OPTIONS

FUTURES

May Options Review

Open Interest Hits a Record 64 Million Contracts

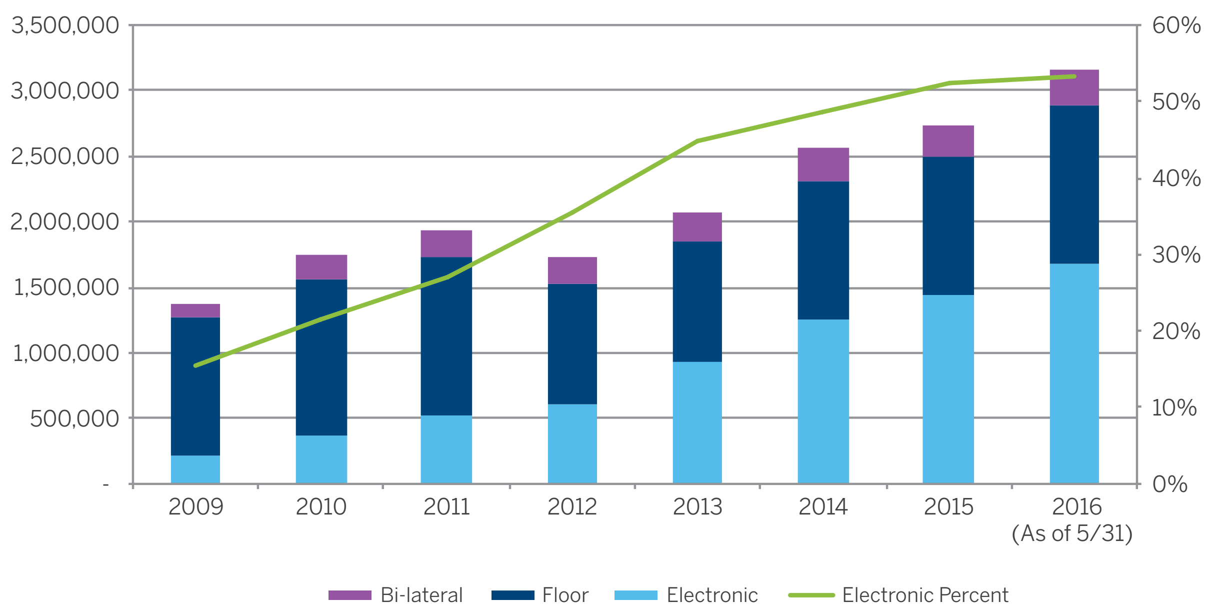
Offering more flexibility (strike, duration, exercise style) and precision, options on futures allow market participants to better customize their risk management strategies to their specific needs.

OPTIONS COMPLEX OVERVIEW

	Electronic Volume		Total Volume		
Asset Class	ADV	(% Change YoY)	ADV	(% Change YoY)	Open Interest*
Total Options	**1,550,430**	**13%**	**2,832,980**	**10%**	**61,709,674**
Interest Rates	576,816	2%	1,579,857	9%	42,876,487
Equity Index	513,484	17%	565,781	18%	5,400,962
Agriculture	214,327	44%	297,638	19%	4,132,298
Energy	144,142	41%	275,034	6%	7,294,050
FX	67,705	-28%	70,047	-28%	806,866
Metals	33,956	51%	44,623	37%	1,199,011

**Open Interest as of 05/31/16*

Options on Futures Monthly Volume By Venue



YOUR BEST RISK MANAGEMENT SOLUTIONS START WITH BETTER OPTIONS

CME Group

Most Active Interest Rate Options – May 2016

Option Product	Symbol	Electronic Volume ADV	Electronic Volume % Change YoY	Total Volume ADV	Total Volume % Change YoY	% Puts
Eurodollars (Quarterly/Serial)	GE	124,543	243%	643,404	133%	57%
1-Year Mid-Curve	GE0	67,064	95%	269,016	32%	52%
2-Year Mid-Curve	GE2	31,960	-28%	130,935	28%	39%
3-Year Mid-Curve	GE3	13,192	9%	43,945	32%	63%
4-Year Mid-Curve	GE4	1,617	-19%	3,314	-18%	46%
10-Year Note	OZN	183,459	-26%	273,224	-38%	51%
5-Year Note	OZF	45,318	11%	69,607	3%	67%
U.S Treasury Bond	OZB	41,553	-5%	48,686	47%	54%
Weekly Treasury Options	ZN1-5, FV1-5, ZB1-5	61,300	-19%	86,869	17%	55%
2-Year Note	OZT	6,713	87%	9,078	78%	71%
Ultra T-Bond	OUB	171	157%	252	-76%	59%
Ultra 10-Year Note	OTN	17	n/a	53	n/a	96%

