

# 2Q 2018 Earnings Commentary

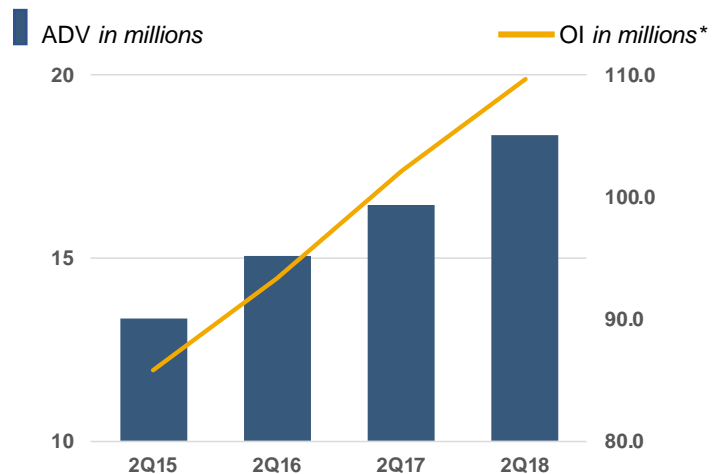


## 2Q 2018 Summary

- 2Q18 average daily volume (ADV) reached 18.4 million contracts, up 12% versus 2Q17, with record Agricultural ADV of 1.7 million contracts and double-digit year-over-year growth across 5 of 6 product lines; second highest quarterly ADV following record 1Q18
- Open Interest (OI) at the end of 2Q18 was 115 million contracts, up 2% from the end of June 2017 and up 6% from year-end 2017; if including only benchmark product areas within Energy, OI was up 7% year-over-year and 9% year-to-date through 2Q18
- Continuing to deepen liquidity and add diverse customer participation as evidenced by reaching record Large Open Interest Holders (LOIH) across Interest Rates, Energy and Agricultural product lines during the quarter
- Global growth continued with 30% growth in ADV from Asia and 9% growth in ADV from Europe during 2Q18; double-digit year-over-year growth in non-U.S. ADV across 5 of 6 product lines
- 2Q18 electronic options ADV grew 4% to 2.3 million contracts, with 28% growth in both Agricultural and Metals electronic options, and 26% growth in Treasury electronic options; 2Q18 electronic options revenue grew 16% compared with 2Q17, with 64% of 1H18 options traded electronically, versus 59% through 1H17
- Invested in core business growth by optimizing products/services to address customer needs
- Strategic execution led to over 40% growth in both adjusted net income and adjusted diluted EPS to \$591.4 million and \$1.74, respectively

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\* Represents quarterly adjusted operating expense excluding licensing and other fee agreements which is the basis for expense guidance

• A reconciliation of the non-GAAP financial results mentioned to the respective GAAP figures can be found within the Reconciliation of GAAP to Non-GAAP Measures chart at the end of the financial statements and earnings presentation materials

• All growth rates included in this document refer to 2Q18 versus 2Q17 unless otherwise noted, any information labeled as “to date in 2018 or 3Q18” is through July 23, 2018, and all global data/statistics exclude the open outcry venue activity

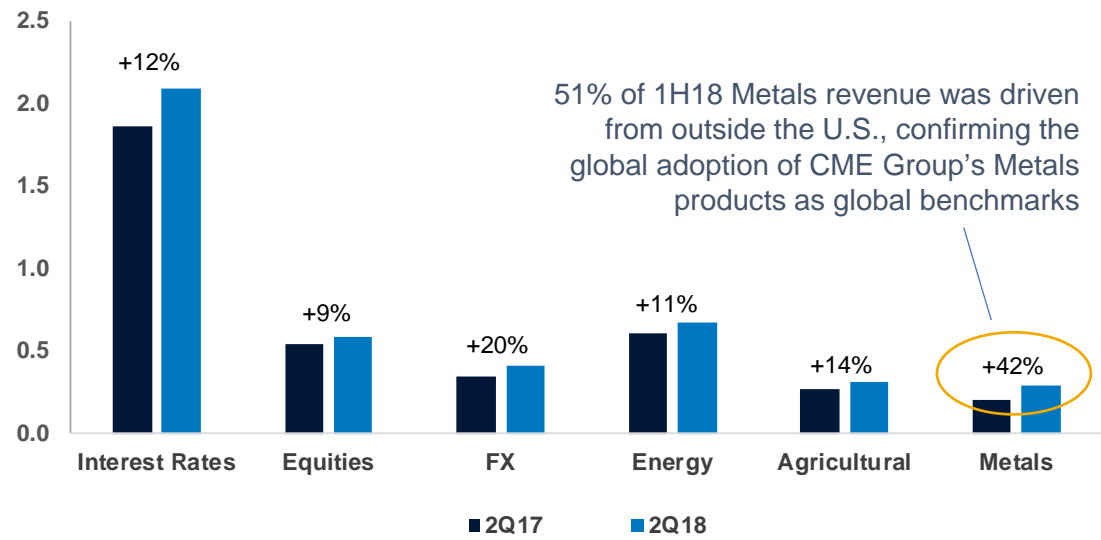
• OI within the chart includes only benchmark product areas within Energy (Crude Oil, Natural Gas and Refined Products)

