## OPTIONS FUTURES

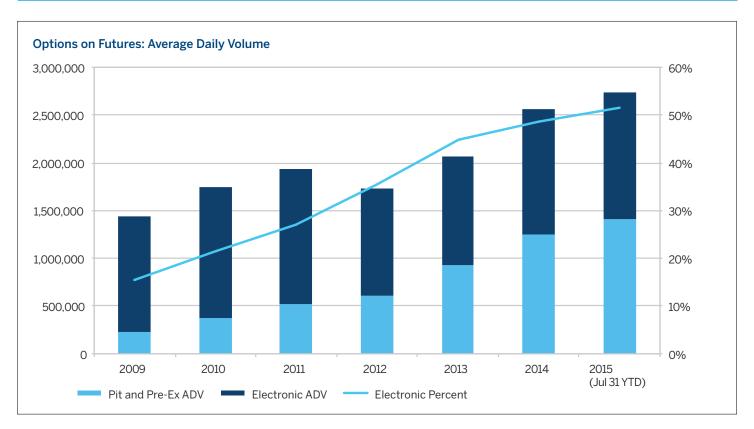
### **July Options Review**

Trading Increases Across All Asset Classes

Offering increased flexibility (strike, duration, exercise style) and precision, options on futures allow market participants to better customize their risk management strategies to their specific needs. Plus, with a record 54.4% of options traded electronically, these products are more accessible than ever.

#### **JULY STATS**

Asset Class	ADV (% Change YOY)	Month-End OI (% Change YoY)	Percent Traded Electronic (Change YoY)
<b>Total Options</b>	2,907,872 (+22%)	50,800,373 (+6%)	54% (+5)
Interest Rates	1,561,753 (+19%)	31,183,000 (+8%)	39% (+6)
<b>Equity Index</b>	585,419 (+28%)	4,584,686 (+25%)	90% (+0)
Energy	292,679 (+26%)	8,747,333 (-1%)	45% (+7)
Agriculture	353,300 (+24%)	3,948,255 (-3%)	61% (+2)
FX	69,620 (+24%)	795,182 (+9%)	97% (+6)
Metals	45,102 (+28%)	1,541,917 (-11%)	73% (+12)



#### INTEREST RATES OPTIONS

Whether you trade on the floor or on the screen, CME Group Interest Rate options give you direct access to an array of products and an ever-expanding pool of liquidity — all in a streamlined and regulated marketplace. With the addition of Weekly Treasury options, the expansion of short dated Eurodollar Mid-Curve options and long-dated (Green) Eurodollar options, CME Group has significantly broadened the range of Interest Rate option opportunities.

#### **Record 21% of Eurodollar Options Traded Electronically**

- Electronic ADV was up 62% YoY, to 193,493 contracts per day (21% electronic vs. 15% electronic in July 2014)
- · Mid-curve options represented 51% of the Eurodollar volume
  - > 61% of Mid-curve volume was done in Puts
  - 2-Year Mid-curve options accounted for 42% of total mid-curve options volume
  - 1-Year Mid-curve options accounted for 39% of total mid-curve options volume
  - 3-Year Mid-curve options accounted for 18% of total mid-curve options volume
- Total Eurodollar Open interest stands at 27.7 million contracts at the end of July, +11% YoY
  - > 65% of open interest is held in Puts

#### **Third Consecutive Record Month for Weekly Treasury Options**

- Weekly Treasury options traded a record 147,707 contracts per day, +111% YoY
  - Weekly 10-Year: 113,531, +131% YoY
    Weekly 30-Year: 15,390 ADV, +32% YoY
    Weekly 5-Year: 18,707 ADV, +102% YoY
- 340,096 and 344,899 contracts traded on July 2 and July 6 respectively, around July Unemployment report.

