S&P GSCI Advisory Panel

October 10, 2024



S&P Dow Jones Indices

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S&P GSCI Advisory Panel

October 2024

Opening Remarks

S&P GSCI 2024 Rebalance Review

Beyond the S&P GSCI: global coverage of the 3 C's: Commodities, Crypto & Case-Shiller

Energy transition: Carbon-accounted metals and update on battery metals markets

QIS alpha strategies

Exchange Limits and Volumes

Opening Remarks

Michael Fodor, Index Committee Chairperson Brian Luke, Head of Commodities & Real Assets

Overview

- No membership changes
- Investment Support Level: US\$310 billion
- Large increase to **Livestock** sector; Large decrease to **Agriculture** sector
- Largest percent weight increases: WTI Crude Oil, Gold & Live Cattle
- Largest percent weight decreases: Corn & Natural Gas
- Brent Crude Oil will continue to hold the largest weight
- Largest World Production Average increase: Lean Hogs (17.0%)
- Largest World Production Average decrease: Silver (-2.8%)
- Largest percentage volume increase: Nickel (55.2%)
- Largest percentage volume decrease: Cocoa (-17.2%)

World Production Quantity Sources

- Nickel 2021 production data provided by International Nickel Study Group
- Copper 2021 production data provided by International Copper Study Group
- Cattle 2021 production data provided exclusively by UN Data due to change in data reporting
- Lean Hogs 2021 production data provided by UN Data due to change in data reporting
- No additional changes to reported sources for 2025

WORLD PRODUCTION QUANTITY SOURCES

Commodity	Source				
Wheat	FAOSTAT				
Corn	FAOSTAT				
Soybeans	FAOSTAT				
Lean Hogs	FAOSTAT and UN Data				
Cattle	UN Data & U.S. Department of Agriculture (USDA)				
Coffee	FAOSTAT				
Sugar	U.S. Department of Agriculture (USDA)				
Cocoa	FAOSTAT				
Cotton	U.S. Department of Agriculture (USDA)				
Gold	U.S. Geological Survey (USGS)				
Silver	U.S. Geological Survey (USGS)				
Crude Oil	UN Data				
Natural Gas	UN Data				
Aluminum	U.S. Geological Survey (USGS)				
	U.S. Geological Survey (USGS) & International				
Copper	Copper Study Group (ICSG)				
Lead	U.S. Geological Survey (USGS)				
Nickel	U.S. Geological Survey (USGS) & International				
Mickel	Nickel Study Group (INSG)				
Zinc	U.S. Geological Survey (USGS)				

World Production Issues & Resolutions

Nickel

<u>Issue</u>

• U.S. Geological Survey (USGS) 2021 World Production data will not be made available

- Utilized 2021 Nickel Production data from the International Nickel Study Group (INSG)
- We will compare the 2021 Production data from INSG to the USGS data once made available

World Production Issues & Resolutions (Cont.)

Copper

<u>Issue</u>

U.S. Geological Survey (USGS) 2021 World Production data will not be made available

- Utilized 2021 Copper Production data from the International Copper Study Group (ICSG)
- We will compare the 2021 Production data from ICSG to the USGS data once made available

World Production Issues & Resolutions (Cont.)

Cattle

<u>Issue</u>

Change in data reporting from UN Data; no longer reported as Industrial Production

- UN Data is now more robust and reported as true World Production
- ALW and ADW data from USDA no longer needed to apply conversion factor
- Data will be incorporated one year at a time. Currently, year 2 of incorporation

World Production Issues & Resolutions (Cont.)

Lean Hogs

<u>Issue</u>

- Change in data reporting from UN Data
- Directly references FAOSTAT as the data source
- Additional countries now provided, most notably China

- Due to the large percentage of production represented by China Lean Hogs, 20% of the production will be rolled in annually starting with the 2024 rebalance, along with the additional countries. For 2025, 40% will be rolled in.
- The World Production excluding China data will be incorporated one year at a time. Currently in Year 2.
- By Year 5, 100% of China production will be accounted for in the first year and all subsequent years used in the calculation of the World Production Average
- By Year 10, all the years and countries will be used in calculating World Production Average, including the full production total of China Lean Hogs

World Production Average (WPA)