# 2Q 2018 Highlights

**Continuing to increase global activity** with non-U.S. ADV up 14% to 4.4 million contracts, compared with 2Q17

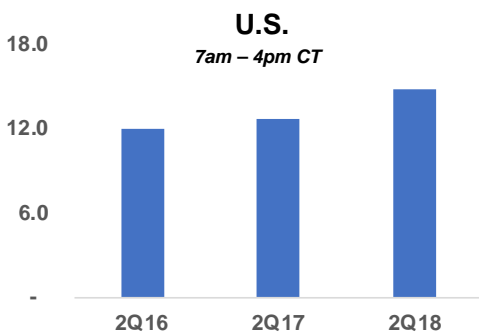
- Double-digit year-over-year growth for 5 of 6 product lines, ranging between 11% and 42%
- 2Q18 Asian ADV up 30% to 871,000 contracts, with particular strength in Equity Index, Metals and Energy products growing 77%, 50% and 41% respectively
- 2Q18 European ADV up 9% to 3.3 million contracts

**Non U.S. ADV in millions**

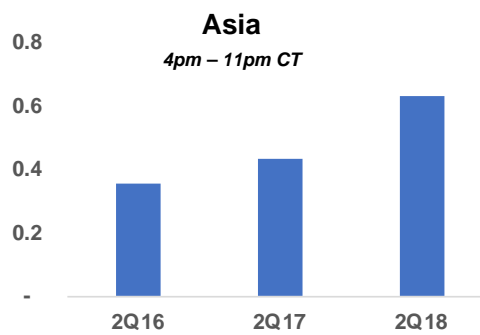


51% of 1H18 Metals revenue was driven from outside the U.S., confirming the global adoption of CME Group's Metals products as global benchmarks

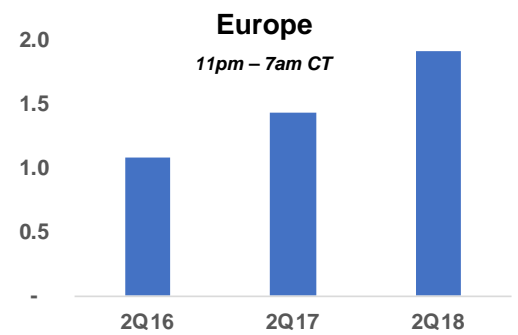
**ADV by Time Zone in millions**



- ADV during U.S. trading hours up 16% in 2Q18

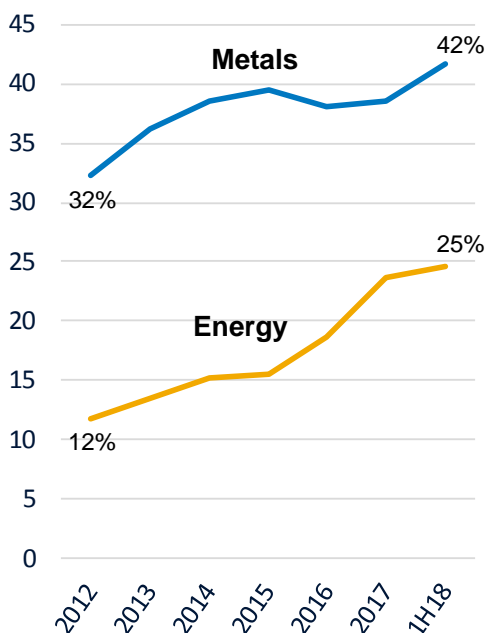


- ADV during Asian trading hours up 45% in 2Q18



- ADV during European trading hours up 34% in 2Q18

**Non U.S. ADV Proportion of Total ADV**



## Strong global growth within Options during 2Q 2018

with non-U.S. options ADV up 16% compared with 2Q17

- 1H18 non-U.S. options ADV is up 39% compared with 1H17
- 2Q18 options ADV ranked #1 for the following individual products across the regions:

### North America

- WTI Crude Oil
- 2-Yr Treasury Note
- Long-Term U.S. Treasury Bond
- E-mini NASDAQ 100
- High Grade Copper
- Platinum
- Soft/Hard Red Winter Wheat