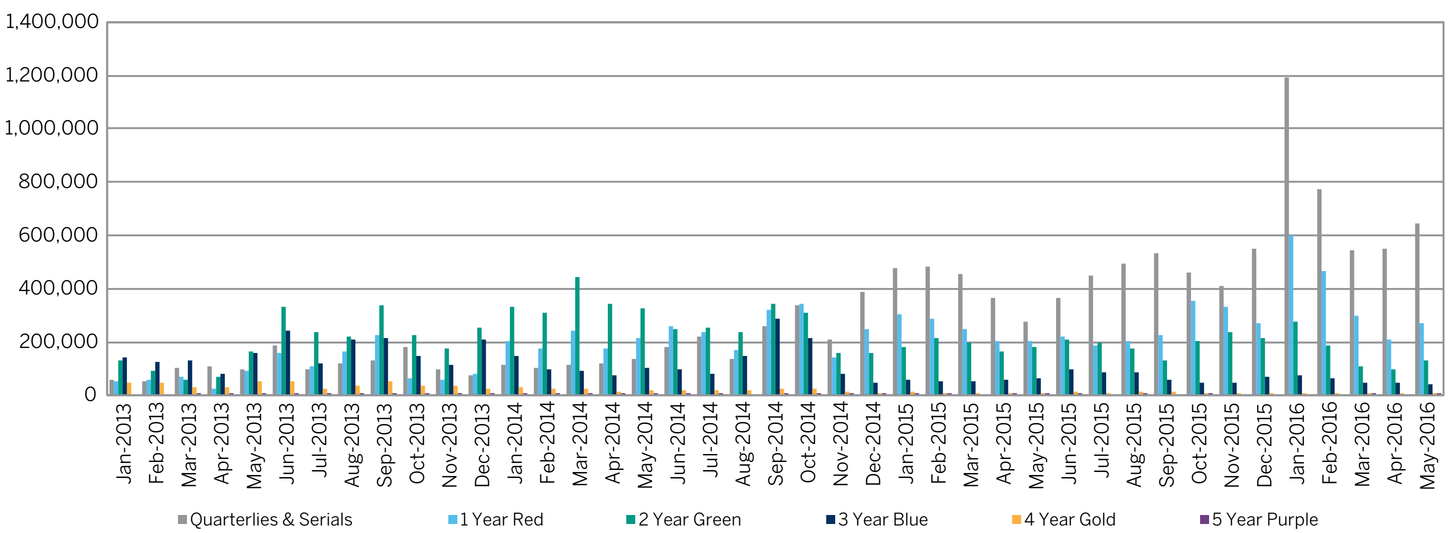
Trends & Highlights

- Interest Rate options complex
  - 1,579,857 interest rate options traded daily in May, +9% YoY
- Eurodollar options
  - 22% of Eurodollar options traded electronically compared to 14% in May 2015
  - Open interest increased to 39.7M contracts
  - June and December 2016 Eurodollar 98.875 puts each have over 1M contracts of open interest
- Treasury options
  - Ultra 10 Options open interest is above 1,000, with trading in Jul and Aug expirations, across nine different strikes

CME Globex Support for Intercommodity Spreads (ICS) in Treasury Options

- Effective Sunday, July 10, CME Globex will support creation of options strategies in select options tenors, allowing customers to improve execution of these relative value trades. For example, buying an FV straddle and selling equivalent TY straddles. **Learn More**