WORLD PRODUCTION AVERAGE COMPARISONS

Commodity	WPQ Units	2024 WPA	2025 WPA	Percentage Change
Wheat	M ton	754,797,305	759,821,262	0.7%
Corn	M ton	1,137,644,091	1,153,224,941	1.4%
Soybeans	M ton	346,297,758	353,797,019	2.2%
Lean Hogs *	1000 M ton	50,568,169	59,188,208	17.0%
Cattle	M ton	66,261,157	69,466,065	4.8%
Coffee	M ton	10,014,257	10,391,692	3.8%
Sugar	M ton	178,439,200	180,162,400	1.0%
Cocoa	M ton	5,303,011	5,530,011	4.3%
Cotton	M ton	25,324,820	25,343,762	0.1%
Gold	1 Kg	3,210,000	3,190,000	-0.6%
Silver	1 M ton	26,180	25,460	-2.8%
Crude Oil	1000 M ton	3,851,970,991	3,801,254,117	-1.3%
Natural Gas	1 Petajoule	43,171	44,948	4.1%
Aluminum	1000 M ton	69,000,000	70,180,000	1.7%
Copper	1000 M ton	24,280,000	24,500,000	0.9%
Lead	1000 M ton	11,640,000	11,840,000	1.7%
Nickel	1 M ton	2,162,800	2,281,200	5.5%
Zinc	1000 M ton	13,580,000	13,540,000	-0.3%

^{*} Adjustments to the World Production data based on the changes implemented starting with the incorporation of China World Production data beginning in 2024.

WPA Comparison Table (2020 – 2025)

WORLD PRODUCTION AVERAGE COMPARISON TABLE

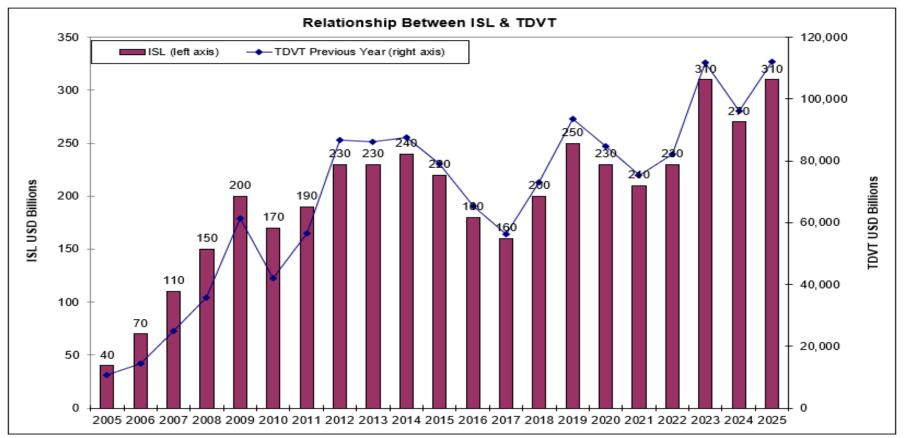
Commodity	Unit	2020	2021		2022		2023		2024		2025	
Wheat	1000 M ton	722,164,585	740,527,832	2.5%	744,992,805	0.6%	751,938,281	0.9%	754,797,305	0.4%	759,821,262	0.7%
Corn	1000 M ton	1,016,567,342	1,079,790,527	6.2%	1,096,590,952	1.6%	1,116,902,063	1.9%	1,137,644,091	1.9%	1,153,224,941	1.4%
Soybeans	1000 M ton	296,726,183	319,193,687	7.6%	333,936,604	4.6%	339,964,995	1.8%	346,297,758	1.9%	353,797,019	2.2%
Lean Hogs	1000 M ton	41,552,392	42,099,187	1.3%	42,882,833	1.9%	43,826,446	2.2%	50,568,169	15.4%	59,188,208	17.0%
Cattle	1000 M ton	60,238,537	61,910,132	2.8%	63,586,878	2.7%	64,585,598	1.6%	66,261,157	2.6%	69,466,065	4.8%
Coffee	1000 M ton	8,941,803	9,007,432	0.7%	9,376,819	4.1%	9,583,155	2.2%	10,014,257	4.5%	10,391,692	3.8%
Sugar	1000 M ton	173,720,600	174,081,600	0.2%	176,971,200	1.7%	177,615,400	0.4%	178,439,200	0.5%	180,162,400	1.0%
Cocoa	1000 M ton	4,651,853	4,808,290	3.4%	5,013,083	4.3%	5,170,340	3.1%	5,303,011	2.6%	5,530,011	4.3%
Cotton	1000 M ton	24,660,238	24,662,720	0.0%	24,585,384	-0.3%	24,644,954	0.2%	25,324,820	2.8%	25,343,762	0.1%
Gold	1 Kg	2,984,000	3,108,000	4.2%	3,184,000	2.4%	3,226,000	1.3%	3,210,000	-0.5%	3,190,000	-0.6%
Silver	1 M ton	26,220	26,600	1.4%	27,600	3.8%	27,340	-0.9%	26,180	-4.2%	25,460	-2.8%
Crude Oil	1000 M ton	3,779,857,044	3,817,246,522	1.0%	3,866,576,722	1.3%	3,898,368,579	0.8%	3,851,970,991	-1.2%	3,801,254,117	-1.3%
Natural Gas	1 Petajoule	37,478	38,268	2.1%	39,758	3.9%	41,624	4.7%	43,171	3.7%	44,948	4.1%
Aluminum	1000 M ton	61,248,000	63,580,000	3.8%	65,892,000	3.6%	67,890,000	3.0%	69,000,000	1.6%	70,180,000	1.7%
Copper	1000 M ton	22,073,200	22,764,800	3.1%	23,580,000	3.6%	23,840,000	1.1%	24,280,000	1.8%	24,500,000	0.9%
Lead	1000 M ton	10,549,000	10,849,600	2.8%	11,020,000	1.6%	11,220,000	1.8%	11,640,000	3.7%	11,840,000	1.7%
Nickel	1 M ton	1,944,000	1,996,000	2.7%	2,016,000	1.0%	2,093,800	3.9%	2,162,800	3.3%	2,281,200	5.5%
Zinc	1000 M ton	13,340,000	13,600,000	1.9%	13,440,000	-1.2%	13,520,000	0.6%	13,580,000	0.4%	13,540,000	-0.3%