### Europe

- WTI Crude Oil
- High Grade Copper
- Platinum
- Soft/Hard Red Winter Wheat

### Latin America

- 2-Yr Treasury Note
- High Grade Copper
- Soft Red Winter Wheat

### Asia

- E-mini NASDAQ 100
- Soft Red Winter Wheat

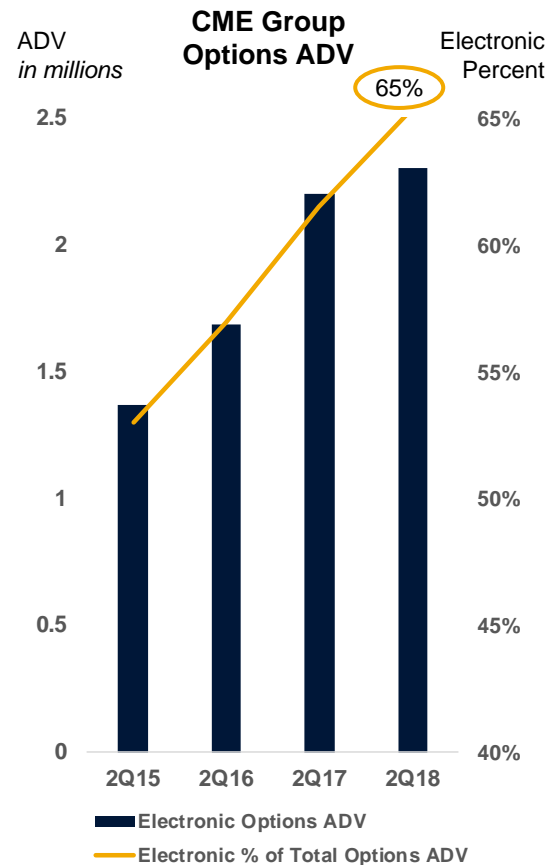
## 2Q 2018 Highlights

### Electronic Options activity continues to progress

- Continued investment in our options technology drove 1H18 electronically traded options to 64% of total options ADV versus 59% in 1H17
  - Largest gains in electronic options activity (1H18 vs. 1H17) in Interest Rates (from 46% to 51%) and Energy (from 62% to 67%)
- 2Q18 options ADV was 3.5 million contracts, down 2% from 2Q17, but the 4<sup>th</sup> highest quarterly ADV on record; electronic options ADV was 2.3 million contracts, up 4%
- Particular strength in 2Q18 for Agricultural and Metals options products, growing 24% and 23% respectively, year-over-year
  - Record 2Q18 electronic Agricultural options ADV of 252,000 contracts, up 28%
- Treasury options ADV was 898,000 contracts in 2Q18, up 25% from 2Q17, with electronic Treasury options ADV of 725,000 contracts, up 26%
- 2Q18 E-mini S&P 500 options ADV was 602,000 contracts, up 1% from 2Q17, including 24% growth in the Monday weekly expiries and 6% growth in the Wednesday weekly expiries

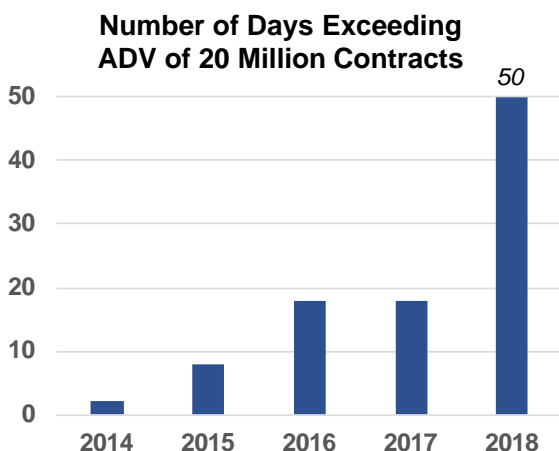
#### 1H18 vs. 1H17 Growth

Product Line	Options ADV
Equities	26%
Metals	26%
Agricultural	23%
Interest Rates	13%
FX	12%
Energy	-8%
Total	14%



- 2Q18 options revenue increased 2% versus 2Q17 with revenue from electronic options growing 16%, led by Agricultural options and Metals options growing 39% and 31% respectively
- Non-U.S. options revenue grew 19.5% 1H18 vs. 1H17, with Asia up 20% and Europe up 19%

### 2Q18 ADV was the second highest quarterly ADV following the record 1Q18; strong 1H18 performance is evidence of market participants continuing to turn to CME Group's diverse liquid products to manage risk



- During 1H18, 50 trading days exceeded 20 million contracts, compared to 34 trading days exceeding 20 million contracts across all of 2017
- CME Group daily volume surpassed 50 million contracts for the first time on May 29, 2018
  - Interest Rate futures and options reached all-time daily volume record of 39.6 million contracts
- Double-digit ADV growth across Metals, FX, Agricultural, Equity Index and Interest Rate products during 2Q18
- WTI Crude Oil futures (CL) OI reached a record 2.7 million contracts in mid-May, and reached the second highest daily volume of 2.4 million contracts on June 22, 2018

Note – graph represents YTD through the same period each year (1H)