Eurodollar Options Average Daily Volume



EQUITY INDEX OPTIONS

Most Active Index Options – May 2016

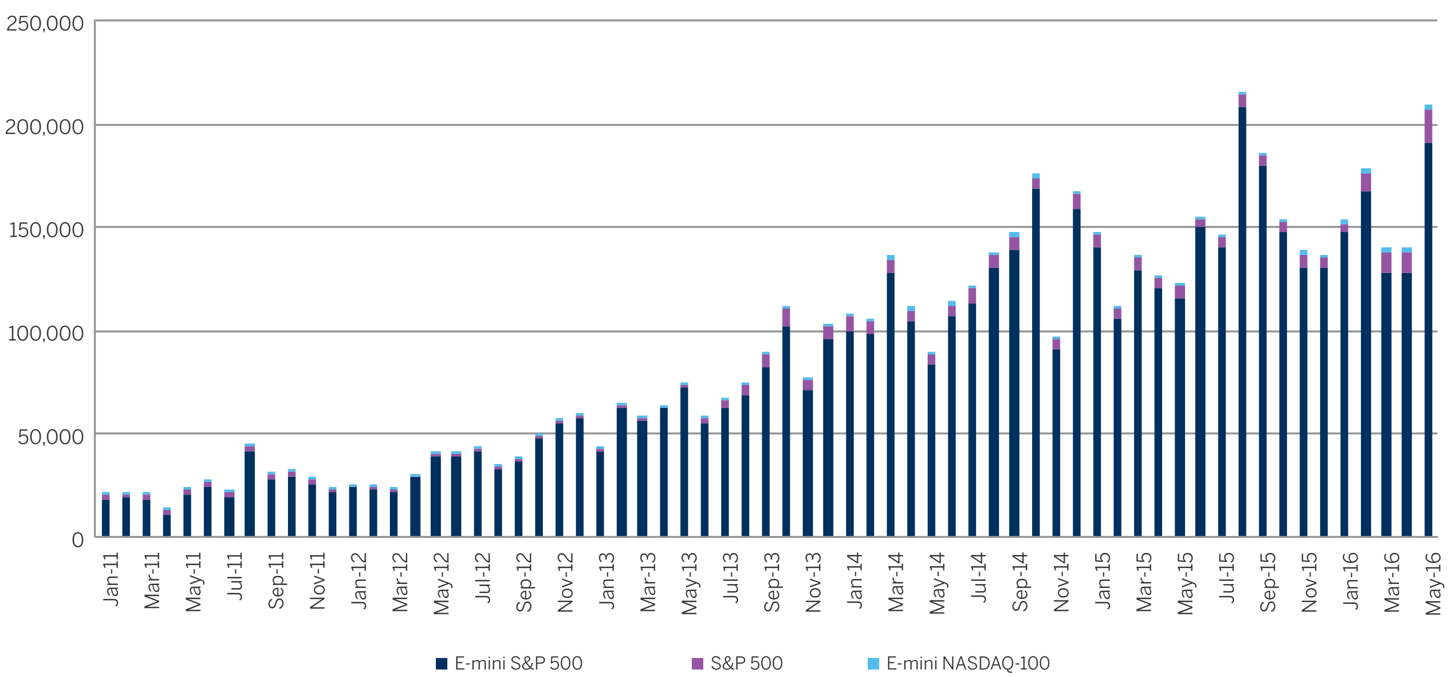
Option Product	Symbol	ADV	% Change YoY	Open Interest*
E-mini S&P 500	ES	250,423	-4%	2,460,719
E-mini S&P 500 Weeklies	EW1, EW2, EW3, EW4	190,197	64%	1,178,667
E-mini S&P 500 End-of-Month	EW	62,700	7%	738,996
S&P 500	SP	28,790	-6%	422,100
S&P 500 Weeklies	EV1, EV2, EV3, EV4	16,244	205%	268,423
S&P 500 End-of-Month	EV	6,268	-3%	243,774
E-mini NASDAQ 100	NQ	7,370	120%	58,415
E-mini NASDAQ 100 Weeklies	QN1, QN2, QN4	3,054	212%	11,712
E-mini NASDAQ 100 End-of-Month	QNE	130	-43%	1,849
E-mini Dow ($5)	YM	528	45%	15,352

**Open Interest as of 5/31/16*

Trends & Highlights

- Record weekly options
  - E-mini S&P 500 weekly options open interest hit a record 1.29M contracts on May 26, which was surpassed on June 2 with 1.35M contracts
  - E-mini S&P 500 weekly options averaged 190,197 contracts per day, +64% YoY
  - S&P 500 weekly options averaged a record 16K contracts per day, +205% YoY
  - E-mini NASDAQ-100 weekly options averaged a record 3K contracts per day, +212% YoY
- Non-U.S. Trading
  - Equity Index options averaged 40,215 contracts per day outside of U.S. trading hours, +47% YoY

