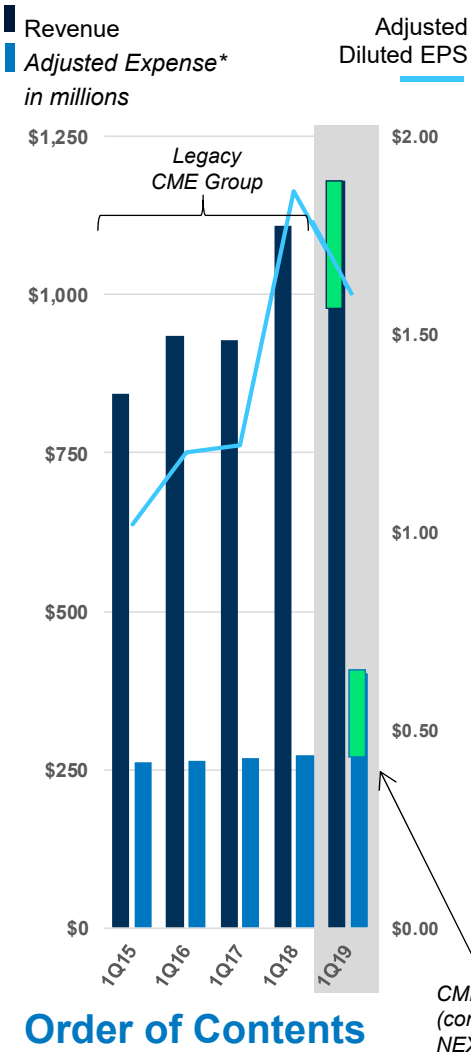


# 1Q 2019 Earnings Commentary

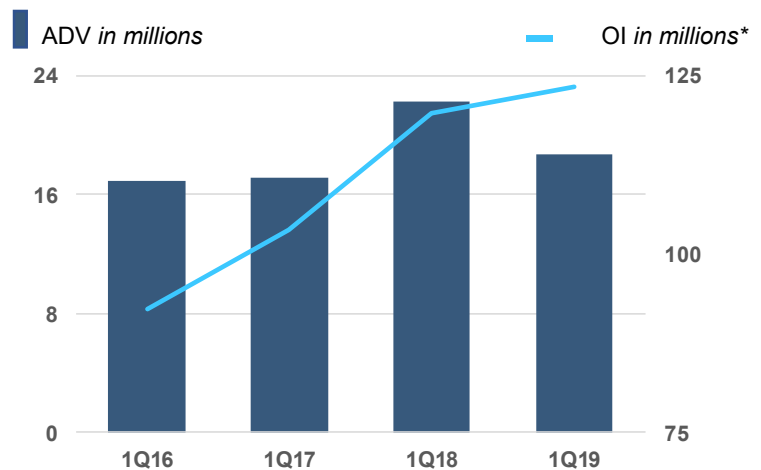


## 1Q 2019 Summary

- 1Q19 average daily volume (ADV) marked the third-highest quarterly ADV ever with 18.6 million contracts, down from a record 22.2 million contracts in 1Q18
  - Quarterly ADV records reached in 2-Year Treasury Note futures, 5-year Treasury Note options, Live Cattle and Lean Hog futures, Lean Hog options, and High Grade Copper options
  - OTC clearing volume grew 15% year-over-year and revenue reached a multi-year high
- Open Interest (OI) at the end of 1Q19 was 126 million contracts, in line with the end of 1Q18, and has built to 131 million contracts to date in April; if including only benchmark products within Energy, overall OI was up 3% year-over-year\*
- 1Q 2019 global activity supported in particular by strength in Asia, with ADV in line with the record 1Q18, as well as Latin American ADV growing 19%; overall non-U.S. ADV was down less than half as much as U.S. ADV was down, and improved as the quarter progressed
- 1Q19 options ADV was 3.9 million contracts – also the third-highest quarterly ADV, but down from a record 1Q18; options activity out of Asia grew 19% and Metals options ADV across all regions grew 8%
- Continued to launch/advance innovative new products, tools and services to support customer needs, and to create capital and operational efficiencies for market participants
- Strong quarter for BrokerTec driven primarily by growth in European Repo activity
- Strategic execution led to adjusted net income attributable to CME Group of \$579.2 million and adjusted diluted EPS of \$1.62

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- 1Q 2019 Summary
- 1Q 2019 Highlights
- 1Q 2019 Product Detail – Financials
- 1Q 2019 Product Detail – Commodities
- 1Q 2019 Product Detail – Cash Markets
- Financial Results & Guidance
- Forward Looking Statements
- Q&A Conference Call Details



\* 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 1Q19 versus 1Q18 unless otherwise noted, any information labeled as “to date in 2019 or 2Q19” is through April 29, 2019, and all global data/statistics exclude the open outcry venue activity  
 • OI within the chart, and throughout this document, includes only benchmark product within Energy (Crude Oil, Natural Gas and Refined Products)

