

# Review of 2018 S&P GSCI Index Rebalancing

## **S&P GSCI ADVISORY PANEL MEETING**

**Pro Forma 2018 S&P GSCI Rebalance, Final rebalance  
will be published in November**

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**S&P Dow Jones  
Indices**

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# Overview

- There should be no substantial modifications to and no contracts added to or removed from the S&P GSCI in 2018.
- The Investment Support Level (ISL) will likely be increased from the current level of US\$ 160 billion to the level of US\$ 200 billion effective January 2018.
- Sector weights will likely remain little changed.
- Brent Crude Oil, Gas Oil and Heating Oil should have the largest weight percent decrease and WTI Crude Oil, Kansas Wheat and Aluminum should have the largest weight percent increases.
- WTI Crude Oil will continue to hold the largest weight in the index.
- Nickel had the largest World Production Average (WPA) increase of 7.6%.
- There were no declines in any commodity World Production Averages (WPA).
- Kansas Wheat saw the largest percentage volume increase, up 34.51% and Soybeans volume saw the largest percentage volume decrease, down 11.42%.

# World Production Quantity Sources

WORLD PRODUCTION QUANTITY SOURCES		
Commodity	Source	Comments
Wheat	FAOSTATS	
Corn	FAOSTATS	
Soybeans	FAOSTATS	
Lean Hogs	FAOSTATS & UN data	FAO data more robust than UN data
Cattle	FAOSTATS & UN data	FAO data more robust than UN data
Coffee	FAOSTATS	
Sugar	USDA	
Cocoa	FAOSTATS	
Cotton	USDA	
Gold	USGS - MYB	
Silver	USGS - MYB	
Crude Oil	UN Data	
Natural Gas	UN Data	
Aluminum	USGS - MYB	
Copper	USGS - MYB	
Lead	USGS - MYB	
Nickel	USGS - MYB & Intl Nickel Study Group	USGS World Production Data Unavailable
Zinc	USGS - MYB	

# World Production Issues & Resolutions

## Nickel

### Issue

- The 2014 USGS Metals Yearbook World Production data will not be made available.

### Resolution

- Utilized data from the International Nickel Study Group to formulate an estimate for the 2014 Nickel World Production data.
  - Obtained the International Nickel Study Group 2010 – 2014 World Production data to calculate a year-over-year percentage change.
  - Compared the yearly percentage change between the International Nickel Study Group and the USGS Metals Yearbook to confirm the trends are similar.
  - Applied the 5-year average percent return difference to the 2014 International Nickel Study Group world nickel production to calculate an estimate of 2014 USGS Metals Yearbook Nickel World Production.

# World Production Averages

## WORLD PRODUCTION AVERAGE COMPARISONS

Commodity	WPQ Units	2017 WPA	2018 WPA	Percentage Change
Wheat	M ton	684,023,002	690,423,419	0.9%
Corn	M ton	889,771,187	932,688,170	4.8%
Soybeans	M ton	253,588,379	270,502,922	6.7%
Lean Hogs	1000 M ton	40,561,411	40,600,373	0.1%
Cattle	M ton	53,177,821	54,796,100	3.0%
Coffee	M ton	8,556,349	8,677,280	1.4%
Sugar	M ton	161,909,000	168,296,600	3.9%
Cocoa	M ton	4,482,378	4,499,853	0.4%
Cotton	M ton	25,818,139	26,509,414	2.7%
Gold	1 Kg	2,644,000	2,790,000	5.5%
Silver	1 M ton	24,480	24,700	0.9%
Crude Oil	1000 M ton	3,642,593,890	3,661,383,369	0.5%
Natural Gas	1 Petajoule	34,398	35,300	2.6%
Aluminum	1000 M ton	48,692,000	52,096,000	7.0%
Copper	1000 M ton	19,680,000	20,440,000	3.9%
Lead	1000 M ton	9,894,000	10,322,000	4.3%
Nickel	1 M ton	1,658,000	1,784,000	7.6%
Zinc	1000 M ton	12,580,000	12,860,000	2.2%