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Investment Support Level (ISL)

Purpose of ISL:

- Estimate for liquidity
- Trigger for CPW Changes
- Not an accurate estimate of commodity investment space



ISL Commentary

- ISL recommendation level: US\$ 310 billion
- 14.8% increase from recommended level of US\$ 270 billion for 2024

ISL DETERMINATION CALCULATON MODEL

Year	ISL	% Change In ISL	TDVT	% Change In TDVT	% Change In TDVT Captured By ISL Change
2004	30	0.00%	7828.4	33.82%	0.00%
2005	40	33.33%	10582.1	35.18%	94.76%
2006	70	75.00%	14301.3	35.15%	213.39%
2007	110	57.14%	24964	74.56%	76.64%
2008	150	36.36%	35670.6	42.89%	84.79%
2009	200	33.33%	61399.1	72.13%	46.21%
2010	170	-15.00%	41984.7	-31.62%	47.44%
2011	190	11.76%	56608.4	34.83%	33.78%
2012	230	21.05%	86698.5	53.15%	39.61%
2013	230	0.00%	86253.4	-0.51%	0.00%
2014	240	4.35%	87565.9	1.52%	285.73%
2015	220	-8.33%	78917.0	-9.88%	84.37%
2016	180	-18.18%	65320.9	-17.23%	105.53%
2017	160	-11.11%	56214.9	-13.94%	79.70%
2018	200	25.00%	73173.6	30.17%	82.87%
2019	250	25.00%	93533.4	27.82%	89.85%
2020	230	-8.00%	84814.5	-9.32%	85.82%
2021	210	-8.70%	75288.6	-11.23%	77.42%
2022	230	9.52%	82045.7	8.97%	106.12%
2023	310	34.78%	111800.3	36.27%	95.91%
2024	270	-12.90%	96029.9	-14.11%	91.47%
2025	310	14.81%	112216.9	16.86%	87.89%

2025 S&P GSCI CPW Calculation – Pro Forma

- All data subject to revisions based on revised data from designated sources
- Official 2025 S&P GSCI CPW announcement November 2024

