshold is currently set at 30.

"**TVM Upper Level**" or "**TVMUL**"— The TVM level, specified by Goldman Sachs in consultation with the Policy Committee, which triggers the exclusion of one or more Designated Contracts on a given GSCI Commodity from the GSCI in accordance with the procedure set forth in section II.5(b) of this GSCI Manual, if the average of the TVMs of all the Designated Contracts on such Commodity exceeds such level. The TVM Upper Level is currently set at 200 for those Contracts that are not currently included in the GSCI at the time of determination and is currently set at 300 for those Contracts that are currently included in the GSCI at the time of determination. The time of determination may be either a Monthly Observation Date or the time of the annual determination of the composition of the GSCI.

"**World Production Average**" or "**WPA**" — The average annual world production quantity of a GSCI Commodity determined by dividing its World Production Quantity by five.

"**World Production Quantity**" or "**WPQ**" — The total quantity of a GSCI Commodity produced throughout the world during the WPQ Period, subject to adjustment as set forth in chapter III of this GSCI Manual.

"WPQ Period" — The period over which the WPQ of a GSCI Commodity is determined, which is defined as the most recent five year period for which complete world production data for all GSCI Commodities are available from sources determined by Goldman Sachs to be reasonably accurate and reliable at the time the composition of the GSCI is determined. For the GSCI Year 2005, the WPQ Period is the five-year period 1997-2001.

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II IDENTIFICATION OF CONTRACTS FOR INCLUSION IN THE GSCI

II.1 Overview of Identification Process

The Contracts to be included in the GSCI for a given GSCI Year must satisfy several sets of eligibility criteria. First, Goldman Sachs identifies those contracts that meet the general criteria for eligibility (section II.2). Second, the Contract volume and weight requirements are applied (sections II.3 and II.4) and the number of Contracts is determined (section II.5), which serves to reduce the list of eligible Contracts. At that point, the list of Designated Contracts for the relevant GSCI Year is complete and the process moves to the determination of the production weights, as discussed in the next section of this GSCI Manual.

II.2 General Eligibility Requirements

In determining the Contracts to be included in the GSCI for a given GSCI Year, Goldman Sachs first identifies the Contracts that satisfy the general eligibility criteria set forth below. These criteria are intended only to identify Contracts with characteristics (e.g., dollar denomination) that will facilitate the calculation of the GSCI and that are consistent with the general purposes of the GSCI as a benchmark for commodity market performance and a tradable index. This process generally produces a substantial list of Contracts potentially eligible for inclusion in the GSCI; the list is narrowed through the application of the more specific criteria described below. The sources of the information used to determine the Contracts that satisfy the general eligibility criteria are identified in section II.7.

The general eligibility criteria are the following:

II.2(a) Non-Financial Commodities

> To be eligible for inclusion in the GSCI, a Contract must be on a physical commodity and may not be on a financial commodity (e.g., securities, currencies, interest rates, etc.). The Contracts on a particular commodity need not require physical delivery by their terms in order for the commodity to be considered a physical commodity.

The GSCI is intended in part to measure performance in the physical commodity markets and to correlate with general price movements in the world economy. The limitation to Contracts on physical commodities and the exclusion of Contracts on financial commodities serve to limit the eligible commodities to those Contracts on commodities that are the subject of production or distribution processes in the world economy and that have a direct effect on price levels and inflation.

II.2(b) Certain Contract Characteristics

To be eligible for inclusion in the GSCI, a Contract must: (i) have a specified expiration or term or provide in some other manner for delivery or settlement at a specified time, or within a specified time period, in the future; and (ii) at any given point in time, be available for trading at least five months prior to its expiration or such other date or time period specified for delivery or settlement.

The requirements set forth in this section reflect the fact that some of the products from time to time traded on or through Trading Facilities, in particular certain electronic platforms, may not display traditional characteristics of a futures contract, such as particular contract months. While it is not necessary for a Contract Expiration to be expressed as a calendar month, the GSCI and its underlying methodology are premised upon the existence of specified dates or time periods for delivery or settlement. It is assumed that Contracts traded on contract markets, exempt electronic trading facilities, derivatives transaction execution facilities, exempt boards of trade and foreign boards of trade (as such terms are defined in the U.S. Commodity Exchange Act and the rules and regulations promulgated thereunder) will generally satisfy the above requirements, unless Goldman Sachs, in consultation with the Policy Committee, determines that any such Contract does not satisfy the foregoing criteria.

II.2(c) Denomination and Geographical Requirements

To be eligible for inclusion in the GSCI, a Contract must be denominated in U.S. dollars and traded on or through a Trading Facility that has its principal place of business or operations in a country that is a member of the Organization for Economic Cooperation and Development ("OECD") during the relevant Annual Calculation Period or Interim Calculation Period, as the case may be.

The requirement that Contracts be U.S. dollar denominated facilitates the calculation and consistency of the GSCI, since numerous currency conversions and other adjustments would need to be made in order to accommodate contracts denominated in other currencies. The requirement that a Contract be traded on or through a Trading Facility in an OECD country assures that the GSCI will be limited to those commodities for which there are Trading Facilities in industrialized countries.

II.2(d) Availability of Daily Contract Reference Prices

(i) For a Contract to be eligible for inclusion in the GSCI, Daily Contract Reference Prices for such Contract generally must have been available on a continuous basis for at least two years prior to the proposed date of inclusion, provided that in appropriate circumstances, Goldman Sachs, in consultation with the Policy Committee, may determine that a shorter time period is sufficient or that historical Daily Contract Reference Prices for such Contract may be derived from Daily Contract Reference Prices for a similar or related Contract.

(ii) At and after the time a particular Contract is included in the GSCI, the Daily Contract Reference Price for such Contract must be published between 10:00 A.M. and 4:00 P.M., New York time, on each Contract Business Day by the Trading Facility on or through which it is traded and must generally be available to all members of, or participants in, such Facility (and, if Goldman Sachs is not such a member or participant, to Goldman Sachs) on the same Contract Business Day from the Trading Facility or through a recognized third-party data vendor. Such publication must include, at all times, Daily Contract Reference Prices for at least one Contract Expiration that is five months or more from the date the determination is made, as well as for all Contract Expirations during such five-month period.

The requirement that a Contract have a continuous price history of at least two years is intended to ensure the reliability and availability of the prices necessary to enable Goldman Sachs to calculate the GSCI. In addition, in order to calculate the GSCI on an ongoing basis, Goldman Sachs must be able to obtain Daily Contract Reference Prices for certain Contract Expirations with respect to each Designated Contract prior to the GSCI Settlement Time on each Contract Business Day. This requirement is intended to assure that the value of the GSCI can be reliably calculated on the basis of prices that are both announced and, in general, readily available to the members of, or participants in, the relevant Trading Facility (and, if Goldman Sachs is not such a member or participant, to Goldman Sachs).

II.2(e) Availability of Volume Data

For a Contract to be eligible for inclusion in the GSCI, volume data with respect to such Contract must be available, from sources satisfying the criteria specified in Section II.7(b), for at least the three months immediately preceding the date on which the determination is made.

II.2(f) Other Requirements with respect to Trading Facilities

The Trading Facility on or through which a Contract is traded must: (i) make price quotations generally available to its members or participants (and, if Goldman Sachs is not such a member or participant, to Goldman Sachs) in a manner and with a frequency that is sufficient to provide reasonably reliable indications of the level of the relevant market at any given point in time; (ii) make reliable trading volume information available to Goldman Sachs with at least the frequency required by Goldman Sachs to make the monthly determinations described in section II.6; (iii) accept bids and offers from multiple participants or price providers (i.e., it must not be a single-dealer platform); and (iv) be accessible by a sufficiently broad range of participants. Such access may be provided either (A) by the Trading Facility making clearing services reasonably available, thereby eliminating counterparts credit considerations, or (B) by a network of brokers or dealers who are willing to intermediate transactions with third parties, thereby enabling such third parties to enter into transactions based on prices posted on such Facility.

These requirements are intended to establish certain minimum standards for Trading Facilities. If trading in certain commodities is shifted to electronic platforms that are largely unregulated, or subject to different levels or types of regulation than traditional exchanges, these standards will serve to ensure that the GSCI includes only Contracts for which sufficient and reliable data, and in particular price data developed in a competitive process, are available. It is assumed that contract markets and foreign boards of trade (as such terms are defined in the U.S. Commodity Exchange Act and the rules and regulations promulgated thereunder) will generally satisfy the above requirements, unless Goldman Sachs, in consultation with the Policy Committee, determines otherwise.

II.2(g) Contract Trading Hour Requirements

Goldman Sachs, in consultation with the Policy Committee, may exclude from the GSCI a Contract that otherwise satisfies the criteria and conditions for inclusion if, in its reasonable judgment, such Contract's Overall Trading Window is insufficient to support the tradability of the GSCI taken as a whole.

This requirement is intended to support and enhance the tradability of the GSCI, by ensuring that all Designated Contracts are available for trading during at least a minimum period of time.

II.3 Total Dollar Value Trading Requirement

The GSCI is limited to those Contracts that are actively traded in order to assure that the prices generated by the markets for such Contracts represent reliable, competitive prices. The Contracts that satisfy the general eligibility requirements set forth in section II.2, therefore, must also satisfy the volume trading requirements described below before being included in the GSCI.

A Contract that is not included in the GSCI at the time of determination (which may be either a Monthly Observation Date or the time of the annual determination of the composition of the GSCI) and that is based on a commodity that is not represented in the GSCI at such time must, in order to be added to the GSCI at such time, have a Total Dollar Value Traded, over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, of at least 15 billion U.S. dollars.

A Contract that is already included in the GSCI at the time of determination and that is the only Designated Contract on the relevant GSCI Commodity must, in order to continue to be included in the GSCI after such time, have a Total Dollar Value Traded of at least 5 billion U.S. dollars over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, and of at least 10 billion U.S. dollars during at least one of the three Annual Observation Periods.

A Contract that is not included in the GSCI at the time of determination and that is based on a GSCI Commodity on which there are one or more Designated Contracts already included in the GSCI at such time must, in order to be added to the GSCI at such time, have a Total Dollar Value Traded, over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, of at least 30 billion U.S. dollars.

A Contract that is already included in the GSCI at the time of determination and that is based on a GSCI Commodity on which there are one or more Designated Contracts already included in the GSCI at such time must, in order to continue to be included in the GSCI after such time, have a Total Dollar Value Traded of at least 10 billion U.S. dollars over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, and of at least 20 billion U.S. dollars during at least one of the three Annual Observation Periods.

In determining whether a particular Contract is included in the GSCI for purposes of this section II.3, any changes in the composition of the GSCI that have been determined in accordance with the procedures set forth in this GSCI Manual but that have not yet become effective shall be deemed to have been already made.

The Total Dollar Value Traded measures the extent to which a commodity is the subject of Contract trading. Analyzing this feature through the use of dollar values is free from contract-dependent characteristics such as contract size, and thus makes it possible to compare the results for all Contracts. The minimum TDVT requirement, therefore, further enhances the tradability of the GSCI by excluding those Contracts that do not represent sufficient trading activity in the relevant commodity.

II.4 Reference Percentage Dollar Weight Requirement

A Contract that is already included in the GSCI at the time of determination must, in order to continue to be included after such time, have a Reference Percentage Dollar Weight of at least 0.10%.

A Contract that is not included in the GSCI at the time of determination must, in order to be added to the GSCI at such time, have a Reference Percentage Dollar Weight of at least 0.75%.

In determining whether a particular Contract is included in the GSCI for purposes of this section II.4, any changes in the composition of the GSCI that have been determined in accordance with the procedures set forth in this GSCI Manual but that have not yet become effective shall be deemed to have been already made.

In addition to the volume requirements described above, this section includes a requirement that a Contract, in order to be included in the GSCI, have a minimum Reference Percentage Dollar Weight. The Reference Percentage Dollar Weight is calculated on the basis of the proposed composition of the GSCI determined in accordance with the procedures set forth in the preceding sections of this chapter II. Any Contract that does not satisfy the applicable Reference Percentage Dollar Weight requirement is excluded from such proposed composition, and the CPWs of the remaining Contracts are recalculated in accordance with the procedure set forth in section III.4, until the proposed GSCI contains only Contracts that satisfy the applicable Reference Percentage Dollar Weight requirements. This provision is designed to enhance the tradability of the GSCI by eliminating from the index those Contracts that would account for *de minimis* percentages of the GSCI, thereby requiring traders to maintain and roll small positions.

II.5 Determination of the Number of Contracts

II.5(a) Determination of Commodity Groups

Goldman Sachs, in consultation with the Policy Committee, will from time to time determine which commodities, based on such factors as physical characteristics, trading, production, use or pricing, are sufficiently related to constitute a single GSCI Commodity for purposes of the methodology and procedures described in this GSCI Manual, in particular in this section II.5.

II.5(b) Selection of Contracts on the same GSCI Commodity and among several GSCI Commodities

In the event that two or more Contracts on the same GSCI Commodity satisfy the eligibility criteria set forth in this chapter II, such Contracts will be included in the GSCI in the order of their respective TQTs, with the Contract having the highest TQT being included first, provided that no further Contracts will be included if such inclusion would result in the TVM for such Commodity exceeding the TVM Upper Level.

If under the procedure set forth in the preceding paragraph, additional Contracts could be included with respect to several GSCI Commodities at the same time, that procedure is first applied with respect to the GSCI Commodity that has the lowest TVM at the time of determination. Subject to the other eligibility criteria set forth in this chapter II, the Contract with the highest TQT on such Commodity will be included. Before any additional Contract on the same GSCI Commodity or on any other GSCI Commodity is included, the TVMs for all GSCI Commodities are recalculated. The selection procedure described above is then repeated with respect to the Contracts on the GSCI Commodity that then has the lowest TVM.

This section describes the procedure for selecting the Contracts to be included in the GSCI for the relevant GSCI Period. Within each commodity group, the order in which additional Contracts will be added is based on the TQTs of the relevant Contracts. If the Contracts on a particular GSCI Commodity have sufficient liquidity to support the portion of the GSCI that is attributable to such Commodity (as measured by the TVM of such Commodity), then no further Designated Contracts on such Commodity are necessary. If, however, the TVM of such Commodity is relatively low, it may be necessary or appropriate to include additional Contracts as Designated Contracts. This will serve to spread the liquidity attributable to the relevant GSCI Commodity across a broader range of Contracts, thereby enhancing the tradability of the GSCI. This section also states that no additional Contracts will be added if their addition would cause the TVM of the relevant GSCI Commodity to exceed the TVM Upper Level. In those circumstances, no further liquidity in the relevant GSCI Commodity is necessary.