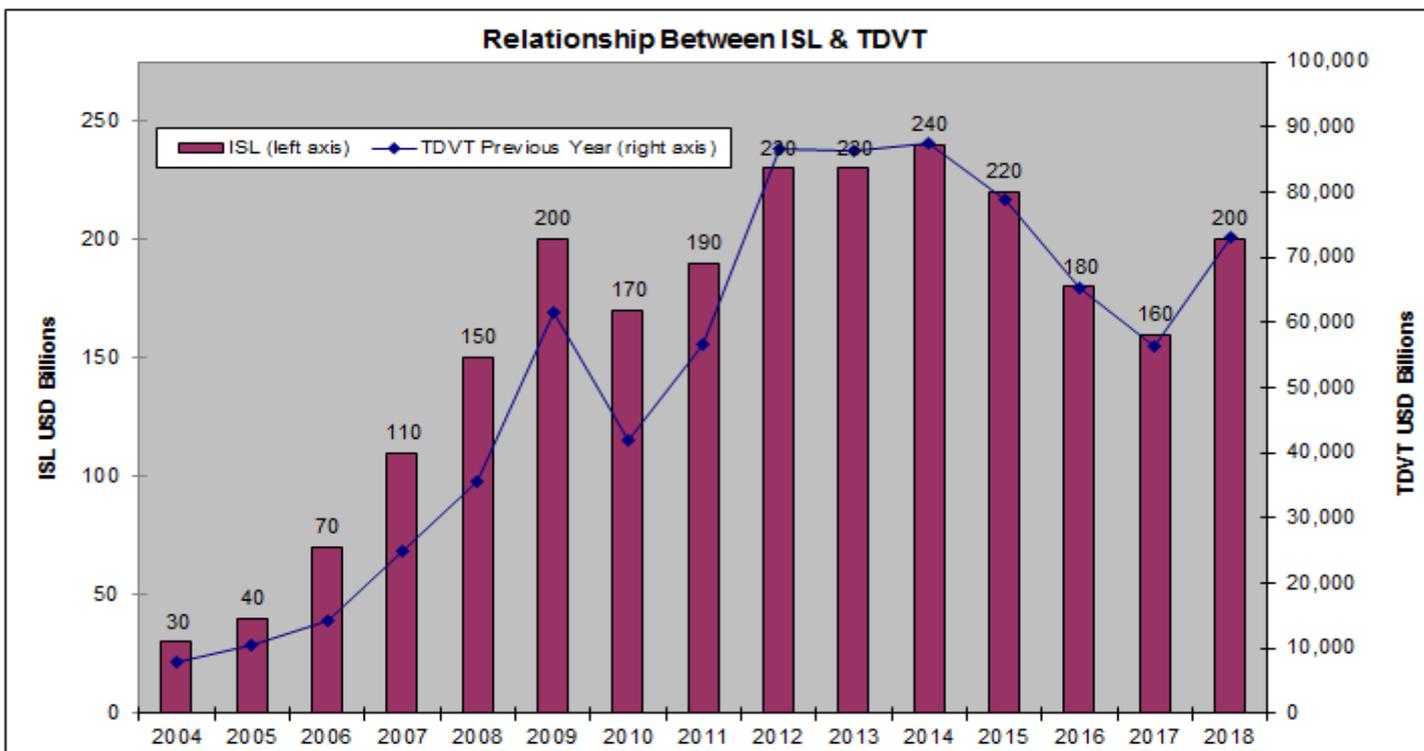
# WPA Comparison Table (2013 – 2018)

Commodity	Unit	2013	2014	2015	2016	2017	2018
Wheat	1000 M ton	642,509,771	647,389,857 0.8%	666,466,762 2.9%	678,027,825 1.7%	684,023,002 0.9%	690,423,419 0.9%
Corn	1000 M ton	771,424,261	799,358,319 3.6%	835,882,151 4.6%	852,546,224 2.0%	889,771,187 4.4%	932,688,170 4.8%
Soybeans	1000 M ton	222,056,398	232,246,870 4.6%	240,278,555 3.5%	244,561,496 1.8%	253,588,379 3.7%	270,502,922 6.7%
Lean Hogs	1000 M ton	34,873,804	37,519,258 7.6%	38,541,813 2.7%	39,767,313 3.2%	40,561,411 2.0%	40,600,373 0.1%
Cattle	1000 M ton	48,126,079	48,720,841 1.2%	49,637,826 1.9%	51,514,494 3.8%	53,177,821 3.2%	54,796,100 3.0%
Coffee	1000 M ton	7,962,799	8,077,173 1.4%	8,245,923 2.1%	8,381,239 1.6%	8,556,349 2.1%	8,677,280 1.4%
Sugar	1000 M ton	155,124,759	156,159,370 0.7%	157,463,200 0.8%	158,969,400 1.0%	161,909,000 1.8%	168,296,600 3.9%
Cocoa	1000 M ton	4,100,944	4,178,555 1.9%	4,277,231 2.4%	4,498,280 5.2%	4,482,378 -0.4%	4,499,853 0.4%
Cotton	1000 M ton	23,809,232	24,353,925 2.3%	25,013,039 2.7%	25,278,836 1.1%	25,818,139 2.1%	26,509,414 2.7%
Gold	1 Kg	2,388,000	2,404,000 0.7%	2,470,000 2.7%	2,544,000 3.0%	2,644,000 3.9%	2,790,000 5.5%
Silver	1 M ton	21,040	21,480 2.1%	22,300 3.8%	23,420 5.0%	24,480 4.5%	24,700 0.9%
Crude Oil	1000 M ton	3,610,557,977	3,604,982,089 -0.2%	3,604,790,667 0.0%	3,623,323,516 1.4%	3,642,593,890 0.5%	3,661,383,369 0.5%
Natural Gas	1 Petajoule	31,096	31,919 2.6%	32,783 2.7%	33,382 1.7%	34,398 3.0%	35,300 2.6%
Aluminum	1000 M ton	43,640,000	44,256,000 1.4%	45,816,000 3.5%	47,090,000 2.8%	48,692,000 3.4%	52,096,000 7.0%
Copper	1000 M ton	17,700,000	18,200,000 2.8%	18,660,000 2.5%	19,100,000 2.4%	19,680,000 3.0%	20,440,000 3.9%
Lead	1000 M ton	8,280,000	8,710,000 5.2%	9,170,000 5.3%	9,484,000 3.4%	9,894,000 4.3%	10,322,000 4.3%
Nickel	1 M ton	1,376,000	1,410,000 2.5%	1,442,000 2.3%	1,516,000 5.1%	1,658,000 9.4%	1,784,000 7.6%
Zinc	1000 M ton	11,120,000	11,580,000 4.1%	12,080,000 4.3%	12,380,000 2.5%	12,580,000 1.6%	12,860,000 2.2%