Weekly Equity Index Options Average Daily Volume



Most Active NYMEX Options – May 2016

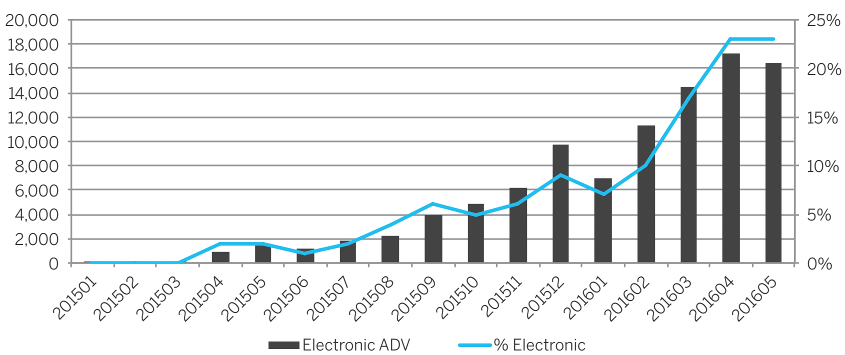
Option Product	Symbol	Settlement	ADV	% Change YoY	% Electronic	Open Interest*
WTI Crude Oil	LO	Physical	162,048	21%	70%	2,697,806
WTI 1 Month CSO	WA	Physical	10,279	-7%	24%	506,903
WTI 1 Month CSO	7A	Financial	5,576	21%	2%	362,675
WTI Average Price options	AO	Financial	1,476	-47%	0%	296,805
WTI Crude Weekly options	LO1-LO5	Physical	923	70%	81%	2,470
Brent Crude Oil Futures-Style option	BZO	Financial	856	N/A	10%	17,253
WTI Crude Oil European options	LC	Financial	807	-46%	0%	91,873
WTI-Brent Spread option	BV	Financial	443	-38%	0%	14,050
Natural Gas European options	LN	Financial	70,811	-15%	23%	2,681,700
Natural Gas options	ON	Physical	9,921	-6%	98%	102,060
Natural Gas 3 Month CSO	G3	Financial	2,396	2,703%	0%	48,535
Natural Gas Daily options	KD	Financial	1,556	41%	0%	0
NY Harbor ULSD	OH	Physical	2,769	-16%	10%	70,732
RBOB Gasoline	OB	Physical	1,853	14%	22%	33,331

Open Interest as of 5/31/16

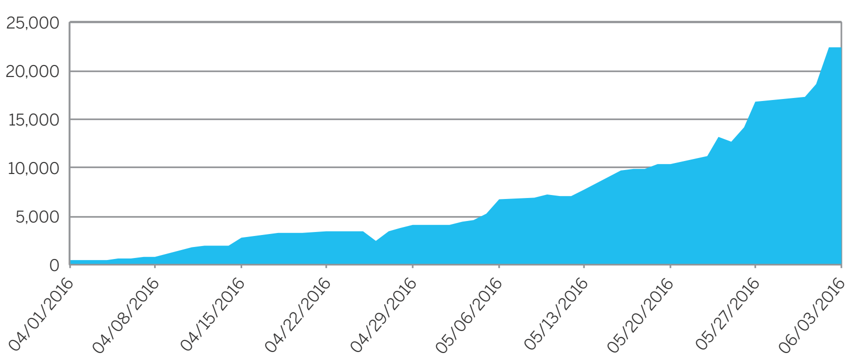
Trends & Highlights

- A record 31% of Natural Gas options traded electronically, compared to 11% in May 2015
- Natural Gas Financial Options (LN) electronic ADV was 16,463 (23% of LN volume)
- Brent Futures-Style options (BZO) open Interest surged 327% to a record 17,253 contracts held at month-end
  - BZO ADV increased 245% MoM to 856 contracts

Natural Gas Financial Option (LN)