## 2Q 2018 Highlights

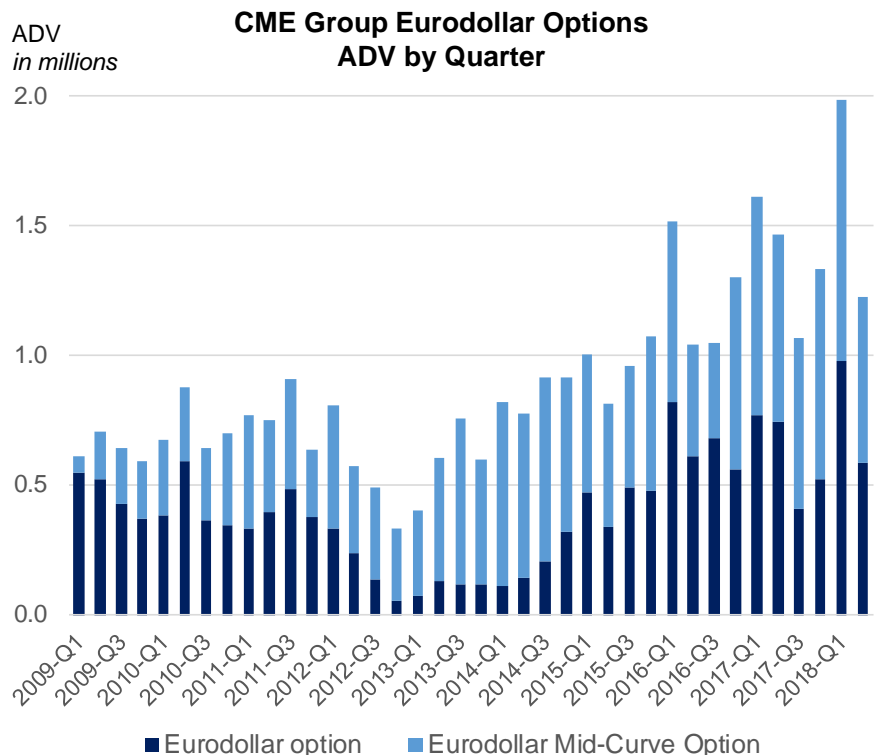
- A dynamic set of market conditions, including record amounts of soybeans planted in the U.S., adverse weather conditions in Argentina, and concerns related to potential trade war repercussions for U.S. Agriculture, contributed to a backdrop for heightened risk management needs during 2Q18 in CME Group Agricultural products
  - 2Q18 Agricultural ADV reached a record 1.7 million contracts, up 16%; June 2018 Agricultural ADV reached a record 2 million contracts, up 15%
  - Agricultural electronic options ADV increased 28% to a record 252,000 contracts in 2Q18
  - Quarterly ADV records were achieved in Corn futures and Soybean futures, both overall and across all regions; Soft and Hard Red Winter Wheat futures and options ADV reached record levels for the quarter
  - Total Agricultural futures and options surpassed 10 million contracts of OI on June 19<sup>th</sup> primarily driven by Corn which surpassed 2 million contracts
  - Achieved all-time daily volume record of 3.2 million contracts on June 19<sup>th</sup>
  - Agricultural futures LOIH reached an all-time high of 3,720 on May 29, 2018

### Invested in core business growth by optimizing products/services to address customer needs

#### Although new products take time to develop, recent new product launches and product extensions continue to progress steadily

- Successful launch of Secured Overnight Financing Rate (SOFR) futures on May 7, 2018
  - The new contract is being supported by a diverse base of market participants and over 100,000 contracts have traded since the May 7<sup>th</sup> launch, with a record 5,043 contracts traded on June 29<sup>th</sup>. The first block trade occurred in early July and spread trading has increased between 1-Month SOFR and Fed Funds. OI is steadily climbing, surpassing 20,000 contracts in mid-July
  - Importantly, the contract market performed remarkably in absorbing and reflecting the impact of SOFR's quarter-end volatility, similar to the volatility that money market practitioners are used to seeing in the U.S. Treasury repo rates at month-ends and quarter-ends

- Launched a new 5<sup>th</sup> quarterly Eurodollar Mid-curve option on January 8<sup>th</sup>, as well as 3-month, 6-month and 9-month Eurodollar Term Mid-Curve options on June 11<sup>th</sup>, bringing greater granularity to our Eurodollar options products. Previously, when the first quarterly yearly Mid-Curve expired, there was no longer a way to trade shorter-dated options on that underlying. Term Mid-Curves address this gap, offering short-dated options on the subsequent second, third and fourth quarterly Eurodollar futures contracts. Since their recent launch, these new products have traded over 400,000 contracts. These are additions to the historical innovative Eurodollar mid-curve option suite which has been important to the entire mid-curve complex