II.6 Intra-Year Changes in the Composition of the GSCI

As described in greater detail in section III.6, the composition of the GSCI is reviewed on a monthly basis during any given GSCI Year. If on any Monthly Observation Date, the TVM of any Designated Contract is below the TVM Threshold for the relevant GSCI Year, the composition of the GSCI with respect to the GSCI Commodity underlying such Contract will be re-determined.

II.7 Sources of Information

The following are the sources of the information used to determine the eligibility of Contracts for inclusion in the GSCI pursuant to the requirements set forth in sections II.2(b) through II.2(g). If any of the sources identified below is unavailable with respect to the determination of the GSCI for a particular GSCI Year, Goldman Sachs, in consultation with the Policy Committee, will identify appropriate alternative sources and the composition of the GSCI for such GSCI Year will be based on such alternative sources. In addition, if Goldman Sachs in its reasonable judgment believes that one or more of the sources identified below contain a manifest error, it may use an alternative source to obtain the necessary information. Any such alternative sources used by Goldman Sachs will be publicly disclosed at the time that the composition of the GSCI for the next GSCI Year is announced.

II.7(a) General Eligibility Requirements

The identification of those commodities that satisfy the general eligibility requirements set forth in section II.2 is based on the FIA Reports that are published with respect to the relevant Annual

Calculation Period or Interim Calculation Period, as the case may be, and on the most recent version of the "Futures and Options Fact Book", published by the Futures Industry Institute, available on the date of determination. The determination as to whether a particular Trading Facility has its principal place of business or operations in an OECD country is based on the most recent data published by the OECD available on the date of determination.

II.7(b) Contract Volume and Liquidity Requirements

In order to determine whether a particular Contract satisfies the volume and liquidity requirements described above, Goldman Sachs may use any available sources that it believes to be reasonably reliable, including but not limited to data contained in the FIA Reports. In the event of manifest error, Goldman Sachs may supplement, and make corrections to, any such data.

Volume data used to determine whether a particular Contract is eligible to be included in the GSCI are the data for the relevant Annual Calculation Period or Interim Calculation Period, as the case may be, provided that in the case of a Contract that has been trading for less than twelve months, the determination is made on the basis of data for the period of time during which the Contract has been trading, with such data being annualized.

Volume data with respect to a given Contract are calculated based on the volumes of all Contract Expirations of such Contract that have been traded within the relevant Annual Calculation Period or Interim Calculation Period, as the case may be.

II.7(c) Adjustments in Special Circumstances

In applying volume data for purposes of calculating the GSCI, Goldman Sachs may make any such adjustments as it believes to be reasonably necessary in order to take into account any unique or unusual factors with respect to the relevant GSCI Commodity.

III CALCULATION OF THE CONTRACT PRODUCTION WEIGHTS

III.1 Overview of the Contract Production Weights

The GSCI, as noted, is a production-weighted index that is designed to reflect the relative significance of each of the constituent commodities to the world economy while preserving the tradability of the index by limiting eligible Contracts to those with adequate liquidity. In addition to determining the list of Designated Contracts it is necessary to ascertain the quantity of each such Designated Contract to be included in the GSCI, i.e. the Contract Production Weights. The calculation of the Contract Production Weights, or CPWs, of the Designated Contracts involves a four-step process: (1) determination of the World Production Quantity, or WPQ, of each GSCI Commodity (section III.2); (2) determination of the World Production Average, or WPA, of each GSCI Commodity over the WPQ Period (section III.3); (3) calculation of the CPW based on the Contract's percentage of the relevant TQT (section III.4); and (4) certain adjustments to the CPWs (sections III.5 and III.6). The procedure for selecting the data sources from which the WPQs, WPAs, and CPWs are derived is described in section III.7.

III.2 World Production Quantities

III.2(a) Determination of WPQs

The WPQ of each GSCI Commodity is equal to the total world production of the GSCI Commodity (except as otherwise set forth in this chapter III) over the WPQ Period.

The use of the five-year WPQ Period (and the averaging of that five year period to determine the WPAs) is intended to mitigate the effect of any aberrational years with respect to the production of a particular commodity. For example, if a given commodity is produced primarily in one part of the world that suffers damage from hurricanes or earthquakes in a particular year, resulting in curtailed production levels, the use of that year's production figures might not accurately reflect the significance of the commodity to the world economy. Commodity production in a particular year may also be higher or lower than would normally be the case as a result of general production cycles, supply and demand cycles, or worldwide economic conditions. Measuring production levels over a five year period should generally "smooth out" any such aberrational years.

The definition of the WPQ Period imposes a delay of approximately one-and-one-half years between the end of the WPQ Period and the end of the relevant Annual Calculation Period. This delay is based on the fact that world production statistics are often incomplete and subject to revision for some time after their publication. Imposing a delay on the WPQ Period, therefore, should generally enhance their accuracy and reliability.

The WPQ Period is defined as the most recent five-year period for which complete world production data is available for all GSCI Commodities from sources determined by Goldman Sachs to be reasonably accurate and reliable. This procedure is intended to assure that the same WPQ Period is used for all GSCI Commodities, which allows comparisons between production figures to be made without taking into account temporary aberrations in different time periods.

The WPQ of each GSCI Commodity represents the world production quantity of the GSCI Commodity over the WPQ Period.

III.2(b) Livestock Production Quantities

The annual production quantity for cattle, which is stated in terms of carcass weight, is converted into an equivalent quantity of live cattle by multiplying the production quantity of cattle for a given year by the ratio of live weight of cattle to the dressed weight of cattle (ALW/ADW) for that year, based on sources selected pursuant to section III.7.

In addition, cattle and hog production quantities are based on world industrial production data, rather than total world production data, derived from sources selected pursuant to section III.7.

III.2(c) Orange Juice Production Quantities

The annual production quantity for orange juice, which is stated in terms of boxes of oranges produced, is converted into an equivalent quantity of pounds of solid frozen concentrated orange juice by multiplying the production quantity of oranges for a given year, in metric tons, by a conversion factor to convert to pounds, and dividing by the number of pounds of oranges per box. The result is then multiplied by the ratio of gallons of orange juice per box of oranges and by the ratio of pounds of solid frozen concentrated orange juice per gallon of orange juice for that year, based on sources selected pursuant to section III.7.

The Designated Contracts on live cattle and frozen concentrated orange juice are based on live weights of cattle and pounds of solid frozen concentrated orange juice, respectively. As a result, the conversion that must be made with respect to each of these commodities differs somewhat from the conversion made in connection with other Designated Contracts. For this reason, special provisions have been implemented for these conversions. It should also be noted that the ALW/ADW ratio used in adjusting the annual livestock production quantity is derived from U.S. statistics, although this ratio should generally be applicable to cattle production throughout the world. Similarly, the conversion ratio used in adjusting the annual production quantity of orange juice is derived from Florida statistics, although this ratio should generally be applicable to orange juice production throughout the world.

In addition, the production data for live cattle and lean hogs used in calculating the GSCI are based on industrial production rather than total world production. This is due to the fact that a significant portion of total world livestock production is used for local consumption and never enters the channels of distribution and production. As a result, the inclusion of this portion of world production in determining the CPWs would tend to overstate the importance of livestock to the world economy. It is possible that in the future Goldman Sachs, in consultation with the Policy Committee, will conclude that it is appropriate to use industrial production figures for other commodities, where available. Any such determination will be publicly announced prior to its effectiveness.

III.2(d) Regional Production Data

If a GSCI Commodity is primarily a regional commodity, based on its production, use, pricing, transportation or other factors, Goldman Sachs, in consultation with the Policy Committee, may, if it deems such action appropriate, determine the WPQ of such GSCI Commodity on the basis of regional, rather than world, production. At present, natural gas is the only GSCI Commodity with respect to which the WPQ is determined on the basis of regional production. The WPQ of natural gas is based on North American production.

Certain commodities, such as natural gas, are primarily regional, rather than world, commodities, due to the prohibitive cost of transporting such commodities from one part of the world to another or for other reasons. In such instances, it might not be appropriate to determine the WPQ of the commodity on the basis of world production data. For this reason, the definition of the term "GSCI Commodity" in the GSCI Manual includes any group of commodities that, based on such factors as physical characteristics, trading, production, use or pricing, is determined by Goldman Sachs, in consultation with the Policy Committee, to be sufficiently related to constitute a single commodity. Section III.2(d) makes it clear that, in those cases in which a GSCI Commodity is a regional commodity, Goldman Sachs, in consultation with the Policy Committee, may determine the WPQ of such Commodity on the basis of regional production data. As noted, the only commodity with respect to which the WPQ is currently determined on a regional basis is natural gas, which is based on North American production.

III.3 World Production Averages

The WPA of each GSCI Commodity is equal to its WPQ over the WPQ Period, divided by five.

The WPA is simply the average annual production amount of the GSCI Commodity based on the WPQ over a five-year period. The WPA is therefore determined, with respect to each GSCI Commodity by dividing its WPQ over the WPQ Period by five.

III.4 Contract Production Weights

With respect to each Designated Contract, the CPW will be equal to (i) the Percentage TQT for such Contract multiplied by (ii) the WPA of the underlying GSCI Commodity (after any necessary conversion made for purposes of calculation) and divided by (iii) 1,000,000. However, if the calculation of the CPWs for the Designated Contracts on a particular GSCI Commodity would result in the TVM of such Contracts being below the TVM Reweighting Level, then the CPWs for all such Contracts will be reduced until the TVM of such Contracts is equal to the TVM Reweighting Level. The final CPWs are rounded to seven digits of precision. The new CPWs are implemented at the beginning of each GSCI Period in accordance with the rolling procedure set forth in section VI.2(d).

In calculating the CPW of each Designated Contract on a particular GSCI Commodity, the WPA of such Commodity is allocated to those Designated Contracts that can best support liquidity. Therefore, the Percentage TQT for each such Contract is multiplied by the WPA (after any necessary conversion made for purposes of calculation) of the underlying GSCI Commodity. The result is then divided by 1,000,000. If, however, the foregoing calculation would result in the TVM of any such Contract being below the TVM Reweighting Level, then the CPWs for all Designated Contracts on the relevant GSCI Commodity are reduced in accordance with the adjustment procedure described in section III.5 until the TVM of all such Contracts is equal to the TVM Reweighting Level. This is achieved by setting the TVM for each such Contract at the TVM Reweighting Level, and reducing the CPW for such Contract accordingly. The adjustment procedure is designed to ensure that the CPW of each Designated Contract is at a level sufficient to support trading activity in the GSCI, but not disproportionately high.

III.5 CPW Adjustment Procedure

The following procedure is used to adjust the CPWs of Designated Contracts, under the circumstances described in section III.4:

(1) Determine the set "A" of all Designated Contracts to be re-weighted. If the set A is empty, then no adjustment is necessary.

(2) Compute the CPWs for all Designated Contracts in A in accordance with the following formula:

$$\mathrm{CPW}_i = \frac{\text{Percentage TQT}_i \times \mathrm{WPA}_i}{1{,}000{,}000}$$

(3) Re-compute the TVMs for all Contracts in A and partition A into the following subsets:
A_L = {Contracts with TVM below the TVM Reweighting Level}
A_E = {Contracts with TVM at the TVM Reweighting Level}
and
A_H = {Contracts with TVM above the TVM Reweighting Level}

(4) If A_L is empty, then no further adjustment is necessary.

(5) For each of the Contracts in A_H, leave the CPW as specified in step (2).

(6) Solve the set of linear equations

$$TQT_i \times \sum_{k \in C} (CPW_k \times ACRP_k) = ISL \times CPW_i \times TVMRL$$

(where C is the set of all Contracts in the prospective index composition)

for the CPWs of all Contracts in A_L and A_E.

(7) Repeat steps (3) through (6) until no further adjustment is necessary.

III.6 Monthly Review of Index Composition

On each Monthly Observation Date, Goldman Sachs will calculate the TVM of each Designated Contract, based on volume data for the relevant Interim Calculation Period. If on any such Date, the TVM of any Designated Contract is below the TVM Threshold, Goldman Sachs will adjust the composition of the GSCI, with respect to the GSCI Commodity underlying such Contract (but not with respect to any other GSCI Commodities), in accordance with the following principles:

(a) All eligible Contracts, whether previously included in the GSCI or not, on such Commodity as of such Date are identified, based on the eligibility criteria and subject to the limits set forth in chapter II.

(b) The CPWs of all Contracts so identified are determined in accordance with the procedure set forth in sections III.4 and III.5, provided that the Percentage TQT for each such Contract will be determined based on volume data for the relevant Interim Calculation Period for which such data are available for all Contracts on the relevant GSCI Commodity.

(c) At the beginning of the new GSCI Period following the foregoing adjustments, the GSCI will be re-normalized in accordance with the procedure set forth in chapter V.

In order to maintain the liquidity and tradability of the GSCI throughout each GSCI Year, this section provides a mechanism to review and reallocate the distribution of CPWs among the Designated Contracts on a particular GSCI Commodity in the course of such Year, if there has been a significant decline in the liquidity of any such Contract. Any such reallocation may result in new Contracts on the same GSCI Commodity being included in the GSCI, or Designated Contracts that have been previously included in the GSCI being excluded. For this purpose, the liquidity of each Designated Contract is measured by its Trading Volume Multiple, which is calculated and reviewed on each Monthly Observation Date.

If any changes are made to the composition of the GSCI (including changes regarding the relative weight of any Designated Contract) in accordance with the procedure described above, the manner in which such changes are effected will be determined by Goldman Sachs, based on market conditions and other relevant factors, and publicly announced as soon as is reasonably practicable, which is expected to be at least three weeks prior to the implementation of such changes.