BZO Open Interest



AGRICULTURE OPTIONS

Most Active Ag Options – May 2016

Option Product	Symbol	ADV	YoY % Change	% Elec	% Puts	Open Interest*
Soybean	OZS	105,938	68%	81%	51%	1,163,306
Corn	OZC	90,128	13%	68%	49%	1,532,543
SRW Wheat	OZW	28,186	-32%	75%	43%	324,914
Live Cattle	LE	21,964	97%	64%	50%	289,243
Soybean Meal	OZM	15,064	24%	73%	53%	257,264
Soybean Oil	OZL	10,162	20%	49%	51%	184,317
Lean Hogs	HE	8,603	-6%	85%	51%	175,109
Feeder Cattle	GF	1,589	12%	92%	58%	27,182
Class III Milk	DC	1,461	43%	47%	61%	72,442
KC HRW Wheat	OKE	1,305	-31%	60%	46%	46,218

Non-Standard Options – May 2016

Option Product	ADV	YoY % Change	% Elec	% Puts	Open Interest*
Short-Dated New Crop options	7,979	-51%	57%	52%	156,820
Weekly options	2,294	39%	36%	47%	14,970
Calendar Spread options	1,977	21%	1%	54%	65,537

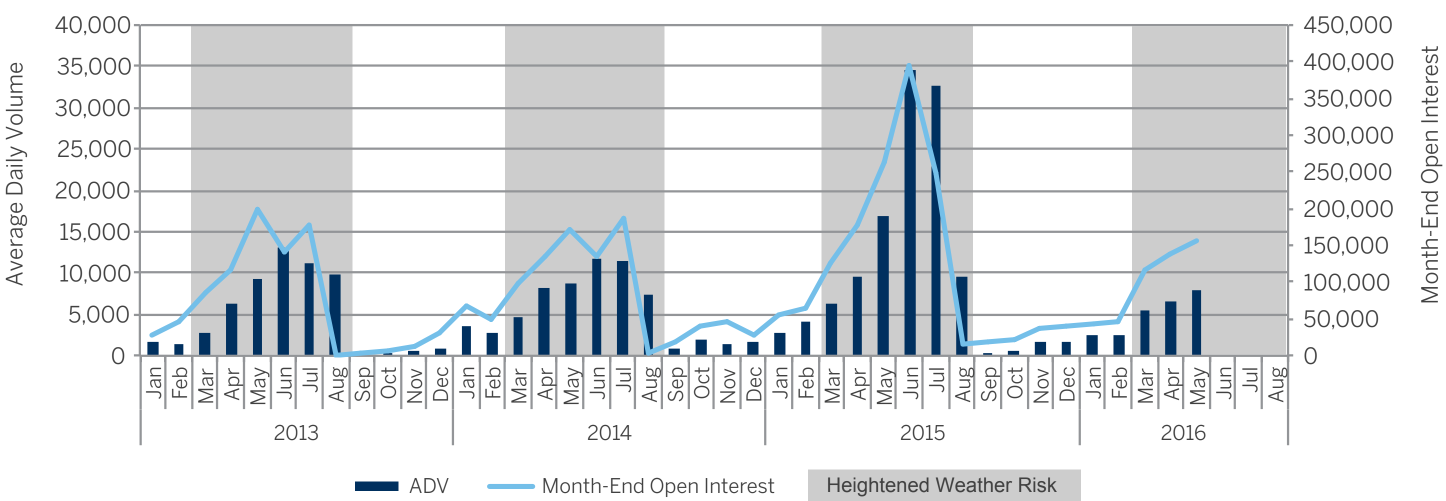
**Open Interest as of 05/31/16*

Trends & Highlights

- Soybean options volume outpaced corn options volume for the 4th consecutive month, and set a single day volume record of 285,978 contracts on 5/10
- Calendar Spread options (CSOs) set a single day volume record of 11,145 contracts on 5/26
- Spreads comprised a record 46% of all electronic ag options volume
- While Short-Dated New Crop options volume is down compared to the 2015 historic levels, May volume was up 19% compared to April

Short-Dated New Crop Options

Seasonal volume spikes during key growing season months



FX OPTIONS

Most Active FX Options – May 2016

Option Product	Symbol	ADV	YoY % Change	% Puts	Open Interest*
EUR/USD	6E	30,606	-47%	56%	311,827
JPY/USD	6J	14,094	2%	50%	173,492
GBP/USD	6B	10,245	-26%	50%	129,075
AUD/USD	6A	8,236	23%	59%	86,554
CAD/USD	6C	6,450	38%	50%	90,837
CHF/USD	6S	345	2%	61%	12,458
MXN/USD	6M	73	25%	56%	1,467