	2025 S&P GSCI CONTRACT PRODUCTION WEIGHT CALCULATION - PRO FORMA										O FORM	Α				
Symbol	Component	Commodity	CF	Contract Size	Lot Size	ISL	WPA	Volume	тот	% тот	CPW	ACRP	TDW	RPDW	TDVT (bill)	TVM
W	Wheat	Chicago Wheat	36.7437	5000	100	310	759,821,262	32,041,432	4,360,125,954	0.678411023	18940.32	5.824583333	110319.4722	2.502%	933.1	120.3
KW	Wheat	Kansas Wheat	36.7437	5000	100	310	759,821,262	15,188,685	2,066,842,071	0.321588977	8978.328	6.180833333	55493.54898	1.258%	469.4	120.3
C	Corn	Corn	39.36825	5000	100	310	1,153,224,941	91,532,557	11,625,174,728	1	45400.45	4.427916667	201029.4092	4.558%	2026.5	143.4
s	Soybeans	Soybeans	36.7437	5000	100	310	353,797,019	66,247,978	9,014,875,747	1	12999.81	11.89604167	154646.2814	3.507%	3940.4	362.5
KC	Coffee	Coffee	2204.623	37500	100	310	10,391,692	12,770,063	217,215,081	1	22909.76	1.993958333	45681.10687	1.036%	954.9	297.4
SB					100					1	397190.2	0.220716667		1.988%	872.6	141.6
	Sugar	Sugar	2204.623	112000		310	180,162,400	35,297,723	1,793,206,810			6537.750000	87666.49698	0.820%	741.3	291.7
CC	Cocoa	Cocoa	-	10	1	310	5,530,011	11,339,335	113,393,350	1	5.530011		36153.82942			
ст	Cotton	Cotton	2204.623	50000	100	310	25,343,762	10,992,374	249,302,806	1	55873.44	0.809833333	45248.17416	1.026%	445.1	139.9
LH	Lean Hogs	Lean Hogs	2204.623	40000	100	310	59,188,208	14,071,129	255,302,226	1	130487.7	0.835916667	109076.8432	2.473%	470.5	61.4
LC	Cattle	Live Cattle	2204.623	40000	100	310	69,466,065	16,266,477	295,133,944	0.746799913	114369.8	1.801854167	206077.7007	4.673%	1172.4	80.9
FC	Cattle	Feeder Cattle	2204.623	50000	100	310	69,466,065	4,412,077	100,064,206	0.253200087	38776.70	2.453145833	95124.90004	2.157%	541.2	80.9
CL	Crude Oil	WTI Crude Oil	7.33	1000	1	310	3,801,254,117	295,176,963	40,269,708,458	0.405584959	11300.89	79.05166667	893354.1893	20.26%	23334.2	371.6
НО	Crude Oil	Heating Oil	315	42000	1	310	3,801,254,117	43,832,960	5,844,394,667	0.058863068	70482.35	2.642750000	186267.2305	4.224%	4865.3	371.6
RB	Crude Oil	RBOB Gasoline	354.9	42000	1	310	3,801,254,117	44,933,635	5,317,589,941	0.053557241	72252.20	2.381458333	172065.6038	3.902%	4494.3	371.6
LCO	Crude Oil	Brent Crude Oil	7.33	1000	1	310	3,801,254,117	288,001,192	39,290,749,250	0.395725162	11026.17	82.89916667	914060.3045	20.73%	23875.1	371.6
LGO	Crude Oil	Gas Oil	1	100	1	310	3,801,254,117	85,655,307	8,565,530,700	0.086269570	327.9326	794.6250000	260583.4423	5.909%	6806.4	371.6
NG	Natural Gas	Natural Gas	975609.75	10000	1	310	44,948	150,647,066	1,544,132	1	43851.52	2.407083333	105554.2629	2.393%	3626.2	488.7
MAL	Aluminum	Aluminum	1	25	1	310	70,180,000	66,275,224	1,656,880,600	1	70.18000	2364.555000	165944.4699	3.763%	3917.8	335.9
MCU	Copper	Copper	1	25	1	310	24,500,000	38,120,176	953,004,400	1	24.50000	8917.437500	218477.2188	4.954%	8498.4	553.4
MNI	Nickel	Nickel	1	6	1	310	2,281,200	14,669,967	88,019,802	1	2.281200	17449.48500	39805.76518	0.903%	1535.9	548.9
MPB	Lead	Lead	1	25	1	310	11,840,000	18,607,291	465,182,275	1	11.84000	2126.120000	25173.26080	0.571%	989	558.9
MZN	Zinc	Zinc	1	25	1	310	13,540,000	26,621,496	665,537,400	1	13.54000	2655.546667	35956.10187	0.815%	1767.4	699.3
GC	Gold	Gold	32.15075	100	1	310	3,190,000	60,153,797	187,099,203	1	102.5609	2194.900000	225110.9194	5.104%	13203.2	834.4
SI	Silver	Silver	32150.75	5000	1	310	25,460	21,125,877	3,285,441	1	818.5581	25.90441667	21204.27009	0.481%	2736.3	1835.8