# Investment Support Level

- Purpose of ISL:

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



# ISL Commentary

- We are recommending an ISL level of 200, which is an increase from 2017. We have historically captured an average of about 91% of the change in TDVT. This year we will capture just below the historical average change, due to the increase in TDVT. The change is in line with the percent change in overall TDVT. We will continue to maintain our conservative approach to the increase in ISL, to allow for a moderate buffer, thus not calling for a potential intra-year rebalance.

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	<b>200</b>	<b>25.00%</b>	<b>73173.6</b>	<b>30.17%</b>	<b>82.87%</b>

Average Excluding Current Year	85.14%
Average With Current Year	84.99%
Average Excluding 2006 & CY	91.69%
Average Excluding 2006 With CY	91.06%

# 2018 S&P GSCI CPW Calculation – Pro Forma

Symbol	Commodity	CF	Contract Size	Lot Size	ISL	WPA	Volume	TQT	% TQT	CPW	ACRP	TDW	RPDW	TDVT (Billion)	TVM
W	Chicago Wheat	36.7437	5000	100	200	690,423,419	32,819,613	4,466,019,073	0.73228097	18577.02	4.34708333	80755.8540	3.03%	713.3	117.8
KW	Kansas Wheat	36.7437	5000	100	200	690,423,419	11,998,721	1,632,758,949	0.26771903	6791.687	4.40166667	29894.7423	1.12%	264.1	117.8
C	Corn	39.3683	5000	100	200	932,688,170	86,949,305	11,043,060,660	1	36718.35	3.61479167	132729.1856	4.98%	1571.5	157.8
S	Soybeans	36.7437	5000	100	200	270,502,922	54,146,228	7,368,096,844	1	9939.278	9.823125	97634.7702	3.66%	2659.4	363.1
KC	Coffee	2204.623	37500	100	200	8,677,280	9,338,102	158,838,416	1	19130.13	1.409875	26971.0920	1.01%	493.7	244
SB	Sugar	2204.623	112000	100	200	168,296,600	31,418,305	1,596,123,310	1	371030.6	0.17870833	66306.2601	2.49%	628.8	126.4
CC	Cocoa	1	10	1	200	4,499,853	10,576,486	105,764,860	1	4.499853	2161.08333	9724.5573	0.36%	228.6	313.3
CT	Cotton	2204.623	50000	100	200	26,509,414	7,573,155	171,756,237	1	58443.26	0.726675	42469.2560	1.59%	275.2	86.4
LH	Lean Hogs	2204.623	40000	100	200	40,600,373	10,694,558	194,038,763	1	89508.52	0.66016667	59090.5413	2.22%	282.4	63.7
LC	Live Cattle	2204.623	40000	100	200	54,796,100	15,772,835	286,177,455	0.79454682	95985.02	1.12816667	108287.1001	4.06%	711.8	87.6
FC	Feeder Cattle	2204.623	50000	100	200	54,796,100	3,262,820	73,999,500	0.20545318	24819.72	1.34541667	33392.8650	1.25%	219.5	87.6
CL	WTI Crude Oil	7.33	1000	1	200	3,661,383,369	363,560,976	49,599,041,746	0.493394	13241.68	49.7308333	658519.7811	24.70%	18080.2	366
HO	Heating Oil	315	42000	1	200	3,661,383,369	42,422,938	5,656,391,733	0.05626782	64895.68	1.59245833	103343.6664	3.88%	2837.4	366
RB	RBOB Gasoline	354.9	42000	1	200	3,661,383,369	50,107,984	5,929,938,935	0.05898897	76651.74	1.59438333	122212.2567	4.58%	3355.4	366
LCO	Brent Crude Oil	7.33	1000	1	200	3,661,383,369	235,409,805	32,115,935,198	0.31947815	8574.135	52.52	450313.5702	16.89%	12363.7	366
LGO	Gas Oil	1	100	1	200	3,661,383,369	72,249,275	7,224,927,500	0.07187106	263.1475	469.541667	123558.7157	4.63%	3392.4	366
NG	Natural Gas	947086.29	10000	1	200	35,300	136,133,513	1,437,393	1	33432.15	3.10875	103932.1963	3.90%	4232.1	542.8
MAL	Aluminum	1	25	1	200	52,096,000	51,863,779	1,296,594,475	1	52.096	1856.85417	96734.6747	3.63%	2407.6	331.8
MCU	Copper	1	25	1	200	20,440,000	34,144,091	853,602,275	1	20.44	5776.27083	118066.9758	4.43%	4930.6	556.7
MNI	Nickel	1	6	1	200	1,784,000	19,996,618	119,979,708	1	1.784	10234.8958	18259.0542	0.68%	1228	896.5
MPB	Lead	1	25	1	200	10,322,000	10,174,541	254,363,525	1	10.322	2239.125	23112.2483	0.87%	569.6	328.5
MZN	Zinc	1	25	1	200	12,860,000	27,988,869	699,721,725	1	12.86	2704.125	34775.0475	1.30%	1892.1	725.3
GC	Gold	32.15075	100	1	200	2,790,000	63,610,501	197,850,753	1	89.70059	1251.15833	112229.6407	4.21%	7958.7	945.3
SI	Silver	32150.75	5000	1	200	24,700	21,518,131	3,346,443	1	794.1235	17.4504167	13857.7860	0.52%	1877.5	1806.1