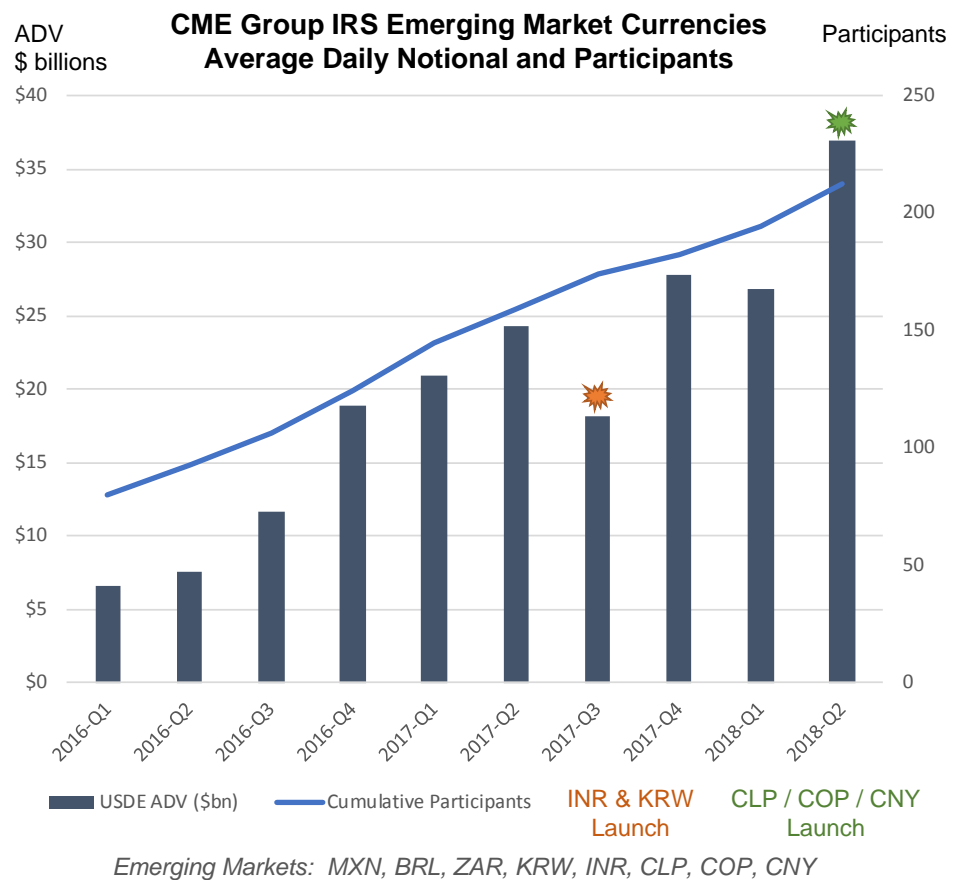
## 2Q 2018 Highlights

### Although new products take time to develop, recent new product launches and product extensions continue to progress steadily - *continued*

- CME Group has continued to bring innovation and efficiency to its marketplaces with FX Link as a great example. Following its late 1Q18 launch, there are now 16 active participants, including 2 banks. Additionally, 6 futures commission merchants (FCMs) and 6 FX prime brokers (FXPBs) are supporting the project. ADV is steadily growing, with a record daily volume near 10,000 round turns on May 25<sup>th</sup>, and liquidity continues to improve
- Monthly FX futures launched in 2017, offering greater granularity in the FX curve, and have achieved 9,000 contracts ADV to date this year, plus 3,000 contracts in additional quarterly contracts traded as a spread to the monthlies
- Basis Trade at Index Close (BTIC) on our Equity Index product volumes reached over 38,000 contracts in 1H18, up 196% from 2017; we launched Trade at Cash Open (TACO) in mid-May and they have started trading actively as well

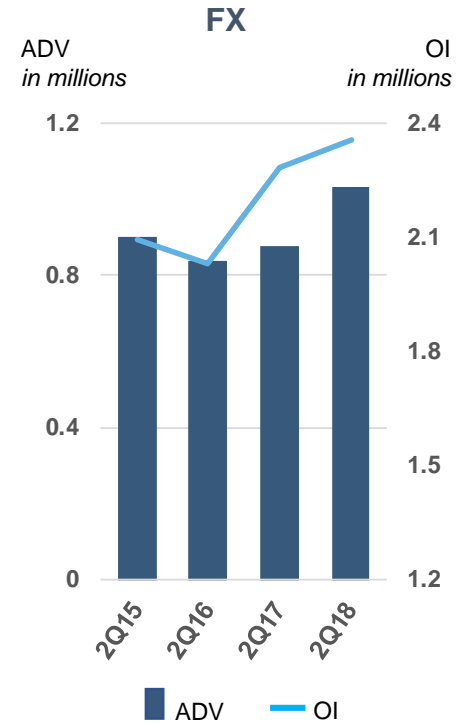
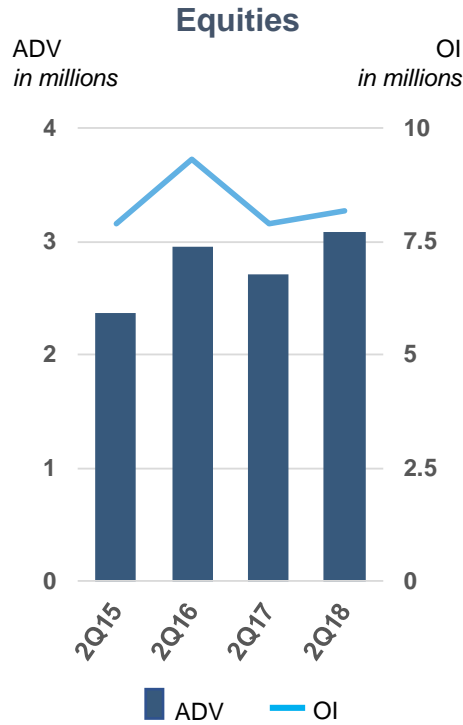
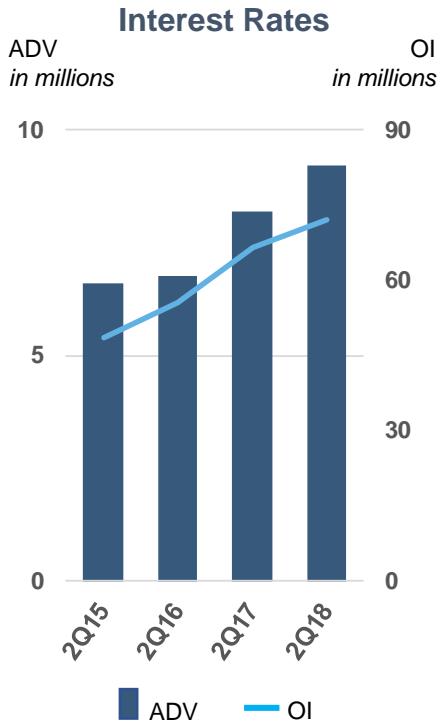
- Emerging Market swap clearing continues to accelerate in 2018 with new currencies and participants submitting transactions for clearing. More customers are clearing new business and backloading bilateral positions into clearing to take advantage of margin efficiencies, liquidity and counterparty netting across the CME Group suite of non-deliverable Interest Rate Swap currencies