III.7 Sources of Information

III.7(a) Sources of Information for the Determination of CPWs

Goldman Sachs, in consultation with the Policy Committee, will determine the sources of information used in determining the CPWs for a given GSCI Period. Goldman Sachs will generally use the same sources of information used to determine the CPWs for or during the immediately preceding GSCI Year, provided that, if such sources are not reasonably available or do not contain the necessary information, or if, in the reasonable judgment of Goldman Sachs, in consultation with the Policy Committee, the information included in any such sources is inaccurate, unreliable or contains manifest error, Goldman Sachs, in consultation with the Policy Committee, will identify alternative sources of information. To the extent practicable, Goldman Sachs will publicly announce the sources used to determine the CPWs for or during a given GSCI Period at the time that the composition of the GSCI and the calculation of the CPWs for such Period are announced.

III.7(b) Sources of Conversion Factors

The factors used to effect the conversions mentioned in section III.2, which are necessary in order to convert the units of measurement used in the WPQs into the units of measurement used with respect to the applicable Contracts are derived from publicly available sources selected by Goldman Sachs, such as publications of the U.S. Department of Agriculture and the American Petroleum Institute.

III.7(c) Sources for Cattle Adjustment Factors

The factor used to make the adjustment mentioned in section III.2(b), with respect to the conversion of dressed weight for cattle into live cattle weight, is derived from publicly available sources selected by Goldman Sachs, such as the U.S. Department of Agriculture, Agricultural Statistics.

III.7(d) Sources for Orange Juice Adjustment

The factor used to make the adjustment mentioned in section III.2(c), with respect to the conversion of boxes of oranges produced into pounds of solid frozen concentrated orange juice, is derived from publicly available sources selected by Goldman Sachs, such as the USDA Florida Agricultural Statistics Citrus Summary.

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IV DESIGNATED CONTRACT EXPIRATIONS

IV.1 Use of Designated Contract Expirations in Calculating the GSCI

As indicated above, the Total Dollar Weight of the GSCI can only be determined on the basis of the prices of actual Contracts. Because Designated Contracts by definition call for delivery or settlement on specified dates or during specified terms, it is necessary to determine the "Designated Contract Expirations" that will be included in the GSCI in order to identify the appropriate prices of such Contracts to be used in calculating the value of the GSCI. The identification of the Designated Contract Expirations for (or, in the case of Contracts added to the GSCI on an intra-year basis, during) a given GSCI Year is made by Goldman Sachs, in consultation with the Policy Committee, at the time that the composition of the GSCI for such Year is determined. This section of the GSCI Manual sets forth the procedures for determining the Designated Contract Expirations for each Designated Contract.

IV.2 Identification of Designated Contract Expirations

> Goldman Sachs, in consultation with the Policy Committee, will determine the Designated Contract Expirations for each Designated Contract in (or, in the case of Contracts added to the GSCI on an intra-year basis, during) a given GSCI Year, provided that each such Designated Contract Expiration must be an Active Contract.

With respect to certain Contracts, a number of Contract Expirations have historically exhibited low trading volumes and are generally regarded as inactive. This may be due to seasonal cycles of supply and demand in the underlying commodity or other production, distribution, or economic factors. Inactive Contracts, although available for trading, might not generate accurate and reliable market prices because of the low level of trading activity. For this reason, the GSCI is calculated only on the basis of the prices of Active Contracts. Once a Contract Expiration is identified as a Designated Contract Expiration, the GSCI will be calculated on the basis of such Contract Expiration for the given GSCI Year, in accordance with the procedures set forth in chapter VI of this GSCI Manual. However, if Goldman Sachs, in consultation with the Policy Committee, determines during the course of a GSCI Year that a Contract Expiration that has been included as a Designated Contract Expiration is no longer an Active Contract, such Designated Contract Expiration will be deleted from the GSCI for the remainder of that GSCI Year. Conversely, if a new Contract is added to the GSCI on an intra-year basis, Goldman Sachs, in consultation with the Policy Committee, will identify the Designated Contract Expirations with respect to such Contract for the remainder of the relevant GSCI Year.

IV.3 Failure to Trade Designated Contract Expirations

IV.3(a) Deletion of Designated Contract Expirations

If a Trading Facility deletes a Contract Expiration that is a Designated Contract Expiration, such Contract Expiration will no longer constitute a Designated Contract Expiration for the remainder of the GSCI Year in which the deletion occurs, and the GSCI will be calculated solely on the basis of the remaining Designated Contract Expirations (with respect to the particular Designated Contract) for the remainder of the relevant GSCI Year.

IV.3(b) Delay in Trading of Designated Contract Expirations

If two consecutive Designated Contract Expirations for a particular Designated Contract have not been made available for trading on or through the relevant Trading Facility at least six months prior to the date on which the Roll Period is scheduled to begin with respect to the first of these two Designated Contract Expirations, pursuant to section VI.2(c), Goldman Sachs, in consultation with the Policy Committee, will determine what action, if any, should be taken. Such action may include, without limitation, a decision to delete the Designated Contract Expirations or the Designated Contract from the GSCI for the GSCI Year in which the failure to make the Designated Contract Expiration available for trading occurs (or for the relevant portion of such GSCI Year) or a contingent decision to include such Contract Expirations or Designated Contract if the Designated Contract Expiration is made available by a specified date.

In unusual situations, a Trading Facility may not officially delete or replace Designated Contracts on a particular commodity but may nevertheless delay the making available of Contracts for particular expirations by the time the Designated Contract Expirations for the next GSCI Year are determined. The provision set forth above is designed to address this type of unusual situation. Any action taken pursuant to section IV.3 will be publicly announced prior to the effective date of the change in the composition of the GSCI.

For example, if the Designated Contract Expirations for a given Designated Contract are scheduled to include the month of July, and the Trading Facility on or through which the Designated Contract Expirations are traded deletes the July Contract Expiration for that year but an August Contract Expiration is made available for trading, the GSCI will be calculated on the basis of the August Contract Expiration, subject to the "rolling" procedures set forth in section VI.2(c) of this GSCI Manual, provided that the August Contract Expiration had been made available for trading sufficiently early as specified in section II.2(d).

IV.4 Replacement of Contracts

If trading in all Contract Expirations with respect to a particular Designated Contract is terminated, or the relevant Trading Facility announces that no additional Contract Expirations will be made available with respect to a Designated Contract, a replacement Contract on the relevant GSCI Commodity (which replacement Contract must satisfy the eligibility criteria set forth in chapter II) may be included in the GSCI for the GSCI Year in which the replacement is made and in subsequent GSCI Years. To the extent practicable, any such replacement will be effected on the next following Monthly Observation Date, and in accordance with the procedure set forth in section III.6.

If another Contract replaces a Designated Contract and the timing or procedure contemplated above is not practicable, a determination must be made as to the date from which the GSCI will be calculated using the replacement Contract. In making this determination, Goldman Sachs expects to take into account a number of factors, including any differences between the existing Contract and the replacement Contract with respect to contract specifications, Contract Expirations, and other matters. These factors may make it necessary or advisable to effect the transfer from the existing Contract to the replacement Contract over a series of days. It is anticipated that such a transfer will be effected in a manner similar to the "rolling" of the GSCI that takes place during each Roll Period, as described in section VI.2(c).

If a replacement contract is to be included in the GSCI, Goldman Sachs will publicly announce the manner in which the transfer from the existing Contract to the replacement Contract will be effected, and whether the CPWs of the other Designated Contracts on the relevant GSCI Commodity and/or the Normalizing Constant will be recalculated.

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V THE NORMALIZING CONSTANT

V.1 Purpose of the Normalizing Constant

In order to assure continuity of the GSCI and to allow comparisons of the value of the GSCI to be made over time, it is necessary to make an adjustment to the calculation of the GSCI each time the CPWs are changed. The factor used to make this adjustment is the "Normalizing Constant," or "NC," and is used in the same manner as similar factors applied to the calculation of other published financial market indices. The NC is determined each time the composition of the GSCI is changed pursuant to the procedures set forth in this GSCI Manual.

V.2 Calculation of the Total Dollar Weight of the GSCI on Non-Roll Days

The formula for calculating the Total Dollar Weight of the GSCI on any GSCI Business Day that does not occur during a Roll Period is the following (with "c" representing the Designated Contract and "d" representing the GSCI Business Day on which the calculation is made):

$$TDW_d = \sum_c CPW_d^c \times DCRP_d^c$$

The Total Dollar Weight, which forms the basis for the calculation of the Normalizing Constant, is equal to the sum of the Dollar Weights of all Designated Contracts. The Dollar Weight of each Designated Contract is in turn calculated by multiplying the appropriate CPW by the applicable Daily Contract Reference Price on the day on which the calculation is made. Accordingly, the formula set forth above can generally be used to calculate the Total Dollar Weight. However, during a Roll Period, as described in section VI.2 of this GSCI Manual, the GSCI is calculated on the basis of the Daily Contract Reference Prices of the First Nearby Contract Expiration and the Roll Contract Expiration of each Designated Contract, reflecting the fact that the GSCI is being rolled from one Contract Expiration to the next.

As a result, the calculation of the Total Dollar Weight of the GSCI during a Roll Period must be adjusted to reflect the fact that different Daily Contract Reference Prices will be used for each Designated Contract (e.g., the respective Daily Contract Reference Prices of the First Nearby Contract Expiration and the Roll Contract Expiration). The formula for calculation of the Total Dollar Weight during a Roll Period (other than a January Roll Period or any other Roll Period in which a re-weighting is effected) is set forth in section VI.3(a). Further, because the roll implemented in January (and in any other Roll Period in which a re-weighting is effected) involves changes not only in the Contract Roll Weights but also the CPWs, a special formula is needed for calculation of the Total Dollar Weight during such Roll Periods. This formula is set forth in section VI.3(b).

V.3 Calculation of the NC

V.3(a) The Total Dollar Weight Ratio

The Total Dollar Weight Ratio is calculated in accordance with the following formula (with "c" representing each Designated Contract, "d" representing the day on which the calculation is made, "CPW_{new}" representing the CPWs that take effect on the first day of the new GSCI Period and "CPW_{old}" representing the CPWs for the prior GSCI Period):

$$TDWR = \frac{\sum_{c} CPW_{new}^{c} \times DCRP_{d}^{c}}{\sum_{c} CPW_{old}^{c} \times DCRP_{d}^{c}}$$

V.3(b) The Normalizing Constant

The Normalizing Constant with respect to a given GSCI Period (referred to in the formula set forth below as "NC_{new}") is calculated on the last GSCI Business Day of the previous GSCI Period and is equal to the product of (i) the Normalizing Constant for the GSCI Period ending on such day (referred to in the formula as "NC_{old}") multiplied by (ii) the Total Dollar Weight Ratio on such day, based on the Daily Contract Reference Price of the First Nearby Contract Expiration for each Designated Contract on such Day. The Normalizing Constant is rounded to seven digits of precision.

The formula for calculating the Normalizing Constant is the following:

$$NC_{new} = NC_{old} \times TDWR$$

VI CALCULATION OF THE GSCI AND RELATED INDICES

VI.1 Overview of the Calculation Process

Because the GSCI is designed as a "tradable" index that can be used to replicate actual commodity market performance, the calculation of the GSCI takes into account the fact that a person holding positions in the First Nearby Contract Expiration of each Designated Contract would need to "roll" such positions forward as they approach settlement or delivery. For this reason, the methodology for calculating the GSCI includes a "rolling" procedure designed to replicate the rolling of actual positions in the Designated Contracts. Moreover, because the rolling of actual positions in a Designated Contract on a single day could be difficult to effect or, if completed on a single day, could have an adverse impact on the market, such rolling would most likely take place over a period of several days. The rolling of the GSCI into new Designated Contract Expirations (referred to as the "Roll Contract Expirations") therefore similarly takes place over periods of several days, which constitute the Roll Periods. The calculation of the GSCI, consequently, takes into account price levels of the First Nearby Contract Expiration on each GSCI Commodity and, during the Roll Periods, price levels of the Roll Contract Expirations as well. Once the Roll Period has been completed, the Roll Contract Expiration becomes the First Nearby Contract Expiration.

The GSCI ER, in contrast, represents the return of a portfolio of commodity futures contracts, the composition of which, on any given GSCI Business Day, reflects the CPWs of all Designated Contracts and the CRWs of all Designated Contract Expirations. The GSCI ER is therefore calculated on the basis of the Contract Daily Return. The GSCI TR reflects the performance of a "total return" investment in commodities — Contract Daily Return plus the daily interest on the funds hypothetically committed to the investment. The GSFPI is designed as a measure of the fair value of the GSCI CME Futures Contracts and therefore does not reflect the rolling of the hypothetical positions in the GSCI Commodities included in the GSCI. In addition, the GSFPI is calculated on the basis of the CPWs and NC scheduled to be in effect on the first GSCI Business Day of the month in which the first available GSCI CME Futures Contract expires, which might not be the same as the CPWs and NC in effect on the day of calculation. The GSCI TRSI is calculated on the basis of the total return on a basket of securities indexed to the GSCI TR.

VI.2 Calculation of the GSCI

VI.2(a) Daily Calculation of the GSCI

The value of the GSCI on each GSCI Business Day is equal to the Total Dollar Weight of the GSCI divided by the Normalizing Constant. The value of the GSCI will be calculated on each GSCI Business Day at such time as Daily Contract Reference Prices for the relevant Contract Expirations become available, but in any event by no later than the GSCI Settlement Time. The

Daily Contract Reference Price for each First Nearby Contract Expiration or Roll Contract Expiration (as the case may be) used in calculating the GSCI is determined in accordance with the procedure set forth in section VI.2(b). The GSCI is indexed to a value of 100 on January 2, 1970.

In formulaic terms, the calculation of the GSCI is as follows (with "d" representing the GSCI Business Day on which the calculation is made), with the results of such calculation rounded to seven digits of precision:

$$GSCI_d = \frac{TDW_d}{NC}$$

The GSCI, as set forth above, is defined to mean the GSCI Spot Index. The GSCI Spot Index reflects only the prices of the First Nearby Contract Expirations (and during a Roll Period, the Roll Contract Expirations) on each GSCI Business Day. The value of the GSCI, therefore, is calculated solely on the basis of the CPW of each Designated Contract, and of the Daily Contract Reference Prices of the First Nearby Contract Expiration and (during a Roll Period) the Roll Contract Expiration of each Designated Contract. These components together constitute the Total Dollar Weight of the GSCI. The Total Dollar Weight of the GSCI is then divided by the Normalizing Constant to assure continuity of the GSCI.