# 2018 S&P GSCI CPW Comparison

Symbol	Commodity	2017 CPW	2018 CPW	% Change
W	Chicago Wheat	19593.74	18577.02	-5.19%
KW	Kansas Wheat	5539.8	6791.687	22.60%
C	Corn	35028.78	36718.35	4.82%
S	Soybeans	9317.775	9939.278	6.67%
KC	Coffee	18863.52	19130.13	1.41%
SB	Sugar	356948.3	371030.6	3.95%
CC	Cocoa	4.482378	4.499853	0.39%
CT	Cotton	56919.26	58443.26	2.68%
LH	Lean Hogs	89422.62	89508.52	0.10%
LC	Live Cattle	94811.31	95985.02	1.24%
FC	Feeder Cattle	22425.74	24819.72	10.68%
CL	WTI Crude Oil	12637.76	13241.68	4.78%
HO	Heating Oil	71069.42	64895.68	-8.69%
RB	RBOB Gasoline	78841	76651.74	-2.78%
LCO	Brent Crude Oil	8679.141	8574.135	-1.21%
LGO	Gas Oil	286.6551	263.1475	-8.20%
NG	Natural Gas	32577.49	33432.15	2.62%
MAL	Aluminum	48.692	52.096	6.99%
MCU	Copper	19.68	20.44	3.86%
MNI	Nickel	1.658	1.784	7.60%
MPB	Lead	9.894	10.322	4.33%
MZN	Zinc	12.58	12.86	2.23%
GC	Gold	85.00658	89.70059	5.52%
SI	Silver	787.0504	794.1235	0.90%

# 2018 ACRP Comparison

Symbol	Commodity	2017 ACRP	2018 ACRP	% Change
W	Chicago Wheat	465.0625	434.7083333	-6.53%
KW	Kansas Wheat	458.1666667	440.1666667	-3.93%
C	Corn	366.125	361.4791667	-1.27%
S	Soybeans	948.7083333	982.3125	3.54%
KC	Coffee	127.4541667	140.9875	10.62%
SB	Sugar	16.13916667	17.87083333	10.73%
CC	Cocoa	3048.083333	2161.083333	-29.10%
CT	Cotton	63.10416667	72.6675	15.15%
LH	Hogs	69.36458333	66.01666667	-4.83%
LC	Live Cattle	125.2416667	112.8166667	-9.92%
FC	Feeder Cattle	155.20625	134.5416667	-13.31%
CL	WTI Crude Oil	42.14416667	49.73083333	18.00%
HO	Heating Oil	1.332925	1.592458333	19.47%
RB	RBOB Gasoline	1.382316667	1.594383333	15.34%
LCO	Brent Crude Oil	44.37916667	52.52	18.34%
LGO	Gas Oil	399.8958333	469.5416667	17.42%
NG	Natural Gas	2.378166667	3.10875	30.72%
MAL	Aluminum	1559.4375	1856.854167	19.07%
MCU	Copper	4820	5776.270833	19.84%
MNI	Nickel	9276.708333	10234.89583	10.33%
MPB	Lead	1749.083333	2239.125	28.02%
MZN	Zinc	1854.583333	2704.125	45.81%
GC	Gold	1205.5	1251.158333	3.79%
SI	Silver	16.17408333	17.45041667	7.89%