## 1Q 2019 Highlights

- Generated significant volume in 1Q19 considering the progression of the overall trading backdrop from the exceptionally strong period at the end of 2018 to a quarter where CME core markets were less volatile in tandem with the entire sector
- CME Group has a track record of growing in all types of macroeconomic environments
  - Taking advantage of this type of environment, CME Group's sales organization, which has scale and global flexibility unmatched by other exchanges, heightened customer engagement
  - Running strategic targeted campaigns / Educating market participants on new, non-core products/product extensions and services (i.e. Total Return futures, S&P Select Sector futures, SOFR, FX Link, global gas, etc.) / Cross-selling across product lines, across options asset classes and into new cash markets and optimization services
- 1Q19 ADV** marked the third-highest quarterly ADV ever with 18.6 million contracts
  - Quarterly ADV records** reached in 2-Year Treasury Note futures, 5-year Treasury Note options, Live Cattle and Lean Hog futures, Lean Hog options, and High Grade Copper options
  - Daily volume records reached during the quarter:**
    - Corn futures - 1.13 million contracts March 29
    - Hog futures - 133K contracts March 13
    - SOFR futures – 83K contracts March 22
    - Eris Swap futures – 56K contracts March 29
    - Hog options - 51.3K contracts March 20
    - FX Link – 26K contracts March 7
    - Copper options - 12.5K contracts February 20 which was surpassed again in April
- Strong quarter for OTC clearing** including:
  - 1Q 2019 OTC ADV grew 15% to \$135 billion across all products and currencies, representing the best quarter for volume and revenue since early 2015
  - Strong results supported by continued strength in Latin American currencies, as well as a resurgence in U.S. dollar volumes, which were at a multi-year high, driven by increased client activity on the short end of the curve
  - 1Q 2019 OTC revenue reached a multi-year high of \$18.6 million, up 16.5%
- BrokerTec's 1Q19 business** held in well compared with a strong 1Q18 due to 4% growth in European Repo average daily notional volume

### Strength in 1Q 2019 global activity primarily seen in Asia

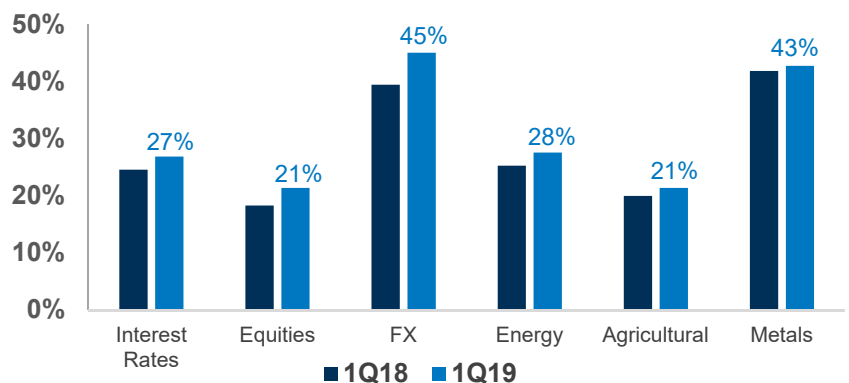
1Q19 Asian ADV was flat versus 1Q18, but was the second highest Asian ADV on record and included:

- Interest Rates ADV growing 8% to a record 418K contracts and Interest Rate options ADV rising 227%
- Equity Index ADV increasing 4% to the second highest quarter on record, with significant strength in the E-mini Nasdaq 100
- Energy ADV rising 2% to 145K contracts, the third highest on record

Overall non-U.S. ADV was down half as much as U.S. ADV, both versus a record 1Q18, and its proportion of total ADV increased to 27% from 24.5%

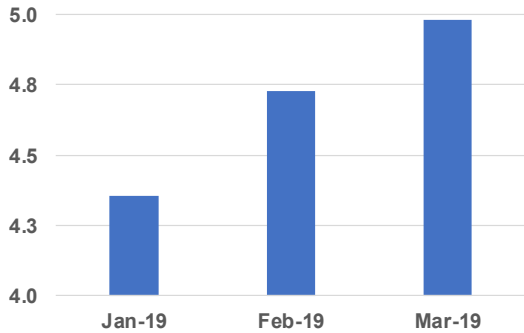
1Q19 Latin American ADV increased 19% versus 1Q18 with particular strength in Eurodollars

### Non-U.S. ADV % of Total ADV by Product Line



Overall non-U.S. ADV improved as the quarter progressed, and Asia and Latin America illustrated the strongest growth of all of the regions in March