- Cleared a record \$36 billion notional in 2Q18 Latin American Interest Rate Swap products, which includes those based on Mexican Peso, Brazilian Real, and Chilean and Columbian Peso. We launched the Chilean and Columbian swaps on May 21<sup>st</sup> and have already cleared over \$50 billion notional, including backloading positions which is evidence of the support of these products

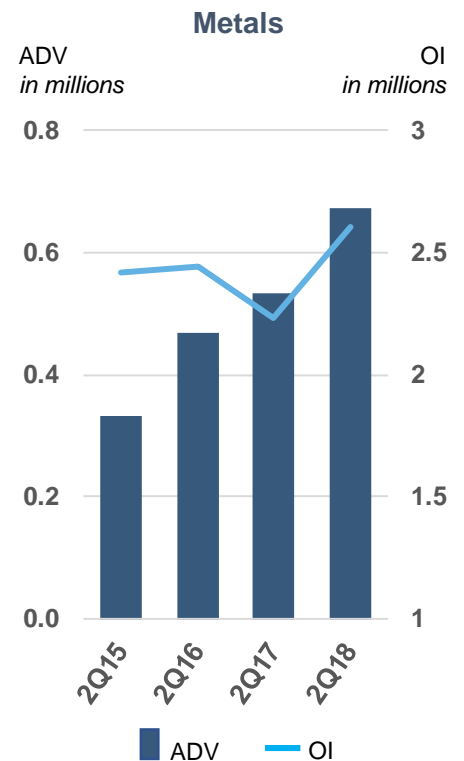
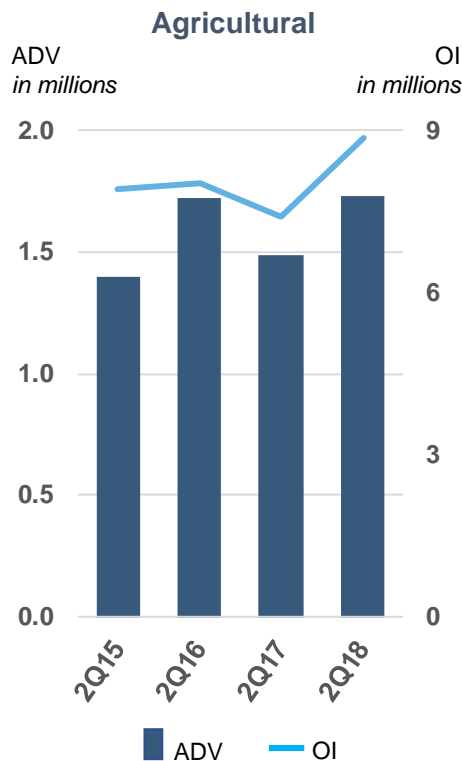
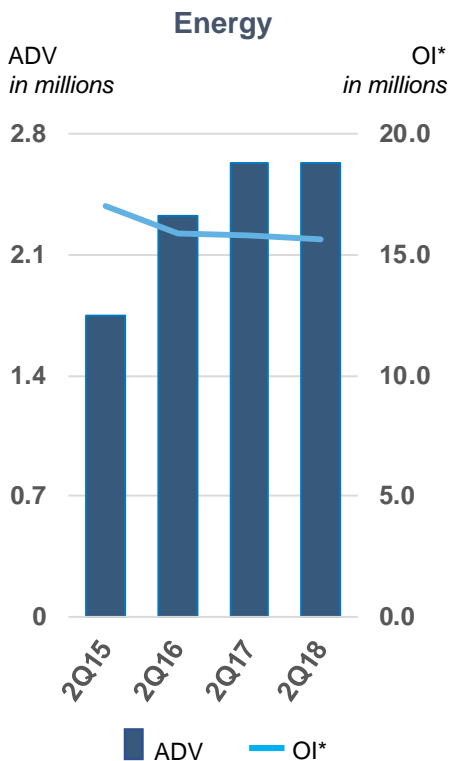