# Yearly Volume Comparison

Symbol	Commodity	2017 Volume	2018 Volume	% Change
W	Chicago Wheat	31,550,062	32,819,613	4.02%
KW	Kansas Wheat	8,920,250	11,998,721	34.51%
C	Corn	87,203,682	86,949,305	-0.29%
S	Soybeans	61,128,360	54,146,228	-11.42%
KC	Coffee	9,318,613	9,338,102	0.21%
SB	Sugar	34,610,684	31,418,305	-9.22%
CC	Cocoa	9,472,190	10,576,486	11.66%
CT	Cotton	7,448,056	7,573,155	1.68%
LH	Lean Hogs	8,700,450	10,694,558	22.92%
LC	Live Cattle	13,385,060	15,772,835	17.84%
FC	Feeder Cattle	2,532,777	3,262,820	28.82%
CL	WTI Crude Oil	289,011,929	363,560,976	25.79%
HO	Heating Oil	38,697,174	42,422,938	9.63%
RB	RBOB Gasoline	42,928,784	50,107,984	16.72%
LCO	Brent Crude Oil	198,482,633	235,409,805	18.60%
LGO	Gas Oil	65,554,938	72,249,275	10.21%
NG	Natural Gas	118,297,510	136,133,513	15.08%
MAL	Aluminum	54,328,348	51,863,779	-4.54%
MCU	Copper	37,013,626	34,144,091	-7.75%
MNI	Nickel	20,164,280	19,996,618	-0.83%
MPB	Lead	10,880,565	10,174,541	-6.49%
MZN	Zinc	26,901,404	27,988,869	4.04%
GC	Gold	51,853,383	63,610,501	22.67%
SI	Silver	16,337,598	21,518,131	31.71%
<b>Total Volume</b>		<b>1,244,722,356</b>	<b>1,403,731,149</b>	<b>12.77%</b>

# 2018 Dollar Weight Comparison – Pro Forma

Symbol	Commodity	2017 CPW	2018 CPW	2017 ACRP	2017 TDW	2018 TDW	2017 PDW	2018 RPDW	Difference (basis pts)
W	Chicago Wheat	19593.74	18577.02	4.347083333	85175.62059	80755.85403	3.25%	3.03%	-22
KW	Kansas Wheat	5539.8	6791.687	4.401666667	24384.353	29894.74228	0.93%	1.12%	19
C	Corn	35028.78	36718.35	3.614791667	126621.742	132729.1856	4.83%	4.98%	15
S	Soybeans	9317.775	9939.278	9.823125	91529.66855	97634.7702	3.49%	3.66%	17
KC	Coffee	18863.52	19130.13	1.409875	26595.20526	26971.09203	1.01%	1.01%	0
SB	Sugar	356948.3	371030.6	0.178708333	63789.63578	66306.26014	2.43%	2.49%	5
CC	Cocoa	4.482378	4.499853	2161.083333	9686.79239	9724.557321	0.37%	0.36%	0
CT	Cotton	56919.26	58443.26	0.726675	41361.80326	42469.25596	1.58%	1.59%	2
LH	Lean Hogs	89422.62	89508.52	0.660166667	59033.83297	59090.54129	2.25%	2.22%	-4
LC	Live Cattle	94811.31	95985.02	1.128166667	106962.9596	108287.1001	4.08%	4.06%	-2
FC	Feeder Cattle	22425.74	24819.72	1.345416667	30171.96436	33392.86495	1.15%	1.25%	10
CL	WTI Crude Oil	12637.76	13241.68	49.73083333	628486.3363	658519.7811	23.97%	24.70%	73
HO	Heating Oil	71069.42	64895.68	1.592458333	113175.0901	103343.6664	4.32%	3.88%	-44
RB	RBOB Gasoline	78841	76651.74	1.594383333	125702.7764	122212.2567	4.79%	4.58%	-21
LCO	Brent Crude Oil	8679.141	8574.135	52.52	455828.4853	450313.5702	17.39%	16.89%	-50
LGO	Gas Oil	286.6551	263.1475	469.5416667	134596.5134	123558.7157	5.13%	4.63%	-50
NG	Natural Gas	32577.49	33432.15	3.10875	101275.272	103932.1963	3.86%	3.90%	4
MAL	Aluminum	48.692	52.096	1856.854167	90413.94308	96734.67467	3.45%	3.63%	18
MCU	Copper	19.68	20.44	5776.270833	113677.01	118066.9758	4.34%	4.43%	9
MNI	Nickel	1.658	1.784	10234.89583	16969.45729	18259.05417	0.65%	0.68%	4
MPB	Lead	9.894	10.322	2239.125	22153.90275	23112.24825	0.85%	0.87%	2
MZN	Zinc	12.58	12.86	2704.125	34017.8925	34775.0475	1.30%	1.30%	1
GC	Gold	85.00658	89.70059	1251.158333	106356.691	112229.6407	4.06%	4.21%	15
SI	Silver	787.0504	794.1235	17.45041667	13734.35742	13857.78596	0.52%	0.52%	0

# 2018 Sector Weight Comparison – Pro Forma

Sector	2017 Weight	2018 Weight	Difference (basis pts)
Energy	59.47%	58.58%	-89
Agriculture	17.89%	18.25%	35
Livestock	7.48%	7.53%	5
Industrial Metals	10.57%	10.91%	34
Precious Metals	4.58%	4.73%	15

- The Agriculture sector had the largest percentage increase due to the individual commodity percentage weight increases in Kansas Wheat, Soybeans and Corn.
- The Energy sector had the largest percentage decrease due to the large individual commodity percentage weight decreases in Brent Crude Oil, Gas Oil and Heating Oil.