 Record OI: Ahead of the July Unemployment report, WTO open interest reached 597,433

#### 634,220 Treasury Options Traded Daily, 49% in Puts

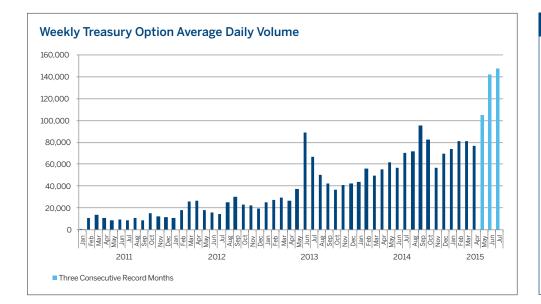
- 10-Year note options: 318,605 ADV, +17% YoY (50% Puts)
- U.S. Treasury Bond: 94,021 ADV, +79% YoY (42% Puts)
- 5-Year note options: 67,375 ADV, -30% YoY (55% Puts)
- 2-Year note options: 6,249 ADV, -11% YoY (51% Puts)
- Ultra T-Bond options: 262 ADV, -52% YoY (56% Puts)

#### **66% of Treasury Options Traded on CME Globex**

- 2-Year: 49% | Down from 54% in July 2014
- 5-Year: 62% | Up from 50% in July 2014
- 10-Year: 63% | Up from 62% from July 2014
- 30-Year: 71% | Down from 76% in July 2014

#### **Fed Fund Options**

- Fed Fund options averaged 692 contracts per day in July, +246% YoY
- YTD ADV is 1,391 contracts per day, up nearly 1500% YoY



#### **CME Direct for Interest Rates**

CME Direct is an integrated environment that provides access to all CME Group futures and options markets within the front end-system. With EOS trader being commissioned on October 30, 2015, user must begin migration to CME Direct to ensure seamless access to CME Group markets.

#### CME Direct offers:

- Rapid order entry and trading across multiple accounts.
- View advanced options analytics through an integration with QuikStrike.
- A customizable market activity feed displays RFQ and trade activity in real time.

cmegroup.com/direct

#### **EQUITY INDEX OPTIONS**

With over 523,000 contracts traded daily in 2015, CME Group Equity Index options on futures provide you with flexible, liquid tools to manage global equity exposure and pursue opportunities represented by the world's leading indexes, all from one marketplace. On the floor or on the screen, large-cap to small-cap, short-term weekly, end-of-month to quarterly expirations, our extensive selection of products provides the choices you need to execute a variety of trading strategies.

#### E-mini S&P 500 options

- E-mini S&P 500 options complex: 521,225 ADV, +30% YoY
  - Quarterly & Serial E-mini S&P 500 options: 307,814 ADV, +22% YoY
  - > Weekly E-mini S&P 500 options: 139,766 ADV, +23% YoY
  - > End-of-Month E-mini S&P 500 options: 73,645 ADV, +115% YoY
  - Open Interest in Weekly E-mini S&P 500 options increased 3% YoY to 537,662 contracts
- Spreads comprised 43% of E-mini option volume in June

#### **S&P 500 Options**

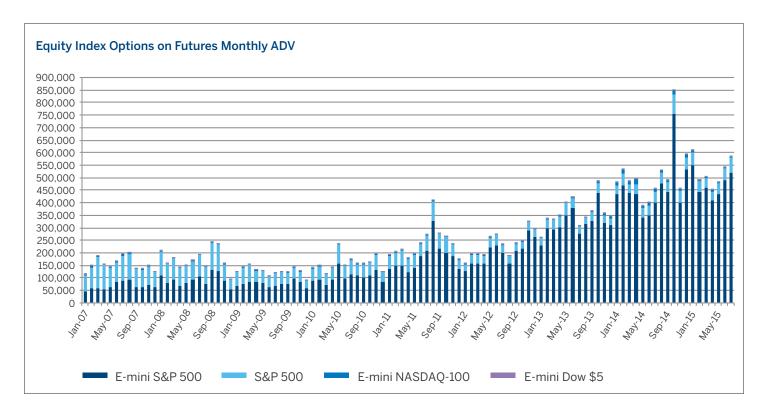
- S&P 500 options: 59,370 ADV, +33% YoY
  - > Weekly S&P 500 options: 5,067 ADV, -23% YoY
  - > S&P 500 End-of-Month options: 7,168 ADV, +194% YoY

#### E-mini NASDAO-100

- E-mini NASDAQ-100 options: 4,530 ADV, -59% YoY
  - > Weekly E-mini NASDAQ-100 options: 1,012 ADV, -47% YoY

#### **July Trading Trends**

- Equity Index options: 64% Puts
  - > E-mini S&P 500 options: 62% Puts
  - > Weekly E-mini S&P 500 options: 67% Puts
  - > End-of-Month E-mini S&P 500 options: 75% Puts
  - > S&P 500 options: 47% Puts
  - > E-mini NASDAQ-100 options: 59% Puts



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#### **ENERGY OPTIONS**

CME Group offers around-the-clock access to the world's benchmark options products among Crude Oil, Natural Gas, and Refined Products. Our diverse options product slate provides the liquidity and open interest that traders need, with the flexibility to buy and sell American-Style, European-Style, Average Price, Calendar Spread, Short-Term, and Futures Strip options on three trading venues.