VI.2(b) Determination of Daily Contract Reference Prices

The Daily Contract Reference Prices used in performing the calculations described in any of the provisions of this GSCI Manual are the most recent Daily Contract Reference Prices of the First Nearby Contract Expirations or Roll Contract Expirations, as the case may be, as made available by the relevant Trading Facility to its members or participants (and, if Goldman Sachs is not such a member or participant, to Goldman Sachs) as of the GSCI Settlement Time on the GSCI Business Day on which the calculation is made, subject to the following:

(i) If the relevant Trading Facility fails to make available a Daily Contract Reference Price on a day that is a Contract Business Day, or, in the reasonable judgment of Goldman Sachs, the Daily Contract Reference Price made available by the relevant Trading Facility reflects a manifest error, the relevant calculation will be delayed until such time as such Price is made available or corrected, as the case may be, provided that, if a Daily Contract Reference Price has not been made available, or the error has not been corrected, by the relevant Trading Facility by 4:00 P.M., New York time, Goldman Sachs may, if it deems such action to be appropriate under the circumstances, determine the appropriate Daily Contract Reference Price for the relevant Designated Contract in its reasonable judgment for purposes of calculating the GSCI. In that event, Goldman

Sachs will disclose the basis for its determination of such Daily Contract Reference Price.

(ii) If any GSCI Business Day is not a Contract Business Day with respect to any Designated Contract Expiration, then the calculations will be made on the basis of the most recently available Daily Contract Reference Price for the First Nearby Contract Expiration or Roll Contract Expiration, as the case may be, on the most recent Contract Business Day, regardless of whether such Contract Business Day is also a GSCI Business Day.

(iii) Notwithstanding the foregoing provisions of this section, if the Daily Contract Reference Price for any Contract Expiration on any GSCI Business Day, determined in accordance with the procedure set forth in this section, is corrected by the relevant Trading Facility (or such Trading Facility makes available a Daily Contract Reference Price that had not previously been made available) sufficiently early on the next succeeding GSCI Business Day to enable Goldman Sachs to recalculate the GSCI, then the value of the GSCI for such GSCI Business Day will be recalculated based on such Daily Contract Reference Price.

(iv) A Daily Contract Reference Price determined in accordance with the procedure set forth in this section will be used in calculating the GSCI regardless of whether such Price is a Limit Price.

VI.2(c) Contract Roll Weights and Roll Contract Expirations

In calculating the Total Dollar Weight of the GSCI during a Roll Period, the Contract Roll Weights of the First Nearby Contract Expiration and the Roll Contract Expiration of each GSCI Commodity are equal to: (i) on the first day of the Roll Period with respect to such Commodity, 0.8 and 0.2, respectively; (ii) on the second day of the Roll Period, 0.6 and 0.4, respectively; (iii) on the third day of the Roll Period, 0.4 and 0.6 respectively; (iv) on the fourth day of the Roll Period, 0.2 and 0.8, respectively; and (v) on the fifth day of the Roll Period, 0.0 and 1.0, respectively, subject to the provisions of section VI.2(d).

This section specifies the procedures for rolling the First Nearby Contract Expiration of each Designated Contract into the appropriate Roll Contract Expiration. The roll is essentially effected by adjusting the Contract Roll Weights of each of the First Nearby Contract Expiration and the Roll Contract Expiration, on each day of the Roll Period, in a manner that shifts the calculation of the GSCI by a *pro rata* amount per day from the First Nearby Contract Expiration to the Roll Contract Expiration for each Designated Contract. The roll is reflected in the modified procedures for determining the Total Dollar Weight of the GSCI during a Roll Period (sections VI.3(a) and V.3(b)).

VI.2(d) Adjustment of Roll Period

The occurrence of any of the following circumstances on any GSCI Business Day will result in an adjustment of a Roll Period in accordance with the procedure set forth in this section:

(i) if such GSCI Business Day is not a Contract Business Day with respect to any First Nearby Contract Expiration or Roll Contract Expiration;

(ii) the applicable Daily Contract Reference Price of any such Contract Expiration on such GSCI Business Day is a Limit Price;

(iii) the Daily Contract Reference Price published by a Trading Facility for a particular Designated Contract Expiration, in the reasonable judgment of Goldman Sachs, reflects manifest error and such error is not corrected by the GSCI Settlement Time, or the Trading Facility for any reason fails to publish a Daily Contract Reference Price for such Contract Expiration by 4:00 P.M., New York time, provided that, if the day is otherwise a Contract Business Day and the circumstances described in clauses (ii) and (iv) of this section do not exist with respect to such Contract Expiration on the relevant day, Goldman Sachs may, if it deems such action to be appropriate under the circumstances, determine the appropriate Daily Contract Reference Price for the relevant Designated Contract in its reasonable judgment and determine the rolling of the GSCI based on such Daily Contract Reference Price (and, in that event, Goldman Sachs will disclose the basis for its determination of such Daily Contract Reference Price), provided further that, if the Trading Facility makes available a Daily Contract Reference Price or corrected Daily Contract Reference Price for such Contract Expiration prior to the opening of trading in such Contract Expiration on the next succeeding Contract Business Day, then the rolling of the portion of the GSCI effected on the prior GSCI Business Day will be revised based on such Daily Contract Reference Price; or

(iv) trading in the relevant Contract Expiration for such GSCI Business Day is terminated prior to the time at which, as of the opening of trading on such Day (as defined under the rules or policies (if any) of the relevant Trading Facility), trading in such Contract Expiration was scheduled to close, and trading in such Contract Expiration does not resume at least ten minutes prior to, and continue until, the scheduled closing time (or the rescheduled closing time if such closing time was rescheduled as a result of the termination).

In any such event, the portion of the roll that would otherwise have taken place on such GSCI Business Day will take place on the next succeeding Contract Business Day (provided that such Day is also a GSCI Business Day) on which none of the circumstances identified in this section exist.

If on any day during a Roll Period the Daily Contract Reference Price of any First Nearby Contract Expiration or Roll Contract Expiration is a Limit Price, no Daily Contract Reference Price is available or trading in the relevant Designated Contract is terminated earlier than scheduled (and does not resume within the specified time period), the portion of the roll that would otherwise have taken place on that day will be deferred until the next day on which such circumstances do not exist. This limitation is based on the fact that, under the circumstances described in this section, it would be difficult or impossible to liquidate and/or establish actual positions in the market and to perform the roll. Delaying the rolling of the GSCI therefore serves to replicate the steps that would need to be taken in rolling actual market positions.

Under this procedure, if any of the enumerated circumstances exists on the first day of the Roll Period with respect to a First Nearby Contract Expiration or a Roll Contract Expiration, then no portion of the roll will be performed and 40% of the roll will be implemented on the next GSCI Business Day. If such circumstances also exist on the second GSCI Business Day of the Roll Period, then 60% of the roll will be performed on the third day, and so forth. If such circumstances exist throughout the five GSCI Business Days initially designated as the Roll Period, then the entire roll will be performed on the next succeeding GSCI Business Day on which none of these circumstances exist. This roll procedure also applies to the rolling of the GSCI into the new CPWs and Normalizing Constant during the January Roll Period, or during any other Roll Period in which a re-weighting of the GSCI is effected, as set forth in section VI.3(b).

The only exception to the foregoing is that, if the relevant Trading Facility makes available a Daily Contract Reference Price that reflects manifest error, and such error is not corrected by the GSCI Settlement Time, or if the Trading Facility fails to make available any Daily Contract Reference Price by 4:00 P.M., New York time, on a day on which trading otherwise occurred (and none of the other conditions specified in section VI.2(d) exist), Goldman Sachs may, if it deems such action appropriate under the circumstances, determine the Daily Contract Reference Price to be used in effecting that day's roll (and, in such instances, Goldman Sachs will disclose the basis for its determination). If the Trading Facility then makes available a Daily Contract Reference Price or a corrected Daily Contract Reference Price prior to the opening of trading on the next Contract Business Day, Goldman Sachs will revise the calculation accordingly. This provision is intended to address the unlikely situation in which trading has taken place on or through a Trading Facility during the trading day, and market participants may therefore have rolled actual positions, but the Trading Facility, due to communications or equipment failures or other problems, publishes an erroneous Daily Contract Reference Price or fails to publish a Daily Contract Reference Price by 4:00 P.M., New York time.

VI.3 Calculation of the GSCI ER

VI.3(a) Calculation of TDW During a Roll Period

The formula for calculating the Total Dollar Weight of the GSCI on any GSCI Business Day that occurs during a Roll Period (other than a January Roll Period or any other Roll Period in which a re-weighting of the GSCI is effected) is the following (with "c" representing each Designated Contract, "d" representing the GSCI Business Day on which the calculation is made, "CRW1" representing the Contract Roll Weight of the First Nearby Contract Expiration, "CRW2" representing the Contract Roll Weight of the Roll Contract Expiration and "DCRP" representing the Daily Contract Reference Price of each respective Contract Expiration):

$$TDW_d = \sum_c CPW^c \times \left(CRW1_d^c \times DCRP1_d^c + CRW2_d^c \times DCRP2_d^c \right)$$

On any GSCI Business Day that does not occur during a Roll Period, the Total Dollar Weight of the GSCI is calculated in accordance with the procedure set forth in section V.2. During a Roll Period, however, the Total Dollar Weight reflects the fact that the GSCI is being rolled from one Contract Expiration to the next. As a result, the formula for Total Dollar Weight during a Roll Period must be adjusted to reflect the fact that different Daily Contract Reference Prices will be used for each Designated Contract (e.g., the respective Daily Contract Reference Prices of the First Nearby Contract Expiration and the Roll Contract Expiration).

VI.3(b) Calculation of TDW in Connection with Changes in the Composition of the GSCI

The CPWs and NC for a given GSCI Period are implemented during the Roll Period of the calendar month in which such GSCI Period begins. In calculating the value of the GSCI on each day of such Roll Period, (i) the Contract Roll Weight of the First Nearby Contract Expiration of each Designated Contract, determined in accordance with the procedure set forth in section VI.2(c), as adjusted by the terms of section VI.2(d), if necessary, is multiplied by the applicable Daily Contract Reference Price of such Contract Expiration and the CPW of the relevant Designated Contract for the prior GSCI Period, and divided by the NC for the prior GSCI Period, and (ii) the Contract Roll Weight of the Roll Contract Expiration of each Designated Contract, determined in accordance with the procedure set forth in section VI.2(c), as adjusted by the terms of section VI.2(d), if necessary, is multiplied by the applicable Daily Contract Reference Price of such Contract Expiration and the CPW of the relevant Designated Contract for the new GSCI Period and divided by the NC for such new GSCI Period.

The formula for calculating the Total Dollar Weight of the GSCI on any GSCI Business Day that occurs during the January Roll Period, or during any other Roll Period in which a re-weighting of the GSCI is effected, is the following (with "c" representing each Designated Contract, "d" representing the GSCI Business Day on which the calculation is made, "CRW1" representing the Contract Roll Weight of the First Nearby Contract Expiration, "CRW2" representing the Contract Roll Weight of the Roll Contract Expiration, "CPW1" representing the CPW of the First Nearby Contract Expiration, "CPW2" representing the CPW of the Roll Contract Expiration and "DCRP" representing the Daily Contract Reference Price of each respective Contract Expiration):

$$TDW_d = \frac{NC_{new}}{NC_{old}} \times \sum_c \left[CPW1^c \times CRW1_d^c \times DCRP1_d^c\right] + \sum_c \left[CPW2^c \times CRW2_d^c \times DCRP2_d^c\right]$$

During the January Roll Period, and during any other Roll Period in which a re-weighting of the GSCI is effected (which may occur upon the recalculation of the CPWs for any Designated Contracts in accordance with the procedure set forth in section III.6 or the replacement of a Contract Expiration in accordance with the procedure set forth in section IV.4), the GSCI rolls into the new CPWs and NC during the regularly scheduled monthly Roll Period. For example, on the first day of the January Roll Period, which is the fifth GSCI Business Day of the month, 80% of the GSCI is calculated based on the CPWs and NC for the prior GSCI Period and 20% of the GSCI is calculated based on the CPWs and NC for the GSCI Period beginning on such Day. On the sixth through ninth GSCI Business Days, the percentages are 60/40, 40/60, 20/80 and 0/100, respectively. On the ninth GSCI Business Day, the roll is completed, unless the Roll Period is extended as a result of the occurrence of one of the events specified in section VI.2(d).

In order to reflect this roll into the new CPWs and Normalizing Constant, the formula for the Total Dollar Weight of the GSCI requires an additional adjustment. Specifically, because the CPWs of the First Nearby Contract Expiration and the Roll Contract Expiration will be different, "CPW1" and "CPW2", as set forth in the above formula, must enter the calculation. In addition, the result of this calculation must be multiplied by the Total Dollar Weight Ratio, which reflects the change in the Total Dollar Weight resulting from the shift to new CPWs and therefore, when multiplied by "CRW1" and "CRW2", rolls the GSCI into the new CPWs and the new Normalizing Constant.

VI.3(c) Calculation of the Contract Daily Return

The Contract Daily Return on any GSCI Business Day is equal to the ratio obtained by dividing the Total Dollar Weight Obtained on such Day by the Total Dollar Weight Invested on the immediately preceding GSCI Business Day, minus one.

In formulaic terms, the Contract Daily Return is calculated as follows:

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

The principal component of the calculation of the GSCI ER is the determination of the Contract Daily Return, or "CDR", for a given GSCI Business Day. The CDR is in turn calculated by reference to the Total Dollar Weight of the GSCI. The Contract Daily Return is generally defined as the percentage change in the Total Dollar Weight of the GSCI from one GSCI Business Day to the next. The Contract Daily Return, therefore, reflects the returns that would be realized by holding positions in the Designated Contract Expirations, appropriately weighted to reflect the CPWs, from the closing of the Trading Facilities on the prior day to the closing of such Trading Facilities on the day on which the calculation is performed. This feature of replicating the performance of actual market positions makes the GSCI a "tradable" index.