# Open Interest Comparison

Symbol	Commodity	Aug. 2016 OI	Aug. 2017 OI	% Change
W	Chicago Wheat	389,869	399,065	2.36%
KW	Kansas City Wheat	207,162	251,346	21.33%
C	Corn	1,155,479	1,187,998	2.81%
S	Soybeans	587,444	605,298	3.04%
KC	Coffee	154,848	183,651	18.60%
SB	Sugar	817,853	766,539	-6.27%
CC	Cocoa	182,334	230,339	26.33%
CT	Cotton	212,347	212,813	0.22%
LH	Lean Hogs	192,431	230,400	19.73%
LC	Live Cattle	230,160	293,129	27.36%
FC	Feeder Cattle	34,511	45,921	33.06%
CL	WTI Crude Oil	1,694,126	2,147,985	26.79%
HO	Heating Oil	342,276	348,869	1.93%
RB	RBOB Gasoline	366,336	378,055	3.20%
LCO	Brent Crude Oil	2,166,947	2,300,658	6.17%
LGO	Gas Oil	802,710	927,333	15.53%
NG	Natural Gas	967,160	1,230,847	27.26%
MAL	Aluminum	929,434	916,077	-1.44%
MCU	Copper	438,154	449,187	2.52%
MNI	Nickel	311,944	331,221	6.18%
MPB	Lead	142,353	140,238	-1.49%
MZN	Zinc	391,038	397,465	1.64%
GC	Gold	504,732	491,894	-2.54%
SI	Silver	166,041	157,299	-5.26%

<b>Total Open Interest</b>	<b>13,387,689</b>	<b>14,623,627</b>	<b>9.23%</b>
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**Sources: CFTC & LME Exchange**

CFTC Data for US futures (total long positions only)  
 CFTC data for ICE - Europe Exchange (total positions reported only)  
 Exchange data for LME (total positions)

# Component Candidate Screening Review

## CONTRACTS TESTED FOR INCLUSION

Soybean Oil	Mont Belvieu LDH Propane (OPIS)
Soybean Meal	Coal (API2) CIF ARA (ARGUS-McCloskey)
Nonfat Dry Milk	Singapore Fuel Oil 380 cst (Platts)
Hard Red Spring Wheat	Oman Crude Oil
Brent Crude Oil Last Day Financial	ICE WTI Crude
Copper (HG)	ICE NYH (RBOB) Gasoline (Monthly)
Platinum	ICE Heating Oil
Natural Gas (Henry Hub) Last-day Financial	Tin
E-mini Crude Oil	Brent Oil
Natural Gas (Henry Hub) Penultimate Financial	Robusta Coffee - 10 Tonne
Chicago Ethanol (Platts)	White Sugar
Palladium	

# Component Candidate Screening Review (Cont.)

*None of the candidates tested completely satisfy all of the components of the eligibility criteria:*

- RPDW: at least 1% for a Contract that is not included in S&P GSCI
- TDVT: at least US\$ 15 billion for Contracts not represented in S&P GSCI  
at least US\$ 30 billion for Contracts already represented in S&P GSCI
- TQT: at least 25% for Contracts already represented in S&P GSCI
- TVM Lower Level: 30 for Contracts not represented in S&P GSCI
- TVM Upper Level: 200 for Contracts already represented in S&P GSCI

# Commodity Index Launch Count Summary

## INDEX LAUNCH COUNT - OCT 24, 2016 TO SEP 13, 2017

TOTAL COMMODITY INDEX LAUNCHES - 154			
Dow Jones Commodity Index	111	Natural Gas	9
Excess Return	64	Wheat	9
Total Return	62	Tin	9
BM&F	54	Gold	8
Inverse	39	Zinc	8
Enhanced	33	Nickel	8
Leveraged	29	Coffee	6
Spot Return	28	North American Copper	4
Soybeans	16	Dynamic Roll	3
Crude Oil	13	Brent Crude Oil	3
Copper	12	Heating Oil	3
Corn	9	Lean Hogs	3
Live Cattle	9	Silver	2