**Open Interest as of 05/31/16*

Trends & Highlights

- May FX options ADV of 70,047 ($8bn notional) +1% MoM, -28% YoY
- Price movement in the energy market, particularly crude oil, drive volume in the commodity currency options
  - AUD options +32% MoM, +23% YoY
  - CAD options +7% MoM, + 38% YoY
- FX options trading during Asia trading hours was up 52% YoY
- Open Interest increased 7% to 806,866 contracts at month-end
- Brexit concerns continue to weigh on the sterling ahead of the EU referendum vote on June 23

G6 American Style Weekly options

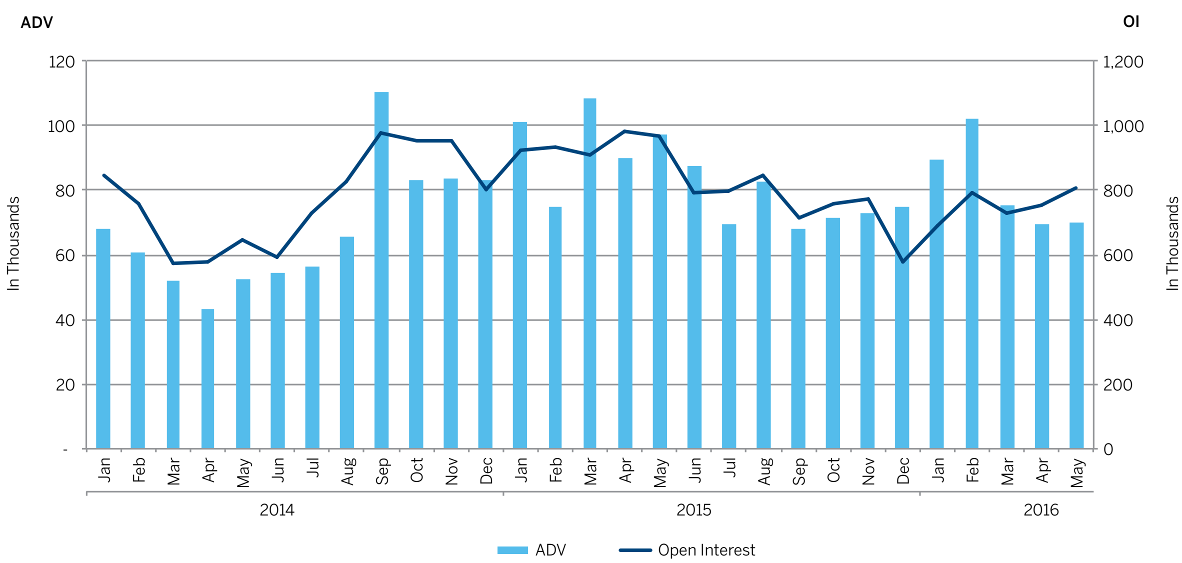
- Weekly JPY/USD options: 2,728 ADV, +155% YoY
- Weekly AUD/USD options: 1,875 ADV, +65% YoY
- Weekly CAD/USD options: 1,345 ADV, +82% YoY

CME Direct Software Enhancements for FX Options

Implied functionality went live on April 25 and ensures maximum liquidity for FX option spreads

- Expanded list of sub-categories in FX products to facilitate faster product selection
- The ability to create User Defined Instruments (UDI) in illiquid Options products
  - Create instruments not yet listed on Globex for any listed contract month
  - Newly created instruments are added to Globex and an RFQ is sent
- **Learn More**