- Further expanding our global Agricultural product suite, CME Group announced the mid-July launch of options on Black Sea Wheat FOB (Platts) and Black Sea Corn FOB (Platts) financially-settled futures contracts. These will complement our growing Black Sea futures contracts which have been trading well since their launch in December 2017 and achieved record OI of 23,830 contracts on July 23<sup>rd</sup>. With the addition of these new regional grain options contracts, our customers now have enhanced hedging capabilities and greater flexibility to mitigate global grain price risk throughout the supply chain

## 2Q 2018 Product Detail - Financials



## 2Q 2018 Product Detail - Commodities

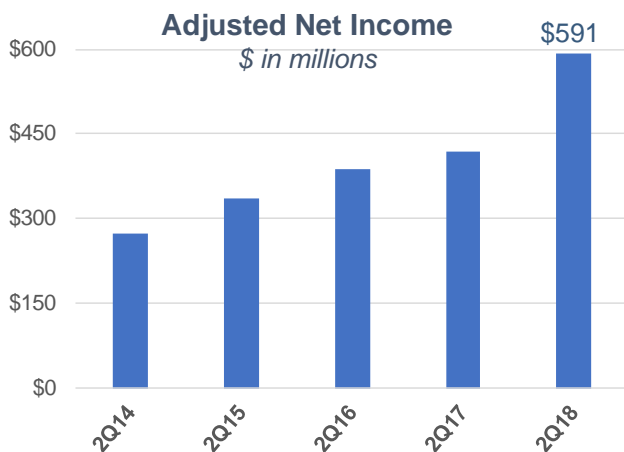


\*OI includes benchmark product areas only – Crude Oil, Natural Gas and Refined



## Financial Results

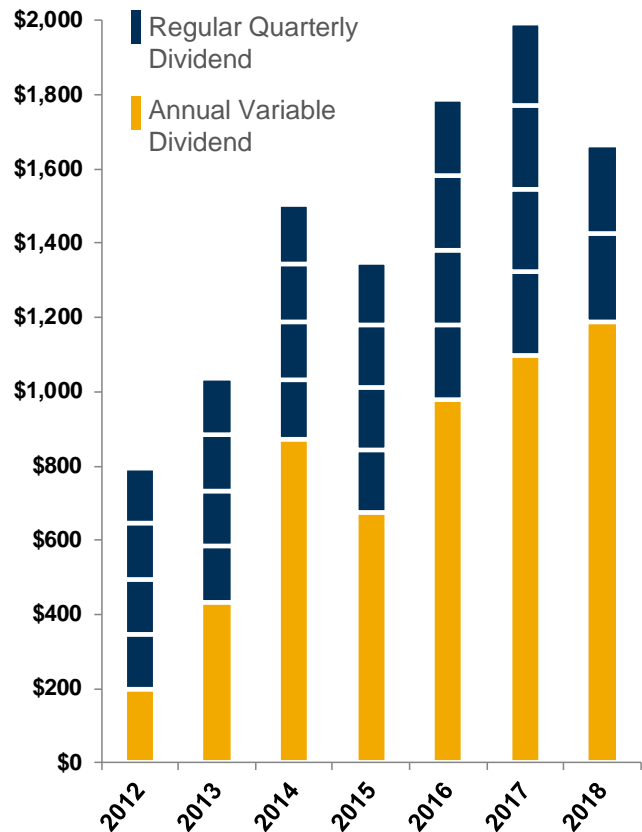
- 2Q18 revenue increased 15% to \$1.1 billion, in line with the record 1Q18 revenue
- Overall 2Q18 RPC was 75.7 cents, up sequentially, driven primarily by product mix; the higher priced Commodities product lines' proportion of the total ADV was higher in 2Q18 versus 1Q18
- Market Data revenue in 2Q18 increased 18% year-over-year to \$113.8 million, and was up \$18.9 million sequentially driven by the screen fee increase in April. We expect some attrition in the real time screen revenue based on historical patterns
- Total 2Q18 adjusted expense excluding license fees increased 4% compared with 2Q17. Overall compensation costs increased 10% compared to 2Q17 due primarily to higher bonus and stock-based compensation driven by the strong performance during the quarter
- Total adjusted non-operating income of \$40 million in 2Q18 was up 37% from 2Q17. There was a sequential reduction in the average cash balances held at the clearing house from \$39.6 billion in 1Q18 to \$32.2 billion in 2Q18. The U.S. Treasury has been increasing net issuance of T-bills, which has pushed yields higher and made that alternative more attractive. So far in 3Q18, cash at the clearing house has averaged \$30.7 billion.
- Adjusted net income and adjusted diluted earnings per share both grew over 40% year-over-year to \$591.4 million and \$1.74, respectively



- Adjusted effective tax rate for the quarter was 24.9%
- Capital expenditures, net of leasehold improvement allowances, for 2Q18 totaled \$21 million