# Commodity Index Launch Count Summary Cont.

- 27 DJCI Enhanced Launches

Dow Jones Commodity Index Enhanced	Dow Jones Commodity Index Heating Oil Enhanced TR
Dow Jones Commodity Index Enhanced ER	Dow Jones Commodity Index Lean Hogs Enhanced
Dow Jones Commodity Index Enhanced TR	Dow Jones Commodity Index Lean Hogs Enhanced ER
Dow Jones Commodity Index Brent Crude Enhanced	Dow Jones Commodity Index Lean Hogs Enhanced TR
Dow Jones Commodity Index Brent Crude Enhanced ER	Dow Jones Commodity Index Live Cattle Enhanced
Dow Jones Commodity Index Brent Crude Enhanced TR	Dow Jones Commodity Index Live Cattle Enhanced ER
Dow Jones Commodity Index Corn Enhanced	Dow Jones Commodity Index Live Cattle Enhanced TR
Dow Jones Commodity Index Corn Enhanced ER	Dow Jones Commodity Index Natural Gas Enhanced
Dow Jones Commodity Index Corn Enhanced TR	Dow Jones Commodity Index Natural Gas Enhanced ER
Dow Jones Commodity Index Crude Oil Enhanced	Dow Jones Commodity Index Natural Gas Enhanced TR
Dow Jones Commodity Index Crude Oil Enhanced ER	Dow Jones Commodity Index Wheat Enhanced
Dow Jones Commodity Index Crude Oil Enhanced TR	Dow Jones Commodity Index Wheat Enhanced ER
Dow Jones Commodity Index Heating Oil Enhanced	Dow Jones Commodity Index Wheat Enhanced TR
Dow Jones Commodity Index Heating Oil Enhanced ER	

# Commodity Index Launch Count Summary Cont.

- 30 DJCI Inverse & Leveraged Launches

Dow Jones Commodity Index Aluminum 2X Inverse ER	Dow Jones Commodity Index Zinc 2X Inverse TR
Dow Jones Commodity Index Aluminum 2X Inverse TR	Dow Jones Commodity Index Zinc 2X Leveraged ER
Dow Jones Commodity Index Aluminum 2X Leveraged ER	Dow Jones Commodity Index Zinc 2X Leveraged TR
Dow Jones Commodity Index Aluminum 2X Leveraged TR	Dow Jones Commodity Index Soybeans 2X Inverse ER
Dow Jones Commodity Index Aluminum Inverse ER	Dow Jones Commodity Index Soybeans 2X Inverse TR
Dow Jones Commodity Index Aluminum Inverse TR	Dow Jones Commodity Index Soybeans 2X Leveraged ER
Dow Jones Commodity Index Copper 2X Inverse ER	Dow Jones Commodity Index Soybeans 2X Leveraged TR
Dow Jones Commodity Index Copper 2X Inverse TR	Dow Jones Commodity Index Natural Gas 2X Inverse ER
Dow Jones Commodity Index Copper 2X Leveraged ER	Dow Jones Commodity Index Natural Gas 2X Inverse TR
Dow Jones Commodity Index Copper 2X Leveraged TR	Dow Jones Commodity Index Natural Gas 2X Leveraged ER
Dow Jones Commodity Index Nickel 2X Inverse ER	Dow Jones Commodity Index Natural Gas 2X Leveraged TR
Dow Jones Commodity Index Nickel 2X Inverse TR	Dow Jones Commodity Index 2X Leverage Crude Oil Enhanced ER
Dow Jones Commodity Index Nickel 2X Leveraged ER	Dow Jones Commodity Index 2X Leverage Crude Oil Enhanced TR
Dow Jones Commodity Index Nickel 2X Leveraged TR	Dow Jones Commodity Index Inverse Crude Oil Enhanced ER
Dow Jones Commodity Index Zinc 2X Inverse ER	Dow Jones Commodity Index Inverse Crude Oil Enhanced TR