#### **Energy Options Volume Up for Tenth Consecutive Month**

- Energy options traded 292,679 contracts per day, +26% YoY
- Electronic ADV increased 50% YoY to 131,823 contracts per day
- 45% of volume traded electronically on CME Globex, up from 38% in July 2014
- Open interest in Energy options decreased 1% YoY to 8.7 million at month-end

#### **Crude Oil Options**

- Crude Oil options traded 192,434 lots per day, +41% YoY.
- WTI options: 189,802 ADV, +50% YoY
  - 71% of the LO contract traded electronically on CME Globex, with ADV of 120,606
  - > WTI 1 Month CSO (Physical): 10,156 ADV YTD, +18% YoY
  - > WTI 1 Month CSO (Financial): 5,077 ADV YTD, +48% YoY
  - > Weekly crude oil options (LO1-LO5) traded 426 lots per day

#### **Natural Gas Options**

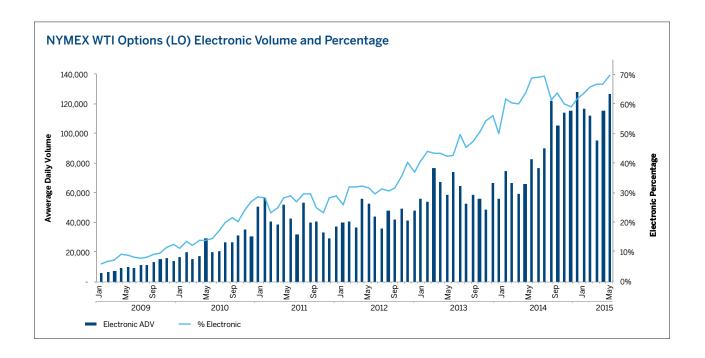
- Natural Gas European Options (LN) had record activity on screen with 1,805 lots per day on CME Globex
- 34% of on screen natural gas options traded as spreads via RFO
- Daily Natural Gas options (KD): 887 ADV, about equal with last year
- Over 10% of Natural Gas options were executed on CME Globex

#### **Refined Product Options**

- ULSD Physical option (OH): 1,608 ADV, -49% YoY
- RBOB option: 2,028 ADV, +204% YoY
- 14% of Refined Product options were executed on CME Globex

#### **Energy Options on CME Direct**

- CME Direct offers superior Energy options execution functionality
- Participation continues to grow with strong Globex energy option volume through CME Direct in July
- Learn more at cmegroup.com/direct



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#### **AGRICULTURE OPTIONS**

CME Group's diverse selection of Agricultural Options offers market participants the flexibility they need for effective risk management, as well as the ability to execute volatility strategies or event-driven trades. Our portfolio of Grain, Oilseed, Livestock, and Dairy products provides an array of opportunities from outright and spread options, including Calendar and Intercommodity Spread Options, to short-term alternatives such as Weekly and Short-Dated New Crop Options.

#### July Overview - Ag Options Up for Eleventh Consecutive Month

- 353,300 Agricultural options traded per day, +24% YoY
- 60% of Grain/Oilseed options were executed electronically in July, 70 % in Livestock
- Record Volumes
  - > 7/1/2015 SRW Wheat options traded 109,105 contracts

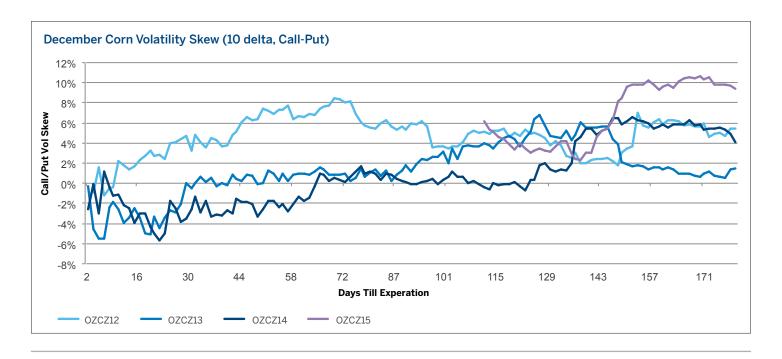
<b>Option Product</b>	June ADV	ADV % Change YoY	% Puts
Corn	155,052	+46%	51%
Soybean	77,274	-2%	47%
SRW Wheat	37,997	+67%	59%
Live Cattle	12,189	-49%	51%
Lean Hogs	11,605	-21%	61%
Soybean Meal	9,237	-14%	53%
Soybean Oil	8,248	+11%	44%
Feeder Cattle	1,790	+39%	54%
Class III Milk	1,119	-19%	45%
KC HRW Wheat	1,019	-105%	67%