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2025 S&P GSCI CPW Comparison

2025 S&P GSCI CPW COMPARISON

Symbol	Commodity	2024 CPW	2025 CPW	% Change	
w	Chicago Wheat	19982.69	18940.32	-5.216%	
KW	Kansas Wheat	7751.352	8978.328	15.83%	
С	Corn	44787.06	45400.45	1.370%	
S	Soybeans	12724.26	12999.81	2.166%	
KC	Coffee	22077.66	22909.76	3.769%	
SB	Sugar	393391.2	397190.2	0.966%	
CC	Cocoa	5.303011	5.530011	4.281%	
СТ	Cotton	55831.68	55873.44	0.075%	
LH	Lean Hogs	111483.7	130487.7	17.05%	
LC	Live Cattle	110944.0	114369.8	3.088%	
FC	Feeder Cattle	35136.87	38776.70	10.36%	
CL	WTI Crude Oil	11252.59	11300.89	0.429%	
но	Heating Oil	74629.31	70482.35	-5.557%	
RB	RBOB Gasoline	78382.22	72252.20	-7.821%	
LCO	Brent Crude Oil	11345.07	11026.17	-2.811%	
LGO	Gas Oil	311.2954	327.9326	5.345%	
NG	Natural Gas	42118.17	43851.52	4.115%	
MAL	Aluminum	69.00000	70.18000	1.710%	
MCU	Copper	24.28000	24.50000	0.906%	
MNI	Nickel	2.162800	2.281200	5.474%	
MPB	Lead	11.64000	11.84000	1.718%	
MZN	Zinc	13.58000	13.54000	-0.295%	
GC	Gold	103.2039	102.5609	-0.623%	
SI	Silver	841.7066	818.5581	-2.750%	

2025 ACRP Comparison

2025 ACRP COMPARISON

Symbol	Commodity	2024 ACRP	2025 ACRP	% Change	
w	Chicago Wheat	724.7500000	582.4583333	-19.633%	
KW	Kansas Wheat	852.8333333	618.0833333	-27.526%	
C	Corn	611.2291667	442.7916667	-27.557%	
S	Soybeans	1421.916667	1189.604167	-16.338%	
KC	Coffee	176.4791667	199.3958333	12.985%	
SB	Sugar	21.89750000	22.07166667	0.7954%	
CC	Cocoa	2881.083333	6537.750000	126.92%	
CT	Cotton	82.96166667	80.98333333	-2.3846%	
LH	Hogs	86.13333333	83.59166667	-2.9509%	
LC	Live Cattle	164.5333333	180.1854167	9.5130%	
FC	Feeder Cattle	210.8291667	245.3145833	16.357%	
CL	WTI Crude Oil	78.28000000	79.05166667	0.9858%	
но	Heating Oil	2.941616667	2.642750000	-10.160%	
RB	RBOB Gasoline	2.552375000	2.381458333	-6.6964%	
LCO	Brent Crude Oil	83.35250000	82.89916667	-0.5439%	
LGO	Gas Oil	839.6250000	794.6250000	-5.3595%	
NG	Natural Gas	3.754083333	2.407083333	-35.881%	
MAL	Aluminum	2313.512500	2364.555000	2.2063%	
MCU	Copper	8430.004167	8917.437500	5.7821%	
MNI	Nickel	23829.29167	17449.48500	-26.773%	
MPB	Lead	2114.498333	2126.120000	0.5496%	
MZN	Zinc	2779.214167	2655.546667	-4.4497%	
GC	Gold	1879.391667	2194.900000	16.788%	
SI	Silver	22.88825000	25.90441667	13.178%	

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Yearly Volume Comparison

- Overall significant total volume increase of 19.26%
- Volume increases for 22 commodities
- Nickel with the largest increase of 55.21%
- Volume decreases only for Cocoa of 17.18% and Sugar of 8.87%