# Commodity Index Launch Count Summary Cont.

- 54 Dow Jones/BM&F Commodity Index Launches

Dow Jones/BM&F Commodity Index	Dow Jones/BM&F Commodity Index Mini Crude Oil
Dow Jones/BM&F Commodity Index ER	Dow Jones/BM&F Commodity Index Mini Crude Oil ER
Dow Jones/BM&F Commodity Index TR	Dow Jones/BM&F Commodity Index Mini Crude Oil TR
Dow Jones/BM&F Commodity Index USD	Dow Jones/BM&F Commodity Index Live Cattle USD
Dow Jones/BM&F Commodity Index USD ER	Dow Jones/BM&F Commodity Index Live Cattle ER USD
Dow Jones/BM&F Commodity Index USD TR	Dow Jones/BM&F Commodity Index Live Cattle TR USD
Dow Jones/BM&F Commodity Index Live Cattle	Dow Jones/BM&F Commodity Index Gold USD
Dow Jones/BM&F Commodity Index Live Cattle ER	Dow Jones/BM&F Commodity Index Gold ER USD
Dow Jones/BM&F Commodity Index Live Cattle TR	Dow Jones/BM&F Commodity Index Gold TR USD
Dow Jones/BM&F Commodity Index Gold	Dow Jones/BM&F Commodity Index Corn USD
Dow Jones/BM&F Commodity Index Gold ER	Dow Jones/BM&F Commodity Index Corn ER USD
Dow Jones/BM&F Commodity Index Gold TR	Dow Jones/BM&F Commodity Index Corn TR USD
Dow Jones/BM&F Commodity Index Corn	Dow Jones/BM&F Commodity Index Hydrous Ethanol USD
Dow Jones/BM&F Commodity Index Corn ER	Dow Jones/BM&F Commodity Index Hydrous Ethanol ER USD
Dow Jones/BM&F Commodity Index Corn TR	Dow Jones/BM&F Commodity Index Hydrous Ethanol TR USD
Dow Jones/BM&F Commodity Index Hydrous Ethanol	Dow Jones/BM&F Commodity Index Arabica Coffee BRL
Dow Jones/BM&F Commodity Index Hydrous Ethanol ER	Dow Jones/BM&F Commodity Index Arabica Coffee ER BRL
Dow Jones/BM&F Commodity Index Hydrous Ethanol TR	Dow Jones/BM&F Commodity Index Arabica Coffee TR BRL
Dow Jones/BM&F Commodity Index Arabica Coffee	Dow Jones/BM&F Commodity Index Soybeans BRL
Dow Jones/BM&F Commodity Index Arabica Coffee ER	Dow Jones/BM&F Commodity Index Soybeans ER BRL
Dow Jones/BM&F Commodity Index Arabica Coffee TR	Dow Jones/BM&F Commodity Index Soybeans TR BRL
Dow Jones/BM&F Commodity Index Soybeans	Dow Jones/BM&F Commodity Index Mini Soybeans BRL
Dow Jones/BM&F Commodity Index Soybeans ER	Dow Jones/BM&F Commodity Index Mini Soybeans ER BRL
Dow Jones/BM&F Commodity Index Soybeans TR	Dow Jones/BM&F Commodity Index Mini Soybeans TR BRL
Dow Jones/BM&F Commodity Index Mini Soybeans	Dow Jones/BM&F Commodity Index Mini Crude Oil BRL
Dow Jones/BM&F Commodity Index Mini Soybeans ER	Dow Jones/BM&F Commodity Index Mini Crude Oil ER BRL
Dow Jones/BM&F Commodity Index Mini Soybeans TR	Dow Jones/BM&F Commodity Index Mini Crude Oil TR BRL

# Commodity Index Launch Count Summary Cont.

- 40 S&P GSCI Inverse & Leveraged & 3 S&P GSCI Dynamic Roll Reduced Energy Launches

S&P GSCI Gold 2X Inverse ER	S&P GSCI Copper 2X Leveraged ER
S&P GSCI Gold 2X Inverse TR	S&P GSCI Copper 2X Leveraged TR
S&P GSCI Lead 2X Inverse ER	S&P GSCI Copper 3 Month Forward 2X Leveraged ER
S&P GSCI Lead 2X Inverse TR	S&P GSCI Copper 3 Month Forward 2X Leveraged TR
S&P GSCI Lead 2X Leveraged ER	S&P GSCI Dynamic Roll Reduced Energy
S&P GSCI Lead 2X Leveraged TR	S&P GSCI Dynamic Roll Reduced Energy ER
S&P GSCI Lead Inverse ER	S&P GSCI Dynamic Roll Reduced Energy TR
S&P GSCI Lead Inverse TR	S&P GSCI Natural Gas Enhanced 2X Leveraged ER
S&P GSCI Silver 2X Inverse ER	S&P GSCI Natural Gas Enhanced Inverse ER
S&P GSCI Silver 2X Inverse TR	S&P GSCI Nickel Inverse ER
S&P GSCI Tin 2X Inverse ER	S&P GSCI Nickel Inverse TR
S&P GSCI Tin 2X Inverse TR	S&P GSCI Nickel 2X Leveraged ER
S&P GSCI Tin 2X Leveraged ER	S&P GSCI Nickel 2X Leveraged TR
S&P GSCI Tin 2X Leveraged TR	S&P GSCI North American Copper Inverse ER
S&P GSCI Tin Inverse ER	S&P GSCI North American Copper Inverse TR
S&P GSCI Tin Inverse TR	S&P GSCI North American Copper 2X Leveraged ER
S&P GSCI Wheat 2X Inverse ER	S&P GSCI North American Copper 2X Leveraged TR
S&P GSCI Wheat 2X Inverse TR	S&P GSCI Zinc Inverse ER
S&P GSCI Wheat 2X Leveraged ER	S&P GSCI Zinc Inverse TR
S&P GSCI Wheat 2X Leveraged TR	S&P GSCI Zinc 2X Leveraged ER
S&P GSCI Wheat Inverse ER	S&P GSCI Zinc 2X Leveraged TR
S&P GSCI Wheat Inverse TR	

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