CME FX Options – ADV and Open Interest



METALS OPTIONS

Most Active Metals Options – May 2016

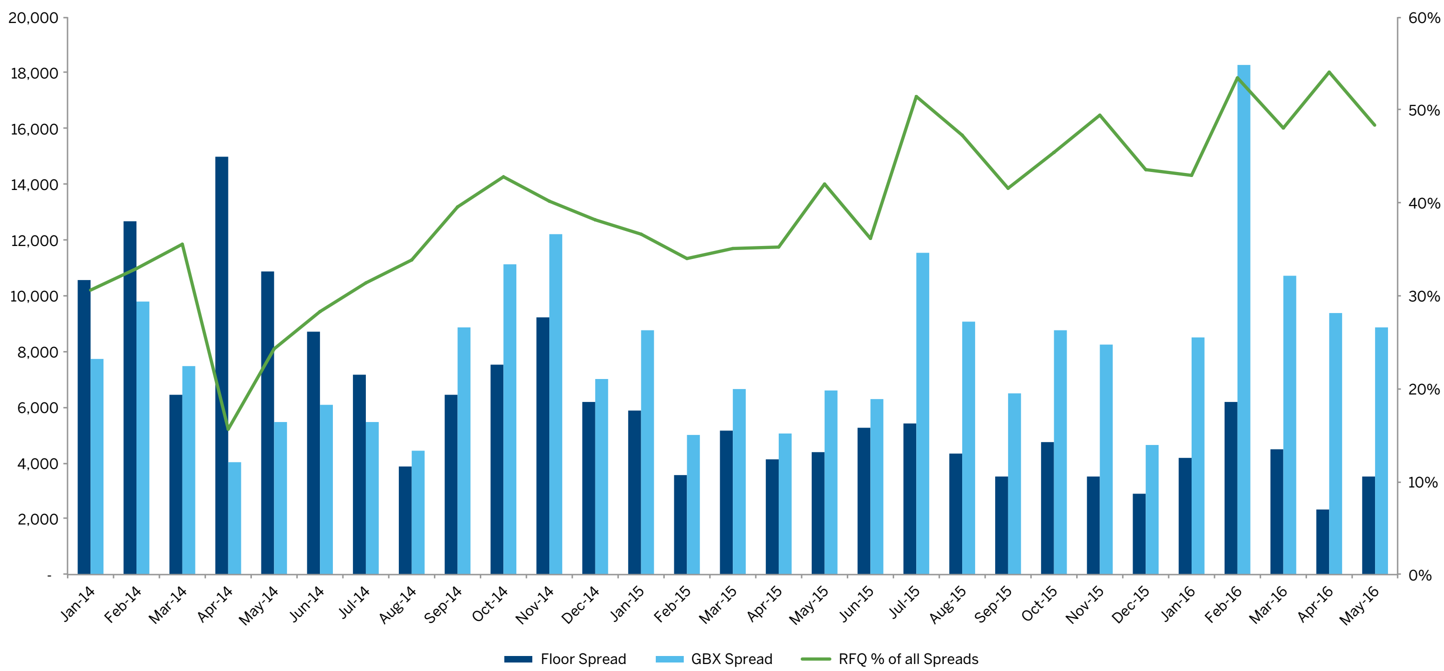
Option Product	Symbol	ADV	% Change YoY	% Electronic	% Puts	Open Interest*
Gold	OG	38,938	46%	76%	43%	1,016,967
Silver	SO	4,826	-7%	82%	49%	133,686
Platinum	PO	268	50%	12%	27%	7,922
Copper	HX	155	170%	84%	54%	3,367
Gold Weeklies	OG1-OG5	191	105%	96%	73%	1,214
Iron Ore	ICT	164	33%	0%	84%	32,920
Palladium	PAO	81	-48%	17%	27%	4,120

**Open Interest as of 05/31/16*

Trends & Highlights

- Overall April ADV was 44,623, +37% YoY
- 76% of Metals options traded electronically on CME Globex
- Gold options volume increased 46% to 38,938 contracts per day
- Weekly Gold options remained strong with 191 lots per day, +105% YoY
- Copper options ADV +170% YoY

Precious Metals Options RFQ Performance



Metals Options Resources

Daily Metals Market Report

Subscribe to receive daily reports recapping the previous day's Metals market activity including, volume, open interest, put/call ratios, and most active contract months/strikes.

cmegroup.com/dailymetals

Liquidity Alerts

Receive real-time notifications when trades are executed and the market is moving in both Base Metal and Precious Metals Options.

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OPTIONS TOOLS AND RESOURCES

QuikStrike Option Pricing & Analysis | **cmegroup.com/quikstrike**

CME Direct | **cmegroup.com/direct**

Request For Quote (RFQ) Functionality | **cmegroup.com/rfq**

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Report Legend

YoY – Unless otherwise specified, YoY compares May 2016 to May 2015
MoM – Compares May 2016 to April 2016

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