2024 YEARLY VOLUME COMPARISON

Symbol	Commodity	2024 Volume	2025 Volume	% Change
w	Chicago Wheat	27,895,354	32,041,432	14.86%
KW	Kansas Wheat	10,820,699	15,188,685	40.37%
С	Corn	78,819,315	91,532,557	16.13%
S	Soybeans	58,317,802	66,247,978	13.60%
KC	Coffee	10,504,770	12,770,063	21.56%
SB	Sugar	38,733,818	35,297,723	-8.871%
cc	Cocoa	13,691,487	11,339,335	-17.18%
СТ	Cotton	9,143,335	10,992,374	20.22%
LH	Lean Hogs	12,624,162	14,071,129	11.46%
LC	Live Cattle	15,595,258	16,266,477	4.304%
FC	Feeder Cattle	3,951,317	4,412,077	11.66%
CL	WTI Crude Oil	240,382,527	295,176,963	22.79%
но	Heating Oil	37,958,633	43,832,960	15.48%
RB	RBOB Gasoline	39,867,472	44,933,635	12.71%
LCO	Brent Crude Oil	242,358,095	288,001,192	18.83%
LGO	Gas Oil	66,500,226	85,655,307	28.80%
NG	Natural Gas	115,543,943	150,647,066	30.38%
MAL	Aluminum	53,827,566	66,275,224	23.13%
MCU	Copper	31,719,943	38,120,176	20.18%
MNI	Nickel	9,451,826	14,669,967	55.21%
МРВ	Lead	12,247,698	18,607,291	51.92%
MZN	Zinc	20,798,938	26,621,496	27.99%
GC	Gold	55,854,797	60,153,797	7.697%
SI	Silver	18,030,514	21,125,877	17.17%

Total Volume	1,224,639,495	1 463 980 781	19.54%
Total volume	1,224,033,433	1,403,300,701	13.34/0

2025 Dollar Weight Comparison – Pro Forma

2025 COMMODITY REFERENCE PERCENTAGE DOLLAR WEIGHT COMPARISON - PRO FORMA

Symbol	Commodity	2024 CPW	2025 CPW	2025 ACRP	2025 TDW	2024 RPDW	2025 RPDW	RPDW BP Diff
w	Chicago Wheat	19982.69	18940.32	5.824583333	110319.4722	3.175%	2.502%	-67
KW	Kansas Wheat	7751.352	8978.328	6.180833333	55493.54898	1.449%	1.258%	-19
C	Corn	44787.06	45400.45	4.427916667	201029.4092	6.001%	4.558%	-144
S	Soybeans	12724.26	12999.81	11.89604167	154646.2814	3.966%	3.507%	-46
KC	Coffee	22077.66	22909.76	1.993958333	45681.10687	0.854%	1.036%	18
SB	Sugar	393391.2	397190.2	0.220716667	87666.49698	1.888%	1.988%	10
cc	Cocoa	5.303011	5.530011	6537.750000	36153.82942	0.335%	0.820%	48
СТ	Cotton	55831.68	55873.44	0.809833333	45248.17416	1.015%	1.026%	1
LH	Lean Hogs	111483.7	130487.7	0.835916667	109076.8432	2.105%	2.473%	37
LC	Live Cattle	110944.0	114369.8	1.801854167	206077.7007	4.001%	4.673%	67
FC	Feeder Cattle	35136.87	38776.70	2.453145833	95124.90004	1.624%	2.157%	53
CL	WTI Crude Oil	11252.59	11300.89	79.05166667	893354.1893	19.31%	20.26%	95
НО	Heating Oil	74629.31	70482.35	2.642750000	186267.2305	4.812%	4.224%	-59
RB	RBOB Gasoline	78382.22	72252.20	2.381458333	172065.6038	4.385%	3.902%	-48
LCO	Brent Crude Oil	11345.07	11026.17	82.89916667	914060.3045	20.73%	20.73%	0
LGO	Gas Oil	311.2954	327.9326	794.6250000	260583.4423	5.729%	5.909%	18
NG	Natural Gas	42118.17	43851.52	2.407083333	105554.2629	3.466%	2.393%	-107
MAL	Aluminum	69.00000	70.18000	2364.555000	165944.4699	3.499%	3.763%	26
MCU	Copper	24.28000	24.50000	8917.437500	218477.2188	4.487%	4.954%	47
MNI	Nickel	2.162800	2.281200	17449.48500	39805.76518	1.130%	0.903%	-23
MPB	Lead	11.64000	11.84000	2126.120000	25173.26080	0.540%	0.571%	3
MZN	Zinc	13.58000	13.54000	2655.546667	35956.10187	0.827%	0.815%	-1
GC	Gold	103.2039	102.5609	2194.900000	225110.9194	4.252%	5.104%	85
SI	Silver	841.7066	818.5581	25.90441667	21204.27009	0.422%	0.481%	6