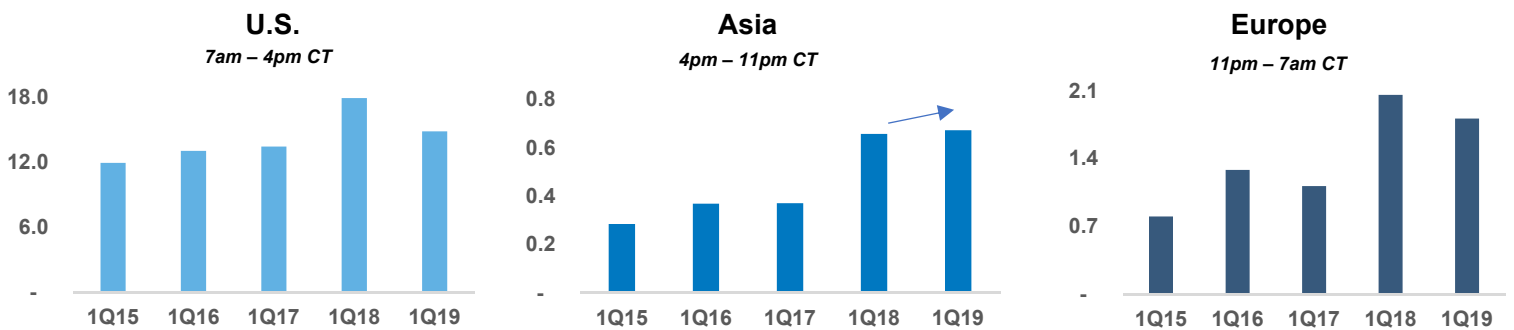
**Non-U.S. ADV in millions**



March 2019 Non-U.S. ADV was relatively flat versus March 2018, with European ADV down 3%, but Asian ADV increased 8% and Greater Latin American ADV rose 34%

- Non-U.S. Interest Rate ADV in March 2019 increased 3% from March 2018, and Eurodollar futures ADV out of Asia in March reached a record ADV of 211K contracts, up 5% year-over-year
- Non-U.S. FX ADV in March 2019 grew 9% compared with March 2018, with British pound and Mexican peso futures ADV out of Europe both reaching record levels for the month
- Lean Hog futures ADV reached monthly records in March 2019 across Europe, Asia and North America

**ADV by Time Zone in millions**



- Activity during the Asian time zone increased 2% compared with 1Q18
- Continued to support clients with strong liquidity in 1Q19 during non-U.S. hours, in particular for Interest Rate products

**ADV during Non-U.S. Hours**

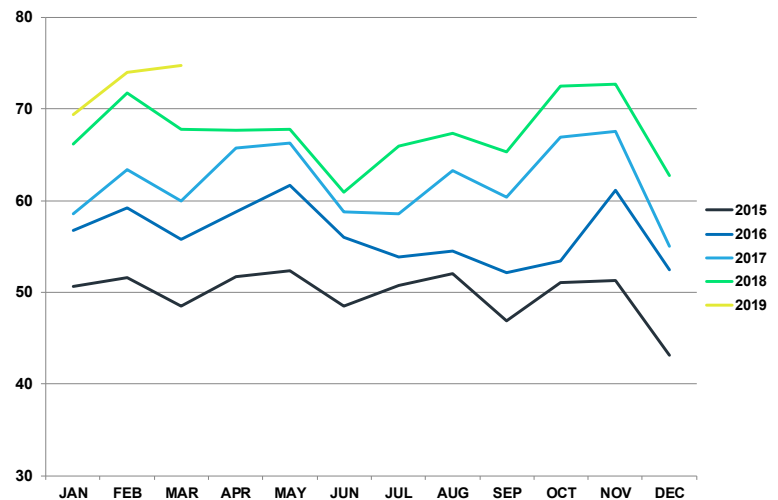
	Q1 2019	2018	% Chg '18 vs. '17	% Chg '18 vs. '13
Fed Funds Futures	63,685	59,276	+60%	+2057%
Eurodollar Futures	639,406	750,966	+37%	+70%
Eurodollar Options	189,115	162,476	+14%	+258%
Treasury Futures	854,131	941,350	+35%	+89%
Treasury Options	174,048	187,648	+57%	+152%

Non-U.S. hours: 5 p.m. - 7 a.m. CT

**Despite low volatility headwinds, 1Q 2019 options ADV of 3.9 million contracts marked the third highest quarterly ADV on record**

- 1Q 2019 Metals options ADV grew 8% to 62K contracts, including the highest growth in both Weekly Gold options and Copper options ADV; continued to set new records in Copper options OI throughout the quarter
- Interest Rate options daily volume reached a single day record of 6.2 million contracts on March 27, 2019, and Eurodollar options traded over 17.8 million contracts during the last week of March, the best 1-week total ever
- Weekly Treasury options grew 6% to 185K contracts, with continued strength in Wednesday and Friday expirations increasingly utilized around economic events
- Lean Hog options ADV grew 86% and hit numerous OI records due to continued uncertainties around the African Swine flu crisis in China
- Reached record Weekly Agricultural options ADV with 63% year-over-year growth
- Strongest growth in Asia and Latin America, with ADV up 19% and 146% respectively