As set forth in sections VI.3(a) and VI.3(b), the formula for calculation of the Total Dollar Weight of the GSCI on those days that occur during a Roll Period differs from the formula used on other days. In addition, during the January Roll Period, or any other Roll Period in which a re-weighting of the GSCI is effected, a further adjustment to this formula must be made. Once the appropriate formula for calculating the Total Dollar Weight of the GSCI is determined, however, the Total Dollar Weight Invested, which reflects a hypothetical investment in the GSCI based on the CPWs, CRWs and Daily Contract Reference Prices on the immediately preceding GSCI Business Day, as well as the Total Dollar Weight Obtained, which reflects the return on the hypothetical investment and is calculated based on the CPWs and CRWs in effect on the immediately preceding day but on the Daily Contract Reference Prices used to calculate the GSCI on the current day, can be determined. The Contract Daily Return can then be calculated by dividing the Total Dollar Weight Obtained on the day on which the calculation is made by the Total Dollar Weight Invested on the immediately preceding day.

VI.3(d) Daily Calculation of the GSCI ER

The value of the GSCI ER on any GSCI Business Day is equal to the product of (i) the value of the GSCI ER on the immediately preceding GSCI Business Day multiplied by (ii) one plus the Contract Daily Return on the GSCI Business Day on which the calculation is made. The value of the GSCI ER is indexed to a normalized value of 100 on January 2, 1970. The result of the foregoing calculation is then rounded to seven digits of precision:

In formulaic terms, the GSCI ER is calculated by rounding the expression below to seven digits of precision

$$\text{GSCI ER}_d = \text{GSCI ER}_{d-1} \ (1 + CDR_d)$$

The GSCI ER is set equal to 100 on January 2, 1970. The GSCI ER is calculated on a cumulative basis beginning with the first day for which the GSCI ER was calculated, which was January 2, 1970. The value of the GSCI ER on any GSCI Business Day, therefore, can be determined by reference to the value on the immediately preceding GSCI Business Day and the Contract Daily Return on the day of calculation.

VI.4 Calculation of the GSCI TR

VI.4(a) The Treasury Bill Return

The Treasury Bill Return on any given calendar day is equal to an amount determined in accordance with the following formula:

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

The subscript *d-1* on TBAR indicates that the Treasury Bill Rate used in the calculation is the Rate available on the immediately preceding GSCI Business Day.

VI.4(b) Daily Calculation of the GSCI TR

The value of the GSCI TR on any GSCI Business Day is equal to the product of (i) the value of the GSCI TR on the immediately preceding GSCI Business Day multiplied by (ii) one plus the sum of the Contract Daily Return and the Treasury Bill Return on the GSCI Business Day on which the calculation is made multiplied by (iii) one plus the Treasury Bill Return for each non GSCI Business Day since the immediately preceding GSCI Business Day. The result of the foregoing calculation is then rounded to seven digits of precision.

In formulaic terms, the calculation of the GSCI TR for any GSCI Business Day *d* is obtained by rounding the expression below to seven digits of precision

$$\mathrm{GSCI\ TR}_{d-1}(1+\mathrm{CDR_d}+\mathrm{TBR_d})(1+\mathrm{TBR_d})^{\mathrm{days}}$$

where *days* is the number of non GSCI Business Days since the immediately preceding GSCI Business Day. The GSCI TR is set equal to 100 on January 2, 1970.

VI.5 Calculation of the Sub-Indices

Each of the sub-indices reflecting portions of the GSCI, the GSCI ER, or the GSCI TR are calculated in the same manner as the GSCI, the GSCI ER and the GSCI TR, respectively, except that: (i) the Daily Contract Reference Prices, CPWs and Contract Roll Weights used in performing such calculations are limited to those of the GSCI Commodities included in the relevant sub-index; and (ii) each sub-index has a separate Normalizing Constant, which is calculated in accordance with the procedures set forth in chapter V of this GSCI Manual, except that the Dollar Weights and Daily Contract Reference Prices used in calculating the Normalizing Constant are limited to those of the Designated Contracts included in the relevant sub-index.

VI.6 Calculation of the GSFPI

The value of the GSFPI on any GSCI Business Day is calculated in the same manner as the calculation of the GSCI, except that the value of the GSFPI is based on (i) the Designated Contract Expiration of each Designated Contract that is, on such Day, the closest to expiration (the "First Nearby Contract") and (ii) the CPW of each Designated Contract and the NC that are scheduled to be in effect on the first GSCI Business Day of the month in which the First Nearby Contract expires.

The calculation of the GSCI, as described in section VI.2, reflects the "rolling" of the First Nearby Contract Expiration of each GSCI Commodity into the Roll Contract Expiration of such Commodity. The Designated Contract for a particular Contract Expiration, however, does not reflect the rolling of the underlying contracts and is comprised of the same Contract Expirations with respect to the underlying Contracts throughout the Roll Period. In addition, although the CPWs and NC for a given GSCI Year become effective during the January Roll Period that begins on the first day of such GSCI Year, the January Contract will not reflect the new CPWs and NC. The implications for other Roll Periods relating to different GSCI Periods are analogous.

The GSFPI is calculated in a manner designed to replicate the composition and calculation of the GSCI CME Futures Contracts and therefore serves as a benchmark for the fair value of such Futures Contracts. In particular, the GSFPI does not reflect the rolling of each Designated Contract during the Roll Period and is calculated on the basis of the CPWs and NC scheduled to be in effect on the first GSCI Business Day of the month in which the First Nearby Contract expires.

VI.7 Calculation of the GSCI TR SI

In order to calculate the GSCI TRSI, it is first necessary to calculate the GSCI TR Security Index Daily Ratio ("SIDR") as follows:

For any GSCI Business Day, the SIDR is equal to the ratio of (i) the sum of, for each Eligible GSCI TR-Indexed Security, (A) the Eligible Security Price of such security determined at the GSCI Settlement Time of the current GSCI Business Day multiplied by (B) the Security Outstanding Amount of such security for the previous GSCI Business Day over (ii) the sum of, for each Eligible GSCI TR-Indexed Security, (A) the Eligible Security Price of such security determined at the GSCI Settlement Time of the previous GSCI Business Day multiplied by (B) the Security Outstanding Amount of such security for the previous GSCI Business Day. In formulaic terms, the SIDR is calculated as follows:

$$\mathrm{SIDR}_d = \frac{\sum_i (\mathrm{SOA}^i_{d-1} \times \mathrm{ESP}^i_d)}{\sum_i (\mathrm{SOA}^i_{d-1} \times \mathrm{ESP}^i_{d-1})}$$

Where *i* means all Eligible GSCI TR-Indexed Securities in the Eligible Portfolio, and *d* indicates a GSCI Business Day.

In the event that there are no Eligible GSCI TR-Indexed Securities on any GSCI Business Day, the value of the SIDR for the following GSCI Business Day shall be equal to the settlement value of the GSCI TR on such following GSCI Business Day divided by the settlement value of the GSCI TR on the GSCI Business Day on which there was no Eligible GSCI TR-Indexed Security in the Eligible Portfolio. In formulaic terms:

$$\mathrm{SIDR}_d = \frac{\mathrm{GSCI\,TR}_d}{\mathrm{GSCI\,TR}_{d-1}}$$

The value of the GSCI TRSI on any GSCI Business Day is equal to the GSCI TRSI on the previous GSCI Business Day, times the SIDR, and then rounded to seven significant digits. In formulaic terms, the GSCI TRSI is obtained by rounding the expression below to seven digits of precision

$$\mathrm{GSCI\,TR\,SI}_d = \mathrm{GSCI\,TR\,SI}_{d-1} \times \mathrm{SIDR}_d$$

where *d* is any GSCI Business Day. The GSCI TRSI is set equal to 100 on May 31, 2000.

The GSCI TRSI is designed to reflect the total return on a basket of securities indexed to the GSCI. Only those securities that are fully indexed to the GSCI TR (i.e., those securities that do not have other indexed components or non-indexed coupons) and that are publicly traded or widely traded in the Rule 144A market (or similar markets) are included in the GSCI TRSI. Because securities indexed to the GSCI TR generally include within such indexing a cost component, reflecting the cost of the embedded investment in the GSCI TR, the GSCI TRSI may serve as a useful benchmark for an actual investment in the GSCI TR. However, the actual costs of an investment in the GSCI TR may vary widely and the GSCI TRSI will therefore not serve as an accurate benchmark for all such investments.

VI.8 CPWs for the GS Reduced Energy Index and GS Light Energy Index

The GS Reduced Energy Index and GS Light Energy Index are two indices that are comprised of the same Designated Contracts as the GSCI but whose Contract Production Weights (CPW) of all Designated Contracts in the energy sector have been divided by 2 (GS Reduced Energy Index) or by 4 (GS Light Energy Index). Because the CPWs of energy-related GSCI Commodities are reduced in these indices, the relative weights of other GSCI Commodities are necessarily increased. As a result, although the GS Reduced Energy Index and the GS Light Energy Index contain all of the GSCI Commodities that are included in the GSCI, they are not world-production weighted in the same manner as the GSCI.

APPENDICES

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APPENDIX A - CONTRACTS INCLUDED IN THE GSCI FOR 2005

Goldman Sachs has performed the Annual Calculation to determine the initial CPW's for the GSCI 2005, as required by the latest edition of the GSCI Manual, based on trading volume from September 2003 to August 2004. The Audited results of the calculations are presented in the appendix section. Orange juice will be removed from the GSCI and no new commodities will enter at this time.

Table 1 (on the next page) identifies the Contracts included in the 2005 GSCI as well as the Contract Production Weights and Designated Contract Expirations for each such Contract in 2005. The Reference Percentage Dollar Weights were calculated on the basis of the Average Contract Reference Prices for 2005 Annual Calculation Period; actual Percentage Dollar Weights on any given GSCI Business Day will vary depending on actual 2005 Daily Contract Prices.

Table 1: Contracts Included in the GSCI for 2005

Trading Facility	Commodity (Contract)	Ticker	2005 CPW	2005 ACRP	2004 PDW[1]	2005 RPDW	TDVT (USD bn)	2005 TVM	Designated Contract Expirations at Month Begin[2]
CBT	Wheat (Chicago Wheat)	W	16111.75	44.3375 /12	3.77%	3.87%	150.7	97.5	H H K K N N U U Z Z Z H
KBT	Wheat (Kansas Wheat)	KW	5732.665	45.3525 /12	1.55%	1.41%	54.9	97.5	H H K K N N U U Z Z Z H
CBT	Corn	C	23731.84	32.0325 /12	4.14%	4.11%	321.7	195.5	H H K K N N U U Z Z Z H
CBT	Soybeans	S	5883.338	94.695 /12	2.89%	3.01%	790.5	655.5	H H K K N N X X X X F F
CSC	Coffee "C"	KC	14865.77	8.4215 /12	0.67%	0.68%	107.0	395.0	H H K K N N U U Z Z Z H
CSC	Sugar #11	SB	288683.9	0.8064 /12	1.26%	1.26%	68.0	134.9	H H K K N N V V V H H H
CSC	Cocoa	CC	3.0886	18208 /12	0.30%	0.30%	35.9	294.5	H H K K N N U U Z Z Z H
NYC	Cotton #2	CT	41800.09	7.6717 /12	1.74%	1.74%	109.3	157.4	H H K K N N Z Z Z Z Z H
CME	Lean Hogs	LH	57133.69	7.72675 /12	2.14%	2.39%	70.2	73.5	G J J M M N Q V V Z Z G
CME	Cattle (Live Cattle)	LC	69228.16	9.97225 /12	3.90%	3.74%	150.0	100.4	G J J M M Q Q V V Z Z G
CME	Cattle (Feeder Cattle)	FC	14368.42	11.63275 /12	0.81%	0.90%	36.3	100.4	H H J K Q Q Q U V X F F
NYM	Oil (No 2 Heating Oil, NY)	HO	116199.7	11.3592 /12	7.21%	7.14%	493.0	172.6	G H J K M N Q U V X Z F
IPE	Oil (Gasoil)	LGO	206.1135	3434.75 /12	3.78%	3.83%	264.4	172.6	G H J K M N Q U V X Z F
NYM	Oil (Unleaded Reg Gas, NY)	HU	114672.6	12.727 /12	8.13%	7.90%	545.2	172.6	G H J K M N Q U V X Z F
NYM	Oil (WTI Crude Oil)	CL	11177.65	426.44 /12	25.63%	25.79%	1780.5	172.6	G H J K M N Q U V X Z F
IPE	Oil (Brent Crude Oil)	LCO	5579.262	389.2 /12	11.89%	11.75%	811.1	172.6	H J K M N Q U V X Z F G
NYM	Natural Gas	NG	28271.85	67.228 /12	10.53%	10.29%	1003.0	243.8	G H J K M N Q U V X Z F
LME	High Grade Primary Aluminum	IA	31.1452	19635.25 /12	3.19%	3.31%	1167.6	882.1	G H J K M N Q U V X Z F
LME	Copper - Grade A	IC	14.58	30645.75 /12	2.35%	2.42%	1253.2	1295.8	G H J K M N Q U V X Z F
LME	Standard Lead	IL	6.214	9364.75 /12	0.31%	0.31%	82.7	656.4	G H J K M N Q U V X Z F
LME	Primary Nickel	IN	1.078	160029 /12	0.91%	0.93%	303.5	812.7	G H J K M N Q U V X Z F
LME	Special High Grade Zinc	IZ	8.626	12164.5 /12	0.55%	0.57%	260.7	1147.9	G H J K M N Q U V X Z F
CMX	Gold	GC	81.72721	4794.3 /12	2.10%	2.12%	572.5	675.0	G J J M M Q Q Z Z Z Z G
CMX	Silver	SI	572.2834	73.831 /12	0.22%	0.23%	150.2	1642.2	H H K K N N U U Z Z Z H

(1) Using the ACRP's for the 2005 Annual Calculation Period.

(2) Futures Months included in the GSCI at the beginning of each calendar month, starting with January 2005. Month letter codes are shown in Table 2.

Table 2: Month letter codes

Month	Letter Code
January	F
February	G
March	H
April	J
May	K
June	M
July	N
August	Q
September	U
October	V
November	X
December	Z

Table 3 (below) demonstrates the effects of re-weighting on the principal GSCI Sub-Indices. The Reference Percentage Dollar Weights were calculated on the basis of Average Contract Reference Prices for the 2005 Annual Calculation Period; actual Daily Percentage Dollar Weights will vary, depending on actual 2005 Daily Contract Prices.