2025 Sector Weight Comparison – Pro Forma

2025 S&P GSCI RPDW SECTOR WEIGHTS - PRO FORMA

Sector	2024 Weight	2025 Weight	Sector RPDW BP Diff
Energy	58.43%	57.41%	-102
Agriculture	18.68%	16.69%	-199
Livestock	7.730%	9.303%	157
Industrial Metals	10.48%	11.01%	52
Precious Metals	4.674%	5.585%	91

- Largest sector percentage increase: Livestock
 - Attributed to percentage weight increases in Live Cattle and Feeder Cattle
- Largest sector percentage decrease: Agriculture
 - Attributed to percentage weight decreases in Corn & Chicago Wheat

Component Candidate Screening Review

COI	CONTRACTS TESTED FOR INCLUSION								
Commodity	Exchange	Commodity	Exchange						
Soybean Meal	CBOT	NYH (RBOB) Gasoline (Monthly)	ICE - Europe						
Soybean Oil	CBOT	Tin	LME						
Class III Milk	CME Group	Hard Red Spring Wheat	MGEX						
Aluminum	COMEX	Argus Propane Far East Index	NYMEX						
Copper	COMEX	Brent Crude Oil Last Day Financial	NYMEX						
E-Micro Gold Futures	COMEX	Chicago Ethanol (Platts)	NYMEX						
miNY Gold	COMEX	E-mini Crude Oil	NYMEX						
Silver (1,000 oz)	COMEX	Micro WTI Crude Oil	NYMEX						
Orange Juice, Frozen Concentrate	ICE - US	Mont Belvieu LDH Propane (OPIS)	NYMEX						
Robusta Coffee 10 Tonne	ICE - Europe	Mont Belvieu Normal Butane (OPIS)	NYMEX						
White Sugar	ICE - Europe	Natural Gas (Henry Hub) Last-day Financial	NYMEX						
WTI Light Sweet Crude Oil	ICE - Europe	Natural Gas (Henry Hub) Penultimate Financial	NYMEX						
Heating Oil	ICE - Europe	Palladium	NYMEX						
Rotterdam Coal	ICE - Europe	Platinum	NYMEX						

Additional Commodity Candidate Testing

ADDITIONAL COMMODITY TDVT TESTING FOR 2025 REBALANCE

Symbol	Commodity	Contract Size	Units	Lot Size	Volume	ACRP	TDVT (bill)	TDVT	Pass/Fail
OCB	Cobalt Metal	2204.62	USD	1	26,332	13.53166667	0.8	15	FAIL
HRC	U.S. Midwest Domestic Hot-Rolled Coil Steel	20	USD	1	297,869	836.5	5	15	FAIL
СМНС	Steel HRC FOB China	10	USD	1	65,572	539.0833333	0.4	15	FAIL
SRR	Steel Rebar	10	USD	1	52,714	586.1666667	0.3	15	FAIL
SSC	Steel Scrap	10	USD	1	1,146,035	390.75	4.5	15	FAIL
OEG	CBL Global Emissions Offset	1000	USD	1	96,677	0.560833333	0.1	15	FAIL
ONG	CBL Nature-Based Global Emissions Offset	1000	USD	1	80,484	0.743333333	0.1	15	FAIL
LTH	Lithium	1000	USD	1	69,753	16.17	1.1	15	FAIL

Component Candidate Eligibility Criteria

Eligibility Criteria for inclusion:

- RPDW at least 1% for a contract that is not included in S&P GSCI
- <u>TDVT</u> minimum **US\$ 15 billion** for contracts not represented in S&P GSCI minimum **US\$ 30 billion** for components not represented in S&P GSCI
- <u>TQT</u> minimum 25% for components not represented in S&P GSCI
- TVM Lower Level 30 for Contracts not represented in S&P GSCI
- TVM Upper Level 200 for components not represented in S&P GSCI

Performance Disclosure

The S&P GSCI launched April 11, 1991 and the S&P GSCI Iron Ore launched November 26, 2018. All information presented prior to an index's Launch Date is hypothetical (backtested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. Complete index methodology details are available at www.spdji.com.

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Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

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