**Month End Options Open Interest in millions**

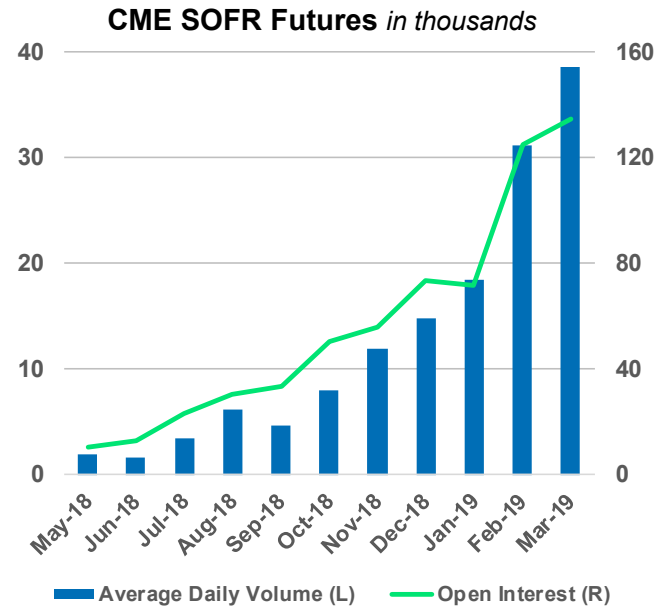


- Options open interest reached an all-time high OI of 79.5 million contracts on March 14, 2019, and has illustrated over 4 years of consecutive month-end year-over-year growth

## Recently launched products progressed, new product offerings were announced, and capital and operational efficiencies continue to be created for market participants

### CME Secured Overnight Financing Rate (SOFR) futures

- Have traded 3.3 million contracts, representing \$6.1 trillion notional, and \$82 million in DV01 risk transfer (dollar value of a basis point / and 24 times the SOFR swap market DVO1), since launch in May 2018
- Reached record volume in March of 38.5K contracts per day or \$68 billion notional
- Open interest hit record level of 151K contracts, or \$479 billion notional, on March 20
- Global participation has surpassed 130 firms, including major bank, buy-side, and proprietary trading firms
- Successfully launched SOFR Packs & Bundles on March 11
- Cash market debt issuance tied to SOFR has begun to create natural exposures; these issuances comprise ~\$80B in notional debt



### Reduced the minimum price increment for the 2-Year U.S. Treasury Note futures in January to enable greater price discovery and cost-effective execution

- Since the adjustment on January 13th, 2-Year U.S. Treasury Note futures ADV has increased from 12.7% in 2018 to 15.5% of total Treasury Note futures ADV, representing a 22% increase relative to other U.S. Treasury Note futures or an incremental jump of ~122K ADV. Driven largely by these improvements, 2-Year U.S. Treasury Note futures ADV reached a record in 1Q19 of 672K contracts ADV
- Following BrokerTec's similar action in November 2018, volume activity has also been equally positively impacted

### Increasing adoption of Invoice Spreads by hedge funds as a more efficient representation of OTC Swap Spreads

- Invoice Spreads (packaged trades between Treasury Futures and swaps) are a capital efficient method of trading swap spread exposure, and have grown following CME's efforts to provide more trading flexibility, portfolio margining efficiencies and marketing. Invoice spreads ADV reached a record 134K contracts in 1Q19, with an approximate \$1.92 rate per contract. Additionally, March Invoice spreads ADV was a record 148K contracts and a daily volume record of 293K contracts traded on February 21. Estimated annualized revenue for invoice spreads, based off of 1Q activity, has grown to more than \$64 million
- Alongside the increase in spread trading activity, we've seen an increase in client adoption of our portfolio margining solution for Interest Rate futures and swaps cleared at CME. Portfolio margin savings recently increased to \$4.3 billion, up from \$2.6 billion at the end of 2018, a 65% increase
- Four of the top 5 all-time high Treasury Exchange for Physical (EFP<sup>1</sup>) volume days occurred in February 2019, with the top day totaling 329K contracts traded on February 21; these EFPs also trade at a premium rate

### Interest Rate Swap clearing for emerging markets currencies

- **Latin American swaps** cleared \$18 trillion since inception across over 230 participants, and the company has expanded its presence in local markets with 37 regionally-based participants clearing with CME Group
- **Chilean/Columbian Peso IRS** – best performing launch to date
  - Over \$500 billion cleared across 74 participants since launching on May 21, 2018; 30 of those participants have already backloaded exposures to clearing

<sup>1</sup>Exchange for Physical (EFP) is a position in the underlying physical instrument for a corresponding futures position

### FX Non-Deliverable Forwards (NDF) and Cash-Settled Forwards (CSF)

- Cleared over 2,000 NDF and CSF trades and \$18.4 billion notional across 23 currency pairs to date, with dealers seeking IM optimization and 40 Act regulations driving buy-side clearing
- Original launch of CSF was in 2011 in anticipation of a clearing mandate which did not come - now there is interest in voluntarily clearing these products due to Uncleared Margin Rule (UMR) pressures; it is estimated that 50 firms will be part of UMR in 2019 and over 1,000 in 2020

### FX Link

- Have witnessed steadily rising interest in this offering that just reached its 1-year anniversary in March 2019
- Launched New Zealand dollar (NZD) and Swiss Franc (CHF) in February and they already account for ~8% of FX Link volume on average
- ADV continues to steadily build, and reached a record daily volume of over 26,000 contracts on March 7, 2019; also equaled record notional value of \$2.9 billion