Table 3: Composition of GSCI Sub-Indices

Sub-Index	2004 PDW*	2005 RPDW	Included Commodities
Energy	67.18%	66.70%	Crude Oil (and supporting contracts) and Natural Gas
Non-Energy	32.82%	33.30%	(All commodities not included in Energy Sub-Index)
Petroleum	56.64%	56.42%	Crude Oil (and supporting contracts)
Agricultural	16.33%	16.38%	Corn, Wheat, Kansas Wheat, Soybeans, Coffee, Cocoa, Sugar, and Cotton
Livestock	6.85%	7.03%	Lean Hogs, Live Cattle and Feeder Cattle
Industrial Metals	7.32%	7.54%	Aluminum, Copper, Lead, Nickel and Zinc
Precious Metals	2.33%	2.35%	Gold and Silver

* Based on the Average Contract Reference Prices for the 2005 Annual Calculation Period.

Contracts Considered for Inclusion in GSCI 2005

The following table contains the information used to identify the Contracts included in the GSCI for 2005. The column labeled "Volume" refers to Total Contract Trading Volume for the relevant Annual Calculation Period. "OECD" indicates those Contracts that are traded on or through Trading Facilities in OECD countries. "USD Denom." indicates whether a Contract is priced in U.S. dollars. The highlighted Contracts are considered for inclusion, subject to the rules set forth in sections II.1-II.6 of this GSCI Manual.

Table 4: Contracts Considered for Inclusion in GSCI 2005

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
US MARKETS									
CHICAGO BOARD OF TRADE									
Wheat	X	X	10	X	X	X	X		8,160,114
Mini Wheat	X	X	30	-	-	-	-		31,155
Corn	X	X	5	X	X	X	X		24,099,500
Mini Corn	X	X	30	-	-	-	-		86,765
Oats	X	X	15	-	-	-	-		421,813
Soybeans	X	X	5	X	X	X	X		20,035,149
Mini Soybeans	X	X	30	-	-	-	-		385,760
Soybean Oil	X	X	30	X	-	-	-	TVM>200	7,866,193
Soybean Meal	X	X	30	X	-	-	-	TVM>200	9,054,192
Rice	X	X	15	-	-	-	-		202,513
Silver	X	X	30	-	-	-	-		0
Silver	X	X	30	-	-	-	-		144,971
Gold	X	X	30	-	-	-	-		0
Gold	X	X	30	-	-	-	-		339,193
Silver	X	X	30	-	-	-	-		0
CHICAGO MERCANTILE EXCH									
Lean Hogs	X	X	5	X	X	X	X		2,725,635
E-Mini Lean Hogs	X	X	30	-	-	-	-		0
Pork Bellies, Frozen	X	X	30	-	-	-	-		159,110
Butter	X	X	15	-	-	-	-		7,318
Fluid Milk	X	X	15	-	-	-	-		0

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Nonfat Dry Milk	X	X	15	-	-	-	-		114
Class III Milk	X	X	15	-	-	-	-		305,614
Class IV Milk	X	X	15	-	-	-	-		593
Live Cattle	X	X	5	X	X	X	X		4,512,027
Feeder Cattle	X	X	10	X	X	X	X		749,183
E-Mini Feeder Cattle	X	X	30	-	-	-	-		0
Orient Strand Board Lumber	X	X	15	-	-	-	-		0
Random Lumber	X	X	15	-	-	-	-		232,666
Diammonium Phosphate	X	X	15	-	-	-	-		27
Urea Ammonium Nitrate	X	X	15	-	-	-	-		105
Urea	X	X	15	-	-	-	-		125
Benzene	X	X	15	-	-	-	-		0
Mixed Xylenes	X	X	15	-	-	-	-		0
HDD Weather	X	X	15	-	-	-	-		7,293
HDD Seasonal Weather	X	X	15	-	-	-	-		435
CDD Weather	X	X	15	-	-	-	-		19,990
CDD Seasonal Weather	X		15	-	-	-	-		2,395
Euro HDD Weather	X			-	-	-	-		940
Euro CAT	X			-	-	-	-		485
Goldman Sachs Commodity Index	X	X		-	-	-	-		200
KANSAS CITY BOARD OF TRADE									
Wheat	X	X	10	X	X	X	X		2,903,422
MIDAMERICA COMMODITY EX									
Wheat	X	X	30	-	-	-	-		0
Corn	X	X	30	-	-	-	-		0
Oats	X	X	15	-	-	-	-		0
Soybeans	X	X	30	-	-	-	-		0
Soybean Meal New	X	X	30	-	-	-	-		0
Soybean Oil	X	X	30	-	-	-	-		0
Live Cattle	X	X	30	-	-	-	-		0
Lean Hogs	X	X	30	-	-	-	-		0

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
New York Silver	X	X	30	-	-	-	-		0
New York Gold	X	X	30	-	-	-	-		0
Platinum	X	X	30	-	-	-	-		0
MINNEAPOLIS GRAIN EXCH									
Spring Wheat	X	X	30	-	-	-	-	TDVT < 30	1,319,186
White Wheat	X	X	30	-	-	-	-		0
Durum Wheat	X	X	30	-	-	-	-		0
Cottonseed	X	X	15	-	-	-	-		0
Hard Winter Wheat Index	X	X	30	-	-	-	-		15,233
National Corn Index	X	X	30	-	-	-	-		1,123
National Soybean Index	X	X	30	-	-	-	-		0
NEW YORK BOARD OF TRADE									
Coffee "C"	X	X	5	X	X	X	X		4,066,868
Sugar #11	X	X	5	X	X	X	X		9,032,155
Sugar #14	X	X	30	-	-	-	-		115,616
Cocoa	X	X	5	X	X	X	X		2,362,747
Cotton #2	X	X	5	X	X	X	X		3,418,251
Ethanol	X	X	15						1,367
Orange Juice, Frozen Concentrate	X	X	15	-	-	-	-		921,704
Orange Juice, Frozen Concentrate - Diff	X	X	15	-	-	-	-		10
Mini Coffee	X	X	30	-	-	-	-		375
NEW YORK MERCANTILE EXCHANGE									
COMEX DIVISION									
Gold	X	X	5	X	X	X	X		14,328,482
Silver	X	X	5	X	X	X	X		4,882,169
High Grade Copper	X	X	30	X	-	-	-	TVM > 200	3,171,631
Aluminum	X	X	30	-	-	-	-		88,017
NYMEX DIVISION									
Palladium	X	X	15	-	-	-	-		229,332
Platinum	X	X	15	X	X	-	-		292,088

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
No. 2 Heating Oil, NY	X	X	10	X	X	X	X		12,401,384
No. 2 Up-Down Spread Cal Swap	X	X		-	-	-	-	Spread Contract	750
Unleaded Reg. Gas., NY	X	X	10	X	X	X	X		12,238,399
Crude Oil	X	X	10	X	X	X	X		50,103,125
Propane	X	X	30	-	-	-	-		19,304
Natural Gas	X	X	5	X	X	X	X		17,903,871
Central Appalachian Coal (CAPP)	X	X	15	-	-	-	-		0
PJM Monthly	X	X	15	-	-	-	-		262,607
WTI Crude Oil Calendar Swap	X	X	30	-	-	-	-		143,499
NYISO A	X	X	15	-	-	-	-		110,027
NYISO G	X	X	15	-	-	-	-		35,787
NYISO J	X	X	15	-	-	-	-		11,788
PJM Daily	X	X	15	-	-	-	-		135,333
PJM Weekly	X	X	15	-	-	-	-		18,022
Dow Jones Mid-Columbia	X	X	15	-	-	-	-		2,510
Dow Jones NP15	X	X	15	-	-	-	-		3,090
Dow Jones SP15	X	X	15	-	-	-	-		5,380
Dow Jones Palo Verde	X	X	15	-	-	-	-		480
Coal	X	X	15	-	-	-	-		6,678
US Gulf Coast No. 2 Crack Spread Calendar	X	X	30	-	-	-	-	Spread Contract	800
NY Harbor No. 2 Crack Spread Calendar Swap	X	X	30	-	-	-	-	Spread Contract	93,965
Gulf Coast Gas vs. Heating Oil Spread Swap	X	X	30	-	-	-	-	Spread Contract	1,800
Gulf Coast Jet vs. NYMEX HO Spread Swap	X	X	30	-	-	-	-	Spread Contract	800
NY Harbor Heating Oil Calendar Swap	X	X	30	-	-	-	-		35,840
NYMEX Gasoline vs NYMEX Heating Oil Swap	X	X	30	-	-	-	-		8,700
NYMEX Gasoline Calendar Swap	X	X	30	-	-	-	-		11,301

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Northwest Rockies Basis Swap	X	X	30	-	-	-	-		456,642
US Gulf Coast Unleaded 87 Crack Spread Calendar	X	X	30	-	-	-	-	Spread Contract	36,075
NY Harbor Unleaded Crack Spread Calendar	X	X	30	-	-	-	-	Spread Contract	29,172
Unleaded 87 Up-Down Calendar Swap	X	X	30	-	-	-	-		1,250
Columbia Gulf Onshore Basis	X	X	30	-	-	-	-		19,042
TETCO ELA Basis	X	X	30	-	-	-	-		28,407
ANR-Oklahoma Basis	X	X	30	-	-	-	-		25,097
Dominion Transmission - Appalachian Basis	X	X	30	-	-	-	-		170,089
MichCon Basis	X	X	30	-	-	-	-		0
WAHA Basis	X	X	30	-	-	-	-		134,811
NGPL Louisiana Basis	X	X	30	-	-	-	-		1,220
NGPL Mid-Continent	X	X	30	-	-	-	-		44,374
NGPL TEX/OK Basis	X	X	30	-	-	-	-		41,454
Northern Natural Gas Ventura Basis	X	X	30	-	-	-	-		29,867
Northern Natural Gas Demarcation Basis	X	X	30	-	-	-	-		22,012
AECO-C/NIT Basis Swap	X	X	30	-	-	-	-		258,342
Chicago Basis Swap	X	X	30	-	-	-	-		118,790
Panhandle Basis Swap	X	X	30	-	-	-	-		106,740
Permian Basis	X	X	30	-	-	-	-		115,927
PG&E Citygate Basis	X	X	30	-	-	-	-		170,612
BG&E Malin Basis	X	X	30	-	-	-	-		0
San Juan Basis Swap	X	X	30	-	-	-	-		38,539
SoCal Basis Swap	X	X	30	-	-	-	-		363,415
Sumas Basis	X	X	30	-	-	-	-		257,310
TCO Basis	X	X	30	-	-	-	-		138,843
Houston Ship Channel Basis Swap	X	X	30	-	-	-	-		282,611
Malin Basis	X	X	30	-	-	-	-		320,737

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Michigan Basis	X	X	30	-	-	-	-		87,673
Texas Eastern Zone M-3 Basis	X	X	30	-	-	-	-		207,383
Tetco STX Basis Swap	X	X	30	-	-	-	-		22,726
Transco Zone 3 Basis Swap	X	X	30	-	-	-	-		41,313
TRANSCO Zone 6 Basis Swap	X	X	30	-	-	-	-		258,415
CIG Rockies	X	X	30	-	-	-	-		52,085
NY Harbor Residual Fuel 1.0% Sulfur Swap	X	X	30	-	-	-	-		975
Mid-Columiba Electricity	X	X	15	-	-	-	-		0
Palo Verde Electricity	X	X	15	-	-	-	-		0
California Oregon Border Electricity	X	X	15	-	-	-	-		0
E-Mini Crude Oil	X	X	30	-	-	-	-		301,547
Brent Crude Oil	X	X	30	-	-	-	-		0
E-Mini Natural Gas	X	X	30	-	-	-	-		135,932
WTI Midland Crude	X	X	30	-	-	-	-		200
NY Harbor Conventional Gasoline vs NYH Gasoline Spread Swap	X	X	30	-	-	-	-	Spread Contract	900
Henry Hub Swing	X	X	30	-	-	-	-		570
Henry Hub Index Swap	X	X	30	-	-	-	-		904
Houston Ship Channel Index Swap	X	X	30	-	-	-	-		30
Henry Hub Basis Swap	X	X	30	-	-	-	-		36,303
Henry Hub Natural Gas Swaps	X	X	30	-	-	-	-		3,518,425
INTERNATIONAL MARKETS									
EURONEXT - AMSTERDAM									
Live Hogs (AVC)	X	-	-	-	-	-	-		252
Piglets (AMB)	X	-	-	-	-	-	-		0
Eggs (EFA)	X	-	-	-	-	-	-		0

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Potatoes (AAC,APC)	X	-	-	-	-	-	-		26,997
Potatoes (FAP)	X	-	-	-	-	-	-		6,579
BM&F, Brazil									
Arabica Coffee	X	-	-	-	-	-	-		571,573
Robusta Conillon Coffee	X	-	-	-	-	-	-		20
Live Cattle	X	-	-	-	-	-	-		189,736
Feeder Cattle	X	-	-	-	-	-	-		1,428
Sugar Crystal	X	-	-	-	-	-	-		46,425
Cotton	X	-	-	-	-	-	-		212
Corn	X	-	-	-	-	-	-		55,390
Soybean Futures	X	-	-	-	-	-	-		3,364
Gold Forward	X	-	-	-	-	-	-		40
Gold	X	-	-	-	-	-	-		1,862
Gold Spot	X	-	-	-	-	-	-		59,647
Anhyddrous Fuel Alcohol Futures	X	-	-	-	-	-	-		38,188
BUDAPEST COMMODITY EXCHANGE									
Corn	X	-	-	-	-	-	-		13,062
Feed Wheat	X	-	-	-	-	-	-		1,308
Feed Barley	X	-	-	-	-	-	-		449
Wheat	X	-	-	-	-	-	-		5,191
Extra Wheat	X	-	-	-	-	-	-		0
Black Seed	X	-	-	-	-	-	-		1,291
Rapeseed	X	-	-	-	-	-	-		269
Soybean	X	-	-	-	-	-	-		0
GAX	X	-	-	-	-	-	-		0
TAX	X	-	-	-	-	-	-		0
Ammonium Nitrate	X	-	-	-	-	-	-		1
DALIAN COMMODITY EXCHANGE, China									
Soybeans	X	-	-	-	-	-	-		0
No. 1 Soybeans	X	-	-	-	-	-	-		65,234,254
Soy Meal	X	-	-	-	-	-	-		22,467,806