- As of June 30, 2018, the company had \$1.1 billion in cash and cash equivalents, excluding \$1.6 billion held in escrow related to the announced NEX Group plc acquisition, and \$3.4 billion of long-term debt. The company paid dividends during the second quarter of \$237.6 million. The company has returned more than \$10 billion to shareholders in the form of dividends since implementing the variable dividend policy in early 2012

**Dividends Paid\*** \$ in millions



\*Annual, variable dividend reflecting excess cash from 2011 was paid in 1Q 2012, and annual, variable dividend reflecting excess cash from 2012 (which is illustrated in 2013 on this chart), was paid early in 4Q 2012

## Notes & Guidance

- Maintaining original 2018 guidance
  - Adjusted operating expense excluding license fees expected to be between \$1.100 billion and \$1.105 billion
  - Capital expenditures, net of leasehold improvement allowances, expected to be between \$90 million and \$100 million
  - Adjusted effective tax rate expected to be approximately 24.5%
- Additional notes
  - 2018 adjusted operating expense guidance implies a 2.5% to 3% annual growth rate. 1H18 adjusted operating expense excluding license fees is up 3.2% vs. 1H17

## Use of Non-GAAP Measures

A reconciliation of the non-GAAP financial results mentioned to the respective GAAP figures can be found within the Reconciliation of GAAP to non-GAAP Measures chart at the end of the financial statements and earnings presentation materials posted in the same area of the Investor Relations page on CME Group's Web site at [www.cmegroup.com](http://www.cmegroup.com).

## Forward-Looking Statements

Statements in this document that are not historical facts are forward-looking statements. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or implied in any forward-looking statements. We want to caution you not to place undue reliance on any forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. Among the factors that might affect our performance are increasing competition by foreign and domestic entities, including increased competition from new entrants into our markets and consolidation of existing entities; our ability to keep pace with rapid technological developments, including our ability to complete the development, implementation and maintenance of the enhanced functionality required by our customers while maintaining reliability and ensuring that such technology is not vulnerable to security risks; our ability to continue introducing competitive new products and services on a timely, cost-effective basis, including through our electronic trading capabilities, and our ability to maintain the competitiveness of our existing products and services, including our ability to provide effective services to the swaps market; our ability to adjust our fixed costs and expenses if our revenues decline; our ability to maintain existing customers, develop strategic relationships and attract new customers; our ability to expand and offer our products outside the United States; changes in regulations, including the impact of any changes in laws or government policy with respect to our industry, such as any changes to regulations and policies that require increased financial and operational resources from us or our customers; the costs associated with protecting our intellectual property rights and our ability to operate our business without violating the intellectual property rights of others; decreases in revenue from our market data as a result of decreased demand; changes in our rate per contract due to shifts in the mix of the products traded, the trading venue and the mix of customers (whether the customer receives member or non-member fees or participates in one of our various incentive programs) and the impact of our tiered pricing structure; the ability of our financial safeguards package to adequately protect us from the credit risks of clearing members; the ability of our compliance and risk management methods to effectively monitor and manage our risks, including our ability to prevent errors and misconduct and protect our infrastructure against security breaches and misappropriation of our intellectual property assets; changes in price levels and volatility in the derivatives markets and in underlying equity, foreign exchange, interest rate and commodities markets; economic, political and market conditions, including the volatility of the capital and credit markets and the impact of economic conditions on the trading activity of our current and potential customers; our ability to accommodate increases in contract volume and order transaction traffic and to implement enhancements without failure or degradation of the performance of our trading and clearing systems; our ability to execute our growth strategy and maintain our growth effectively; our ability to manage the risks and control the costs associated with our strategy for acquisitions, investments and alliances; our ability to continue to generate funds and/or manage our indebtedness to allow us to continue to invest in our business; industry and customer consolidation; decreases in trading and clearing activity; the imposition of a transaction tax or user fee on futures and options on futures transactions and/or repeal of the 60/40 tax treatment of such transactions; our failure to maintain our brand's reputation; the unfavorable resolution of material legal proceedings and the uncertainties of the ultimate impact of the Tax Cuts and Jobs Act. For a detailed discussion of these and other factors that might affect our performance, see our filings with the Securities and Exchange Commission, including our most recent periodic reports filed on Form 10-K and Form 10-Q.

### Q&A Conference Call Details:

CME Group will hold a live Q&A teleconference to take questions related to second-quarter 2018 results at 8:30 a.m. Eastern Time today. A live audio Webcast of the Q&A teleconference will be available on the Investor Relations section of CME Group's Web site at [www.cmegroup.com](http://www.cmegroup.com). Following the conference call, an archived recording will be available at the same site. Those wishing to listen to the live Q&A teleconference via telephone should dial 877-264-2842 if calling from within the United States or 334-323-0501 if calling from outside the United States, at least 10 minutes before the call begins.

Analysts and investors are encouraged to review the Company's recent filings with the U.S. Securities and Exchange Commission, as well as the quarterly earnings reference documents posted to the Investor Relations page of CME Group's Web site.