### Basis Trade at Index Close (BTIC) on Major Indices

- Launched BTIC on Nikkei 225 during the quarter and reached record volume in BTIC on E-mini Dow of \$376 million in notional in early January
- Continued to see strong adoption in 1Q19 of the expansion of BTIC futures on Total Return indices, which occurred in December 2018 while enhancing the Total Return futures offering by extending the S&P listing cycle out to beyond 5 years; the rate per contract for the longer-dated BTIC Total Return futures is at a significant premium to regular S&P BTIC, and currently OI is at a record level going into the March expiry of 281,539 contracts, or \$38 billion in notional value

### Announced Micro E-mini Futures launching in early May

- Since launching in 1997, classic E-mini futures have increased dramatically in notional value. For example, an E-mini S&P 500 futures contract valued at ~\$47K in 1997 was worth ~\$125K by the end of 2018, making the upfront capital requirements to trade significant for some individual traders
- At 1/10th the size of their classic E-mini counterparts, Micro E-mini futures make it easier for a broader universe of traders to discover the benefits of trading futures

### Successful Launch of our Innovative US Crude Oil Auction Facility

- CME hosted our first two auctions on March 5 and April 4, enabling participants to seamlessly take delivery of physical crude oil priced off of WTI Houston (HCL) futures and efficiently hedge cargoes, all on one platform
- This innovative new auction facility connects global crude oil buyers to the most robust crude oil infrastructure in Houston, enhancing price discovery and transparency for U.S. crude oil exports.

### Continued record growth of Physical WTI Houston Crude Oil futures (HCL) and options

- Launched in late November 2018, this new contract is steadily building and successfully addressing the specific needs of the evolving Houston market
- Good example of addressing specific market participant needs as the Gulf Coast infrastructure is in flux
- 40 unique customers have traded the contract since launch, open interest is building and marked a record daily volume on April 22

### Announced new U.S. Midwest Hot-Rolled Coil Steel (Platts) futures which launched in mid April 2019

- Increased volatility of steel markets and uncertainty around regional prices has led to a growing demand for risk management tools across the steel supply chain and this new contract will complement CME Group's existing steel and ferrous metals product suite, providing customers with another tool to manage regional price risk

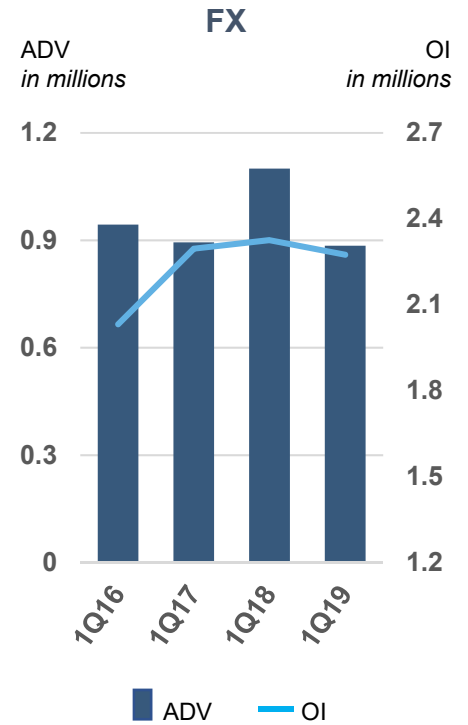
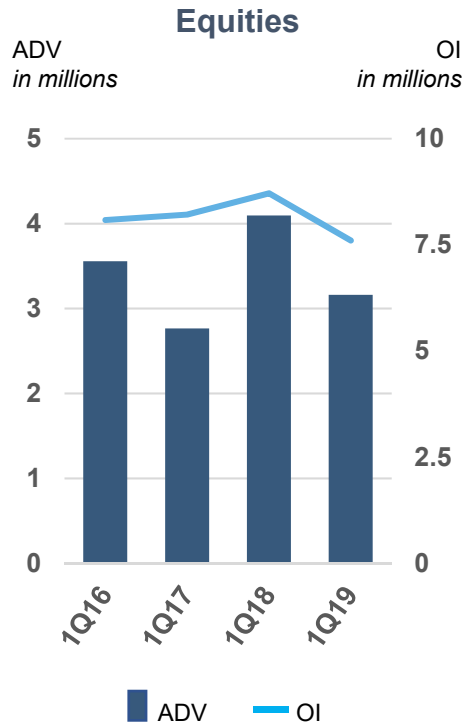
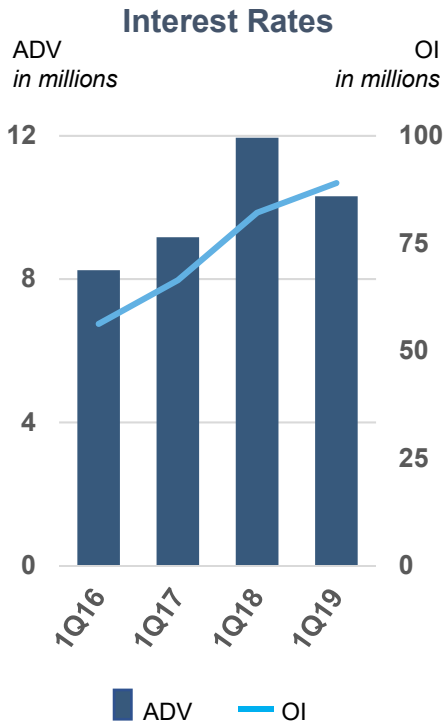
### Announced listing of new calendar spreads for the Black Sea Wheat and Black Sea Corn products