#### **Record Trading in Short-Dated New Crop (SDNC) options**

- SDNC options traded 32,634 contracts per day in July, +188% YoY. Second month in a row with ADV over 30K
  - > SDNC Corn options: 22,885 ADV
  - > SDNC Soybean options: 8,299 ADV

#### **Weekly Ag Options**

 Weeklies traded 2,547 contracts per day in July with Corn accounting for 68% of the volume



#### **FX OPTIONS**

Trade FX options in the world's premier FX marketplace. CME Group's flexible products on major and emerging-market currencies provide greater capital efficiency, security, and unparalleled opportunity for managing FX exposure. That includes 31 FX options based on 22 currencies, offering enhanced trading versatility and the security of one of the world's largest central counterparty (CCP) clearinghouses to mitigate counterparty risk.

#### **CME FX Options Up for Twelfth Consecutive Month**

- CME FX Options ADV of 69,620 which is +24% vs. July 2014, +63% YTD YoY
- 97% of FX options traded electronically on CME Globex
- Open Interest increased 9% YoY to 795,182 contracts

#### **EUR and AUD Options Lead the Way**

- EUR/USD options traded 38,507 contracts per day, +78% YoY
- JPY/USD options: 10,191 ADV, -7% YoY
- AUD/USD options: 7,221 ADV, +47% YoY
- GBP/USD options: 6,793 ADV, -45% YoY
- CAD/USD options: 6,405 ADV, +15% YoY
- CHF/USD options: 415 ADV, -50% YoY

#### **Weekly FX American-Style Options**

- 15,585 weekly options traded daily, +29% YoY
- EUR weekly: 8,932 ADV, +135% YoY
- AUD weekly: 1,998 ADV, +125% YoY
- CAD weekly: 1,823 ADV, +4% YoY
- JPY weekly: 1,464 ADV, Flat YoY
- GBP weekly: 1,259 ADV, -69% YoY
- CHF weekly: 109 ADV,+3% YoY

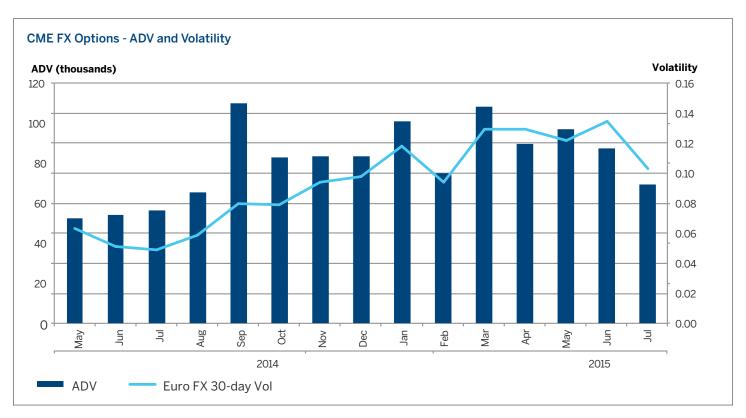
#### **Trading Trends**

- EUR/USD: 55% Puts
- JPY/USD: 50% Puts
- GBP/USD: 52% Puts
- CAD/USD: 51% Puts
- AUD/USD: 57% Puts
- CHF/USD: 49% Puts

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# Voted Best FX Options Platform

Profit & Loss Readers' Choice Awards



#### **METALS OPTIONS**

The CME Group COMEX and NYMEX metals options suite gives market participant's access to Short-Term Gold Options as well monthly Gold, Silver, Platinum, Palladium, Iron Ore, and Copper Options. All of our products are traded on three venues — CME Globex, CME ClearPort, and the New York trading floor, allowing for maximum access to liquidity for investors whenever they need it.