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
INTL PETROLEUM EXCHANGE, UK									
Brent Crude Oil	X	X	10	X	X	X	X		25,008,704
Gasoil	X	X	10	X	X	X	X		9,238,912
Fuel Oil	X	X	30	-	-	-	-		0
Natural Gas - Seasons	X	-	-	-	-	-	-		3,360
Natural Gas - Quarters	X	-	-	-	-	-	-		6,195
Natural Gas BOM	X	-	-	-	-	-	-		455
Natural Gas Daily (NBP)	X	-	-	-	-	-	-		15
Natural Gas Monthly (NBP)	X	-	-	-	-	-	-		503,350
Electricity Baseload - Monthly	X	-	-	-	-	-	-		0
KOREA FUTURES EXCHANGE									
Gold	X	-	-	-	-	-	-		40,094
LONDON METAL EXCHANGE									
High Grade Primary Aluminum	X	X	5	X	X	X	X		28,544,162
Aluminium Alloy	X	X	30	-	-	-	-	TVM > 200	565,949
North American Special Aluminum Alloy	X	X	30	-	-	-	-		1,095,744
Copper - Grade A	X	X	5	X	X	X	X		19,628,797
Standard Lead	X	X	5	X	X	X	X		4,238,094
Primary Nickel	X	X	5	X	X	X	X		3,792,597
Special High Grade Zinc	X	X	5	X	X	X	X		10,287,605
Silver	X	X	30	-	-	-	-		0
Tin	X	X	30	X	X	-	-	% Dollar Weight	1,140,907
LMEX	X	X	15	-	-	-	-		0
EURONEXT - LIFFE, UK									
Barley	X	-	15	-	-	-	-		0
No. 7 Cocoa	X	-	30	-	-	-	-		2,562,838
Robusta Coffee	X	X	30	-	-	-	-		2,928,671
Potatoes	X	-	15	-	-	-	-		0

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Wheat	X	-	30	-	-	-	-		83,741
White Sugar	X	X	30	-	-	-	-		1,164,559
MALAYSIA DERIVATIVES EXCHANGE BERHAD									
formerly Kuala Lumpur Opt. & Fin. Futures Exch and Commodity & Monetary Exch of Malaysia									
Crude Palm Oil (FCPO)	-	-	-	-	-	-	-		1,426,166
EURONEXT - Paris									
Wheat #2	X	-	-	-	-	-	-		141,907
Corn	X	-	-	-	-	-	-		70,772
Sunflower Seeds	X	-	-	-	-	-	-		0
Wine	X	-	-	-	-	-	-		0
European Rapeseed Meal	X	-	-	-	-	-	-		190,050
MERCADO A TERMINO DE BUENOS AIRES									
Wheat	-	-	-	-	-	-	-		432
Corn	-	-	-	-	-	-	-		4
Sunflowerseed	-	-	-	-	-	-	-		0
Soybean	-	-	-	-	-	-	-		0
Rosafe Soybean Index (ISR)	-	-	-	-	-	-	-		24,519
Rosafe Corn Index (IMR)	-	-	-	-	-	-	-		209
Argentine Wheat Index (ITA)	-	-	-	-	-	-	-		0
NEW ZEALAND FUTURES EXCH									
New Zealand Electricity	X	-	-	-	-	-	-		0
SHANGHAI FUTURES EXCHANGE									
Copper	-	-	-	-	-	-	-		20,759,678
Aluminum	-	-	-	-	-	-	-		6,447,552
Rubber	-	-	-	-	-	-	-		19,047,786
Fuel Oil	-	-	-	-	-	-	-		145,375
SIMEX, Singapore									

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Brent Crude	-	-	-	-	-	-	-		0
SOUTH AFRICAN FUTURES EXCH (SAFEX)									
White Maize (WMAZ)	-	-	-	-	-	-	-		918,851
Yellow Maize (YMAZ)	-	-	-	-	-	-	-		231,500
WEAT	-	-	-	-	-	-	-		179,286
SUNS	-	-	-	-	-	-	-		57,070
WSEC	-	-	-	-	-	-	-		0
YSEC	-	-	-	-	-	-	-		0
SOYA	-	-	-	-	-	-	-		3,078
WOPT	-	-	-	-	-	-	-		0
SYDNEY FUTURES EXCHANGE									
NSW Base Load Electricity	X	-	-	-	-	-	-		0
d-cypha SFE NSW Base Load Electricity	X	-	-	-	-	-	-		4,625
d-cypha SFE VIC Base Load Electricity	X	-	-	-	-	-	-		2,510
d-cypha SFE QLD Base Load Electricity	X	-	-	-	-	-	-		1,405
d-cypha SFE SA Base Load Electricity	X	-	-	-	-	-	-		1,955
d-cypha SFE NSW Peak Period Electricity	X	-	-	-	-	-	-		1,940
d-cypha SFE VIC Peak Period Electricity	X	-	-	-	-	-	-		1,307
d-cypha SFE QLD Peak Period Electricity	X	-	-	-	-	-	-		1,065
d-cypha SFE SA Peak Period Electricity	X	-	-	-	-	-	-		488
NSW Peak Period Electricity	X	-	-	-	-	-	-		0
VIC Base Load Electricity	X	-	-	-	-	-	-		0
VIC Peak Period Electricity	X	-	-	-	-	-	-		0
Wheat	X	-	-	-	-	-	-		0
Fine Wool	X	-	-	-	-	-	-		1,919

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Broad Wool	X	-	-	-	-	-	-		1,070
Barley	X	-	-	-	-	-	-		0
Canola	X	-	-	-	-	-	-		0
Sorghum	X	-	-	-	-	-	-		0
Greasy Wool	X	-	-	-	-	-	-		7,234
MLA/SFE Cattle	X	-	-	-	-	-	-		1,331
				-					
WINNIPEG COMMODITY EXCHANGE									
Wheat	X	-	-	-	-	-	-		77,234
Flat Seed	X	-	-	-	-	-	-		1,032
Oats	X	-	-	-	-	-	-		0
Canola	X	-	-	-	-	-	-		1,712,101
Canola Meal	X	X	15	-	-	-	-	Volume Traded	0
Field Peas	X	-	-	-	-	-	-		0
Western Barley	X	-	-	-	-	-	-		201,899
FUKUOKA FUTURES EXCHANGE Formerly the KANMON COMMODITY EXCH									
Red Beans	X	-	-	-	-	-	-		14,825
Imported Soybeans	X	-	-	-	-	-	-		42,643
Non-GMO Soybeans	X	-	-	-	-	-	-		415,601
Refined Sugar	X	-	-	-	-	-	-		1,427
Corn	X	-	-	-	-	-	-		2,502,900
Broiler	X	-	-	-	-	-	-		77,363
Soybean Meal	X	-	-	-	-	-	-		255,095
KANSAI COMMODITIES EXCHANGE									
Red Beans	X	-	-	-	-	-	-		12,291
U.S. Soybeans	X	-	-	-	-	-	-		18,290
Non-GMO Soybeans	X	-	-	-	-	-	-		470,430
Refined Sugar	X	-	-	-	-	-	-		2,860
Raw Sugar	X	-	-	-	-	-	-		29,511
Raw Silk	X	-	-	-	-	-	-		6,582
Frozen Shrimp	X	-	-	-	-	-	-		1,082,229
Corn 75 Index	X	-	-	-	-	-	-		374,912

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Coffee Index	X	-	-	-	-	-	-		869,937
Kansai International Grain Index	X	-	-	-	-	-	-		0
CENTRAL JAPAN COMMODITY EXCH									
Red Beans	X	-	-	-	-	-	-		3,420
Imported Soybeans	X	-	-	-	-	-	-		0
Non-GMO Soybeans	X	-	-	-	-	-	-		203,234
Refined Sugar	X	-	-	-	-	-	-		0
Dried Cocoon	X	-	-	-	-	-	-		0
Cotton Yarn (40S)	X	-	-	-	-	-	-		0
Shell Egg	X	-	-	-	-	-	-		829,151
Gasoline	X	-	-	-	-	-	-		14,268,952
GasOil	X	-	-	-	-	-	-		918,969
Kerosene	X	-	-	-	-	-	-		13,993,011
OOSAKA MERCANTILE EXCHANGE									
Cotton Yarn (20S)	X	-	-	-	-	-	-		3,172
Cotton Yarn (40S)	X	-	-	-	-	-	-		1,716
Rubber (RSS3)	X	-	-	-	-	-	-		1,118,240
Rubber (TSR20)	X	-	-	-	-	-	-		1,423,871
Rubber Index	X	-	-	-	-	-	-		1,202,062
Aluminum	X	-	-	-	-	-	-		1,038,108
Nickel	X	-	-	-	-	-	-		353,370
THE TOKYO COMMODITY EXCHANGE									
Gold	X	-	-	-	-	-	-		20,050,246
Silver	X	-	-	-	-	-	-		1,512,769
Platinum	X	-	-	-	-	-	-		14,342,209
Palladium	X	-	-	-	-	-	-		469,761
Aluminum	X	-	-	-	-	-	-		397,806
Gasoline	X	-	-	-	-	-	-		23,913,664
Kerosene	X	-	-	-	-	-	-		13,051,770
Crude Oil	X	-	-	-	-	-	-		2,071,473
GasOil	X	-	-	-	-	-	-		569,704

MARKET	OECD	Usd Denom	TDTV required (USD bn)	PASSES TDTV Test	PASSES TVM Test	PASSES RPDW Test	Included in the GSCI	NOTES / Reason for Exclusion	VOLUME(1) Sep03 - Aug04
Rubber	X	-	-	-	-	-	-		2,671,554
TOKYO GRAIN EXCHANGE									
American Soybeans	X	-	-	-	-	-	-		2,512,240
Non-GMO Soybeans	X	-	-	-	-	-	-		10,688,200
Soybean Meal	X	-	-	-	-	-	-		76,033
Arabic Coffee	X	-	-	-	-	-	-		4,660,333
Red Beans	X	-	-	-	-	-	-		457,414
Corn	X	-	-	-	-	-	-		8,769,590
Refined Sugar	X	-	-	-	-	-	-		2,854
Robusta Coffee	X	-	-	-	-	-	-		517,921
Raw Sugar	X	-	-	-	-	-	-		387,165
YOKOHAMA COMMODITY EXCHANGE									
Japan Raw Silk	X	-	-	-	-	-	-		575,188
International Raw Silk	X	-	-	-	-	-	-		8,904
Dried Cocoon	X	-	-	-	-	-	-		2,587
Potato	X	-	-	-	-	-	-		838,801

(1) Contracts traded over the Annual Calculation Period. Source: Futures Industry Association

WPAs and Conversion Factors

The WPAs and relevant units and conversion factors used for the Designated Contracts becoming effective during the first Roll Period for the GSCI year 2005 are shown below.

Table 5: World Production Averages for 2005 GSCI Commodities

GSCI Commodity	WPQ	Units	2005 WPA
Wheat	1000	M ton	594,168,000
Corn	1000	M ton	602,788,800
Soybeans	1000	M ton	160,026,800
Lean Hogs	1000	M ton	25,915,400
Cattle	1000	M ton	37,918,763
Coffee "C"	1000	M ton	6,743,000
Sugar #11	1000	M ton	130,944,800
Cocoa	1000	M ton	3,088,600
Cotton #2	1000	M ton	18,960,200
Gold	1	Kg	2,542,000
Silver	1	M ton	17,800,000
Crude Oil	1000	M ton	3,302,888,800
Natural Gas	1	Petajoule	29,851.4
High Grade Primary Aluminum	1000	M ton	31,145,200
Copper - Grade A	1000	M ton	14,580,000
Standard Lead	1000	M ton	6,214,000
Primary Nickel	1	M ton	1,078,000
Special High Grade Zinc	1000	M ton	8,626,000

Abbreviations:

bbl	Barrels
gal	US Gallons
Lbs	Pounds
MMBTU	Million British Thermal Units
kg	Kilograms
M ton	Metric Tons
oz.	Troy Ounces

Table 6: Contract Units and Conversion Factors for 2005 GSCI Contracts

Trading Facility	Contract	Contract Units		Conversion Factor Between Contract Units and WPQ Units
CBT	Wheat	5,000	bu	1000/27.2
KBT	Wheat	5,000	bu	1000/27.2
CBT	Corn	5,000	bu	1000/25.4
CBT	Soybeans	5,000	bu	1000/27.2
CME	Lean Hogs	40,000	lbs	2,204.623
CME	Live Cattle	40,000	lbs	2,204.623
CME	Feeder Cattle	50,000	lbs	2,204.623
CSC	Coffee "C"	37,500	lbs	2,204.623
CSC	Sugar #11	112,000	lbs	2,204.623
CSC	Cocoa	10	M ton	1.000
NYC	Cotton #2	50,000	lbs	2,204.623
CMX	Gold	100	oz	32.15075
CMX	Silver	5,000	oz	32.15075
NYM	No 2 Heating Oil, NY	42,000	gal	304.626
IPE	Gasoil	100	M ton	1.000
NYM	Unleaded Reg Gas, NY	42,000	gal	357.462
NYM	Crude Oil	1,000	bbl	6.998
IPE	Crude Oil	1,000	bbl	6.998
NYM	Natural Gas	10,000	MMBTU	947,086.289
LME	High Grade Primary Aluminum	25	M ton	1.000
LME	Copper - Grade A	25	M ton	1.000
LME	Standard Lead	25	M ton	1.000
LME	Primary Nickel	6	M ton	1.000
LME	Special High Grade Zinc	25	M ton	1.000
NYC	OJ, Frozen Concentrate	15,000	lbs	1.000

Sources and Notes:

Contract Size / Units (Domestic Trading Facilities): Futures Industry Association, *Monthly Volume Report*.

Contract Size / Units (Foreign Trading Facilities): Futures Industry Institute, *Futures and Options Fact Book*.

Sources for World Production Data

In accordance with the GSCI Manual, the WPQ Period for the 2005 GSCI is 1997-2001. This is the most recent period for which data was available for all GSCI Commodities.