- Black Sea Wheat futures have traded nearly 30K contracts year-to-date in 2019, up 76% over the same period last year; Black Sea Corn futures have traded over 13K contracts
- Effective mid-April 2019, calendar spreads will give market participants enhanced functionality for risk management

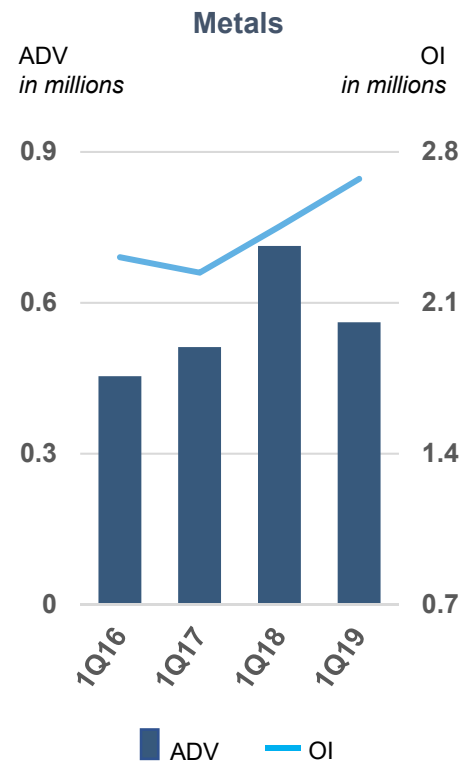
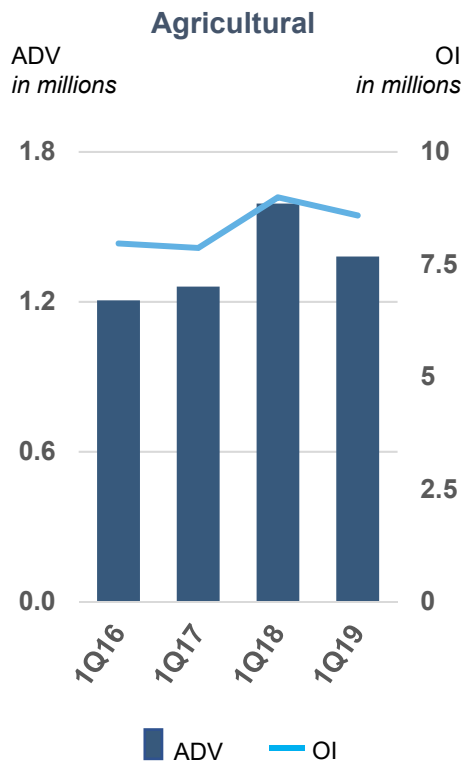
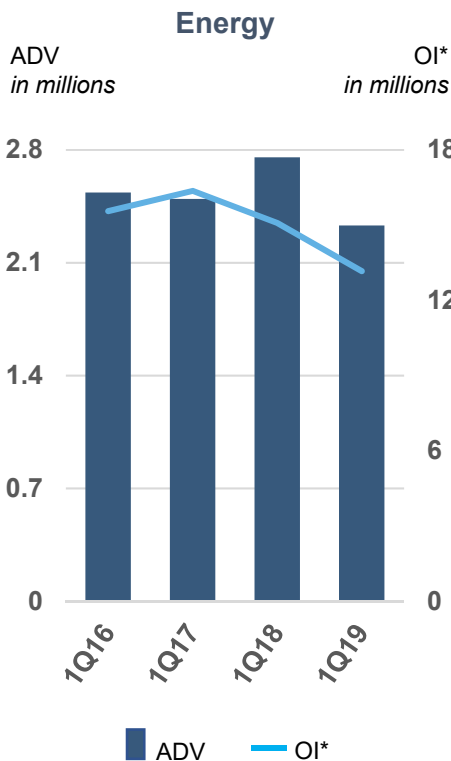
### EBS announced a 2Q19 launch of a new API streaming service on the EBS Quant Analytics platform, the FX market's largest and most comprehensive community-based analytics tool (previously known as NEX Quant Analytics)

- This new functionality will stream trade information, market impact and alpha calculations on a trade-by-trade basis to clients; using benchmark data taken from the entire EBS ecosystem, the Quant Analytics platform provides insights that allow clients to analyze trade flows, optimize execution efficiencies and benchmark their performance against the EBS community, including statistics on averages for like trades
- First of its kind in the marketplace, the service will allow EBS clients to analyze their individual and relative performance more efficiently than ever before by consuming the data in real-time and in their own environments, ultimately helping them grow volumes and revenues