#### **Record Electronic Trading in Metals Options**

- Metals options: 45,102 ADV, +28% YoY
- A record 73% of Metals options traded electronically on CME Globex, compared to 61% in July 2014
- Total open interest in Metal options was 1,836,141 at month-end

#### **Precious Metals**

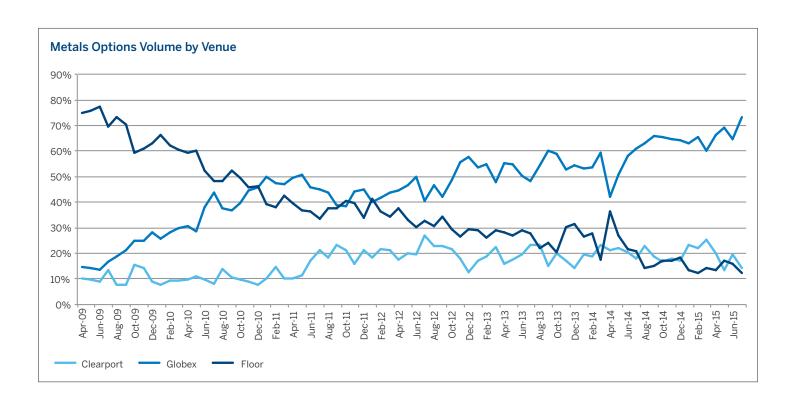
- Gold options: 38,451 ADV, +36% YoY, +41% MoM
  - > Open interest for gold options is split 78:22 (calls vs puts)
- Silver options: 5,516 ADV, +4% YoY, -2% MoM
  - > Open interest for Silver options is split 61:39 (calls vs puts)
- Platinum options: 177 ADV, -65% YoY
- Palladium options: 124 ADV, -79% YoY

#### **Ferrous & Base Metals**

- Iron Ore options: 660 ADV, +1762% YoY
- Copper options: 92 ADV, -35% YoY
  - As of May 1, 2015 CME Group now has a fee waive in place on Copper options for COMEX members as well as a fee reduction for non-members. With these new fees, we are now the most cost-effective clearing venue for your Copper options trading needs. These contracts are listed for trading on CME Globex and the NYMEX trading floor and for submission for clearing through CME ClearPort.

#### **Weekly Metals Options**

- Weekly Gold options traded 74 lots per day in July
- Offer greater flexibility to manage the risk associated with government economic data, world events and other market-moving factors, with the added benefit of shorter expirations to gain market exposure at a lower premium.
- · Available for Gold, Silver, and Copper options



#### THREE WAYS TO ACCESS

#### On CME Globex

The recent growth of electronic options markets has led to deeper, more diverse markets with easier entry and exit points, and more streamlined access for execution and clearing.

- 1,415,277 in daily liquidity
- Speed, transparency, access and liquidity of electronically traded markets
- Two-sided markets supported by dedicated market makers
- Request for Quote (RFQ) Allows participants to get competitive quotes, even during times of low market activity.
- CME Direct's complex options functionality allows you to send Request for Quotes on CME Globex.

#### On the Floor

- 1,093,623 in daily liquidity
- · Quick setup and nearly instant access to liquidity
- Voice brokers and floor traders facilitate price discovery and efficient execution on your behalf

#### **Bilaterally**

- 232,298 in daily liquidity
- · Control and convenience of privately negotiated trades
- · Security and counterparty credit risk mitigation of CME Clearing

#### **OPTIONS TOOLS AND RESOURCES**

#### **Options Product Page**

Analytic tools, product information, education, research, tools and resources

#### cmegroup.com/options

#### **QuikStrike Option Pricing & Analysis**

Access current and historical volatility (by strike), concise volume and open interest information, delta sheets, options pricing analysis, spread analysis & risk graphs.

#### cmegroup.com/quikstrike

#### **Equity Index Volatility Surface Reports**

View the volatility surface of all E-mini S&P 500 options and all E-mini NASDAQ-100 options currently listed for trading. **cmegroup.com/volsurface** 

#### **Electronic Options Spotlight**

A quarterly snapshot of electronic trends and opportunities **cmegroup.com/electronicoptions** 

#### **Options on Futures Guide**

Introductory guide to options and listing of most actively traded options contracts

#### cmegroup.com/optionsguide

#### **Tabb Group Report**

Options on Futures Primed for Expansion

#### cmegroup.com/optionsreport

#### **Report Legend**

**YoY** – Unless otherwise specified, YoY compares June 2015 to June 2014

MoM - Compares June 2015 to May 2015

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