Commodity	Primary Source for Production Data
Wheat	FAOYBP #56 p. 74 Table 16 (2002); FAOYBP #55 p. 74 Table 16 (2001); FAOYBP #54 p. 74 Table 16 (2000); FAOYBP #53 p. 62 Table 16 (1999);
Corn	FAOYBP #56 p. 83 Table 20 (2002); FAOYBP #55 p. 83 Table 20 (2001); FAOYBP #54 p. 83 Table 20 (2000); FAOYBP #53 p. 79 Table 20 (1999);
Soybeans	FAOYBP #56 p. 116 Table 37 (2002); FAOYBP #55 p. 116 Table 37 (2001); FAOYBP #54 p. 115 Table 37 (2000); FAOYBP #53 p. 111 Table 37 (1999);
Lean Hogs	UNICS 2001, Table 3111-071, p. 99
Cattle	UNICS 2001, Table 3111-011, p.89, USDA AS 2004, p. VII-8, Table 7-10 and p. VII-41, Table 7-65
Coffee	FAOYBP #56 p. 194 Table 78 (2002); FAOYBP #55 p. 193 Table 78 (2001); FAOYBP #54 p. 191 Table 78 (2000); FAOYBP #53 p. 186 Table 78 (1999);
Sugar	FAOYBP #56 p. 176 Table 69 (2002); FAOYBP #55 p. 175 Table 69 (2001); FAOYBP #54 p. 173 Table 69 (2000); FAOYBP #53 p. 168 Table 69 (1999);
Cocoa	FAOYBP #56 p. 196 Table 79 (2002); FAOYBP #55 p. 195 Table 79 (2001); FAOYBP #54 p. 193 Table 79 (2000); FAOYBP #53 p. 187 Table 79 (1999);
Cotton	FAOYBP #56 p. 205 Table 87 (2002); FAOYBP #55 p. 204 Table 87 (2001); FAOYBP #54 p. 202 Table 87 (2000); FAOYBP #53 p. 196 Table 87 (1999);
Gold	BOM MYB 2002, Table 1 and 2001, Table 1, "Gold: World Mine Production, By Country"
Silver	BOM MYB 2002, Table 1 and 2001, Table 1, "Silver: World Mine Production, By Country"
Platinum	BOM MYB 2002, Table 5, and 2001, Table 5, "Platinum-Group Metals: World Mine Production, By Country"
Crude Oil	UNICS 2001, Table 2200-01A, p. 5
Natural Gas	UNICS 2001, Table 2200-10B, p. 8
Aluminum	BOM MYB 2002, Table 12 and 2001, Table 12, "Aluminum, Primary: World Production, By Country", UNICS 2001, Table 3720-222, p. 609 for secondary aluminum
Copper	BOM MYB 2002, Table 22 and 2001, Table 22, "Copper: World Refinery Production, By Country"
Lead	BOM MYB 2002, Table 15 and 2001, Table 15, "Lead: World Refinery Production, By Country"
Nickel	BOM MYB 2002, Table 11 and 2001, Table 11, "Nickel: World Plant Production, By Country"
Zinc	BOM MYB 2002, Table 1 and 2001, Table 1, "Zinc: World Smelter Production, By Country"
Oranges (FCOJ)	FAOYBP #56 p. 181 Table 71 (2002); FAOYBP #55 p. 180 Table 71 (2001); FAOYBP #54 p. 178 Table 71 (2000); FAOYBP #53 p. 173 Table 71 (1999);FAS Citrus Summary 2002-03, p.17
UNICS	Industrial Commodity Statistics Yearbook, United Nations
BOM MYB	Minerals Yearbook, US Department of the Interior, US Geological Survey
FAOYBP	Production Yearbook, Food and Agriculture Organization of the United Nations
USDA AS	United States Department of Agriculture, Agricultural Statistics
FAS	Florida Agricultural Statistics

Example for Calculating the Normalizing Constant

The Normalizing Constant becoming effective during the first Roll Period for the GSCI Year 2005 depends on the Daily Contract Reference Prices of the relevant Designated Contracts on the 4th business day of January. At the time of the compilation of this GSCI Manual, such prices are obviously not available. Therefore, for demonstration purposes, we carry on the calculation using the Average Contract Reference Prices. Rules are described in chapter V.

Trading Facility	Designated Contract	CPW 2004	CPW 2005	ACRP	Dollar Weights 2004	Dollar Weights 2005
CBT	Wheat	15463.8	16111.75	44.3375 /12	57135.519	59529.560
KBT	Wheat	6229.591	5732.665	45.3525 /12	23543.960	21665.891
CBT	Corn	23505.31	23731.84	32.0325 /12	62744.487	63349.180
CBT	Soybeans	5545.801	5883.338	94.695 /12	43763.302	46426.891
CSC	Coffee "C"	14456.59	14865.77	8.4215 /12	10145.514	10432.674
CSC	Sugar #11	283418.4	288683.9	.8064 /12	19045.716	19399.558
CSC	Cocoa	3.022	3.0886	18208. /12	4585.381	4686.436
NYC	Cotton #2	41101.23	41800.09	7.6717 /12	26276.359	26723.146
CME	Lean Hogs	50394.15	57133.69	7.72675 /12	32448.583	36788.145
CME	Live Cattle	71035.51	69228.16	9.97225 /12	59031.989	57530.043
CME	Feeder Cattle	12605.38	14368.42	11.63275 /12	12219.603	13928.686
NYM	No 2 Heating Oil, NY	115393.9	116199.7	11.3592 /12	109231.866	109994.636
IPE	Gasoil	200.1037	206.1135	3434.75 /12	57275.515	58995.695
NYM	Unleaded Reg Gas, NY	116057.3	114672.6	12.727 /12	123088.438	121619.848
NYM	Crude Oil	10919.02	11177.65	426.44 /12	388025.574	397216.422
IPE	Crude Oil	5552.733	5579.262	389.2 /12	180093.640	180954.064
NYM	Natural Gas	28469.22	28271.85	67.228 /12	159494.060	158388.328
LME	High Grade Primary Aluminum	29.5126	31.1452	19635.25 /12	48290.607	50961.982
LME	Copper - Grade A	13.96	14.58	30645.75 /12	35651.223	37234.586
LME	Standard Lead	6.046	6.214	9364.75 /12	4718.273	4849.380
LME	Primary Nickel	1.0348	1.078	160029. /12	13799.834	14375.939
LME	Special High Grade Zinc	8.278	8.626	12164.5 /12	8391.478	8744.248
CMX	Gold	79.73386	81.72721	4794.3 /12	31855.670	32652.064
CMX	Silver	545.2767	572.2834	73.831 /12	3354.860	3521.021
					1514211.453	1539968.423

Based on the Normalizing Constant effective before the 2005 January Roll Period equal to 5543.740, using the formula in chapter V and rounding to 7 (seven) significant digits, the new Normalizing Constant would be

$$NC_{new} = NC_{old} \cdot TDWR = 5543.740 \cdot \frac{1539968.423}{1514211.453} = 5638.040$$

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APPENDIX B - GSCI POLICY COMMITTEE

Meeting of October 13, 2004

The following is a summary of the Annual Meeting of the Policy Committee of the Goldman Sachs Commodity Index (the "GSCI®"), which was held at the offices of Goldman Sachs on October 13, 2004. The purpose of the meeting was to discuss the following issues related to the operation, composition and methodology of the GSCI.

Agenda Item #1: Summary of Modifications to GSCI 2004 Manual That Affect the 2005 Weights

The TDVT rule was amended in order to help maintain stability of the underlying commodities in the GSCI. Specifically, the threshold for entering the index for a new Contract that is based on a commodity that is not represented in the GSCI at the time was raised from 10 billion to 15 billion U.S. dollars. The threshold for a new Contract to enter the Index that is based on a GSCI Commodity on which there is one or more Designated Contracts already included in the GSCI was raised from 20 billion to 30 billion U.S. dollars.

The GSCI is limited to those Contracts that are actively traded in order to assure that the prices generated by the markets for such Contracts represent reliable, competitive prices. The Contracts that satisfy the general eligibility requirements set forth in section II.2, therefore, must also satisfy the volume trading requirements described below before being included in the GSCI.

> A Contract that is not included in the GSCI at the time of determination (which may be either a Monthly Observation Date or the time of the annual determination of the composition of the GSCI) and that is based on a commodity that is not represented in the GSCI at such time must, in order to be added to the GSCI at such time, have a Total Dollar Value Traded, over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, of at least 15 billion U.S. dollars.
>
> A Contract that is already included in the GSCI at the time of determination and that is the only Designated Contract on the relevant GSCI Commodity must, in order to continue to be included in the GSCI after such time, have a Total Dollar Value Traded of at least 5 billion U.S. dollars over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, and of at least 10 billion U.S. dollars during at least one of the three Annual Observation Periods.
>
> A Contract that is not included in the GSCI at the time of determination and that is based on a GSCI Commodity on which there are one or more Designated Contracts already included in the GSCI at such time must, in order to be added to the GSCI at such time, have a Total Dollar Value Traded, over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, of at least 30 billion U.S. dollars.
>
> A Contract that is already included in the GSCI at the time of determination and that is based on a GSCI Commodity on which there are one or more Designated Contracts already included in the GSCI at such time must, in order to continue to be included in the GSCI after such time, have a Total Dollar Value Traded of at least 10 billion U.S. dollars over the relevant Annual Calculation Period or Interim Calculation Period, as the case may be and annualized, and of at least 20 billion U.S. dollars during at least one of the three Annual Observation Periods.

In determining whether a particular Contract is included in the GSCI for purposes of this section II.3 any changes in the composition of the GSCI that have been determined in accordance with the procedures set forth in this GSCI Manual but that have not yet become effective shall be deemed to have been already made.

The Total Dollar Value Traded measures the extent to which a commodity is the subject of Contract trading. Analyzing this feature through the use of dollar values is free from contract-dependent characteristics such as contract size, and thus makes it possible to compare the results for all Contracts. The minimum TDVT requirement, therefore, further enhances the tradability of the GSCI by excluding those Contracts that do not represent sufficient trading activity in the relevant commodity.

Agenda Item #2: Proposed Increase to the Investment Support Level

Goldman Sachs proposes an increase to the Investment Support Level from $30bn to $40bn, effective immediately and to apply to the January 2005 composition, due to the significant increase in the commodity index investments over the past year. Current Commodity Index investments are estimated to be between $25bn - $30bn and are expected to continue to grow.

This is not a rule change but rather a change in the level contemplated by the rule.

"Investment Support Level" or **"ISL"** – The target amount of investment in the GSCI and related indices, expressed in U.S. dollars, that Goldman Sachs, in consultation with the Policy Committee, reasonably believes may need to be supported by liquidity in the relevant Designated Contracts, based on the estimated aggregate outstanding level of investment in GSCI – related investments. The Investment Support Level will not necessarily reflect the actual levels of such investment and may include amounts estimated to have been invested in similar indices, as well as any amount that is reasonably expected to be invested in the GSCI or related or similar indices with the next twelve-month period. The Investment Support Level is currently set at ~~30~~ **40** billion U.S. dollars.

Agenda Item #3: Index Composition for the GSCI Year 2005

Goldman Sachs has performed the Annual Calculation to determine the initial CPW's for the GSCI 2005, as required by the latest edition of the GSCI Manual, based on trading volume from September 2003 to August 2004. The audited results of the calculations are presented in the appendix section. No new commodities contracts will enter or be removed at this time.

Agenda Item #4: Proposed Increase to the TVM Upper Level for Existing Contracts

Goldman Sachs proposes to expand the TVM Upper Limit for Contracts that are currently included in the GSCI from 200 to 300 in order to further enhance the stability of the underlying Contracts in the index. The TVM Upper Level for new Contracts to enter the index would still remain at 200. This rule enhances the stability of the index composition by significantly reducing the possibility that Contracts within a commodity group (GSCI Commodity) exit and successfully re-enter the index due to cycles in volume and price. In addition, differentiating the TVM Upper Level for existing and prospective Contracts is consistent with the other GSCI rules which have dual parameters for existing and prospective Contracts.

"**TVM Upper Level**" or "**TVMUL**"— The TVM level, specified by Goldman Sachs in consultation with the Policy Committee, which triggers the ~~removal~~ **exclusion** of one or more Designated Contracts on a given GSCI Commodity from the GSCI in accordance with the procedure set forth in section II.5(b) of this GSCI Manual if the average of the TVMs of all the Designated Contracts on such Commodity exceeds such level. The TVM Upper Level is currently set at 200 **for those Contracts that are not currently included in the GSCI at the time of determination and is currently set at 300 for those Contracts that are currently included in the GSCI at the time of determination. The time of determination may be either a Monthly Observation Date or the time of the annual determination of the composition of the GSCI.**

Agenda Item #5: Update on Power and the GSCI

At the 2003 Policy Committee meeting we commented that a number of factors had reduced the possibility that Power would enter the GSCI in the near future. Specifically, we mentioned the challenges faced by the merchant energy sector, the decline in power trading, and continued structural uncertainty. We have monitored this situation and at this point there has not been an increase in Power trading volumes sufficient to qualify for inclusion in the GSCI.

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APPENDIX C - SUMMARY OF CHANGES TO THE GSCI MANUAL

The following is a summary of the changes from the 2004 edition of the GSCI Manual that are reflected in this edition of the Manual.

- The definition of the Investment Support Level has changed from $30bn to $40bn to better reflect the significant increase in the commodity index investments over the past year.

- The amendment to Section 1.4 concerns a change in one member of the Policy Committee.

- Section VI.8 has been added to describe the GS Reduced Energy Index and the GS Light Energy Index.

- The only substantive change that has been made to the GSCI Manual since the prior edition appears in the definition of the TVM Upper Level and in Section II.5. The TVM Upper Limit for Contracts that are currently included in the GSCI was expanded from 200 to 300 in order to further enhance the stability of the underlying Contracts in the index. The TVM Upper Level for new Contracts to enter the index remains at 200. This rule enhances the stability of the index composition by significantly reducing the possibility that Contracts within a commodity group (GSCI Commodity) exit and successfully re-enter the index due to cycles in volume and price. In addition, differentiating the TVM Upper Level for existing and prospective Contracts is consistent with the other GSCI rules which have dual parameters for existing and prospective Contracts.

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