## 1Q 2019 Product Detail - Financials



## 1Q 2019 Product Detail - Commodities

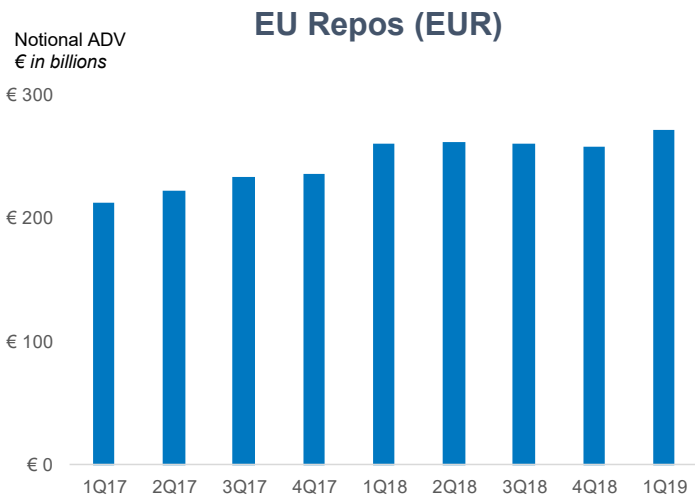
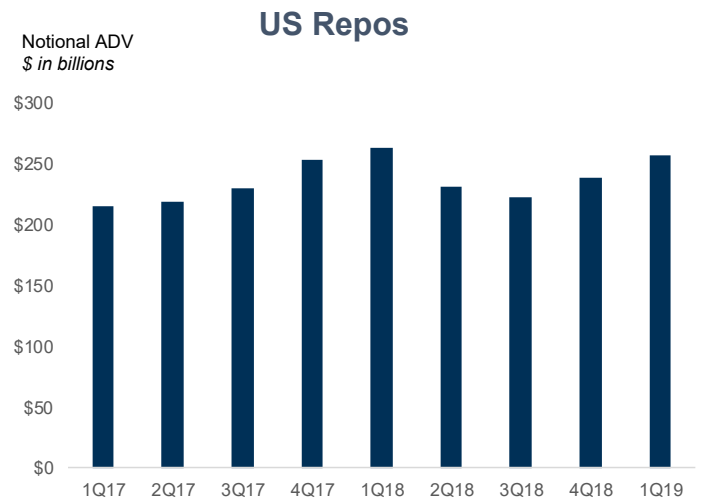
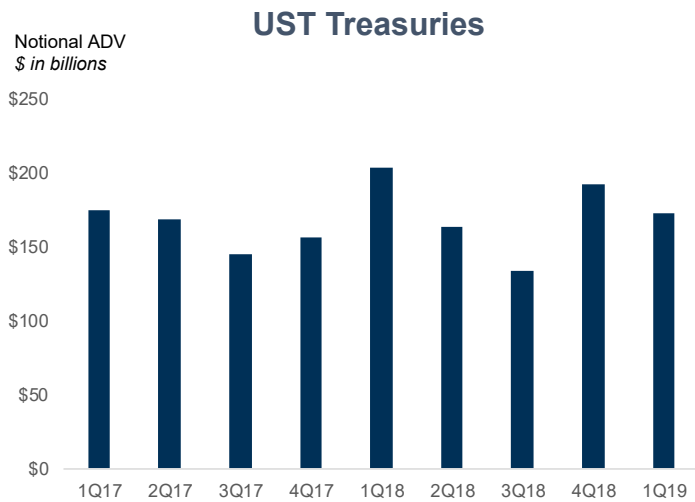


\*OI includes benchmark product areas only – Crude Oil, Natural Gas and Refined

# 1Q 2019 Product Detail – Cash Markets

## BrokerTec

- Global electronic platform for the trading of U.S. Treasuries, European government bonds and EU and US Repo, facilitating trading for banks and non-bank professional trading firms

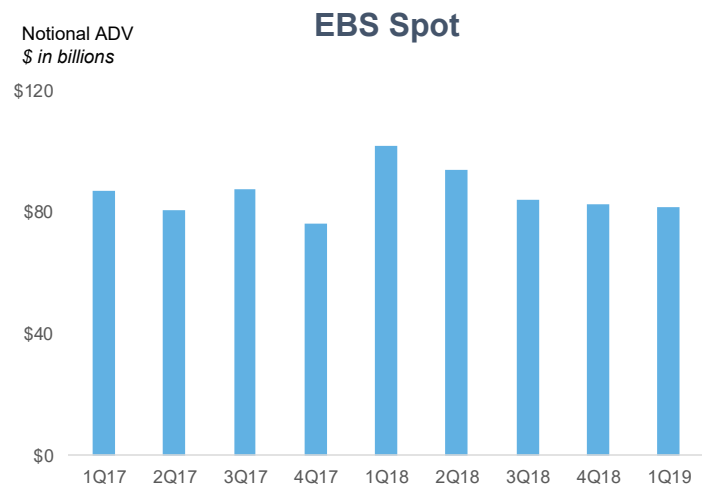


- Strong US Repo volumes in March, the highest in the fiscal year and third highest on record

- 1Q19 European Repo volume grew 4% versus 1Q18
- Reached record notional ADV for both March 2019 and 1Q 2019

## EBS

- Global electronic platform for the FX markets – reliable and trusted source of executable and genuine liquidity across major and emerging market currencies
- Both the anonymous and disclosed trading venues give clients multiple execution and distribution options and the benefit of an established and far-reaching distribution network of liquidity providers and consumers



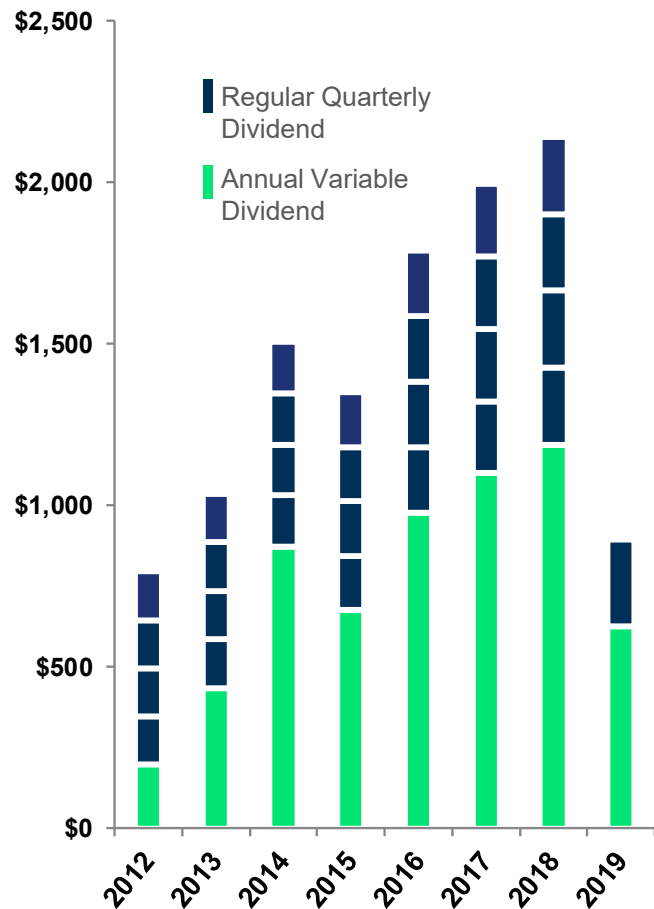
## CME Group – Optimisation Highlights

- A variety of solutions dedicated to mitigating risk, increasing efficiency, reducing costs and streamlining increasingly complex processes for market participants
  - Strong first-quarter 2019 performance across triResolve, Reset and Traiana

## Financial Results

- 1Q19 revenue was \$1.18 billion, including \$191 million generated by NEX activity
- 1Q19 clearing and transaction fees revenue totaled \$953 million, including approximately \$123 million from NEX. EBS generated \$49 million of transaction revenue during the quarter and Brokertec added \$48 million
- Overall 1Q19 RPC was 71.3 cents, up more than 2% sequentially driven primarily by lower volume discounts
- Market Data revenue in 1Q19 was \$130 million, and included \$17 million from NEX
- 1Q19 Other revenue was \$97 million, including \$51 million associated with NEX activity
- Total 1Q19 adjusted expense excluding license fees was \$403 million, including approximately \$137 million associated with NEX
- Total adjusted non-operating income of \$22 million in 1Q19. Net investment income was down sequentially due to NEX related debt paydown during the quarter. There is a new fee program on non-cash collateral held at the clearing house beginning July 1, 2019. Fees will go from 1 bps to 5 bps for non-cash collateral. Neither excess non-cash collateral, nor the guarantee fund, will be impacted by the increase
- Adjusted net income attributable to CME Group was \$579 million and adjusted diluted earnings per share were \$1.62
- Adjusted effective tax rate for the quarter was 23.7%
- Capital expenditures, net of leasehold improvement allowances, for 1Q19 totaled \$49 million
- As of March 31, the company had \$1.1 billion in cash (including \$100 million deposited with Fixed Income Clearing Corporation (FICC) and included in other current assets) and \$4.3 billion of long-term debt. The company paid dividends during the first quarter of \$892 million, consisting of the annual variable dividend for 2018 of \$624 million and the regular first-quarter dividend of \$268 million

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

### Full Year 2019

- Adjusted operating expense excluding license fees expected to be between \$1.65 billion and \$1.66 billion – assumes 1.31 dollars to the pound related to NEX
  - **Q1 average exchange rate was 1.302 dollars per pound**
- Capital expenditures, net of leasehold improvement allowances, expected to be between \$180 million and \$200 million
- Adjusted effective tax rate expected to be between 24.5% and 25.5%
  - **We expect Q2 and Q4 tax rates to be close to the high end of that range**
- Included in originally communicated guidance, the company expects to achieve \$50 million in run rate synergies by the end of 2019, and expects to realize \$25 million in P&L impact during 2019, mostly in the second half of the year



## 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 first-quarter 2019 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 1-888-394-8218 if calling from within the United States or +1-323-794-2590 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.