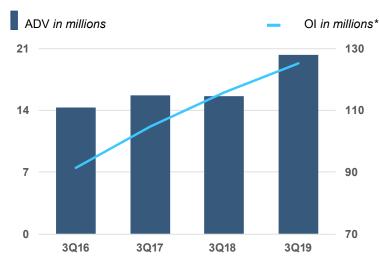


## **3Q 2019 Summary**

- 3Q19 average daily volume (ADV) grew 30% to 20.2 million contracts
  - Interest Rates ADV up 39% to 10.9 million contracts
  - Equity Index ADV up 47% to 3.9 million contracts
  - Metals ADV up 32% to a record 821,000 contracts
  - Asia Pacific ADV up 61% to a record 1.2 million contracts
- Open Interest (OI) at the end of 3Q19 was 127 million contracts, up 6% from 3Q18; if including only benchmark products within Energy, overall OI was up 8% year-over-year\*
- 3Q 2019 non-U.S. ADV grew 40% from 3Q 2018 to 5.3 million contracts, including 34% growth in Europe, 61% growth in Asia, and 87% growth in Latin America
- 3Q19 options ADV rose 32% to 4.1 million contracts, including record quarterly Metals options ADV of 108,000 contracts, up 83%, as well as Interest Rate options ADV up 48% to 2.8 million contracts
- Solid quarter for BrokerTec, with U.S. Treasuries average daily volume up 34% to \$179 billion and U.S. Repos average daily volume up 22% to a record \$271 billion
- Continued to launch/advance innovative new products, tools and services to support customer needs, and to create capital and operational efficiencies for market participants
- Strategic execution led to adjusted net income attributable to CME Group of \$679 million and adjusted diluted EPS of \$1.90





- \* 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
- All growth rates included in this document refer to 3Q19 versus 3Q18 unless otherwise noted, any information labeled as "to date in 2019 or 4Q19" is through October 25, 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)

## 3Q 2019 Highlights

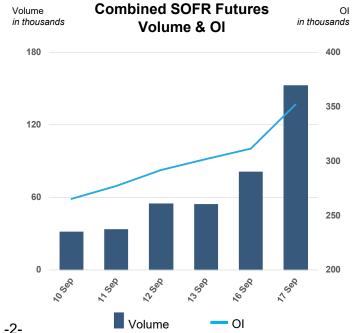
- 3Q19 ADV increased 30% to 20.2 million contracts, including quarterly ADV records:
  - Asia Pacific ADV 1.2 million contracts, up 61%
  - Metals products 821,000 contracts, up 32%
    - Gold futures 432,000 contracts, up 43%
    - Silver futures 120,000 contracts, up 35%
    - Gold options 90,000 contracts, up 84%
    - Platinum futures 26,000 contracts, up 19%
  - 2-Year U.S. Treasury Note futures ADV 762,000 contracts, up 81%
  - Ultra 10-Year U.S. Treasury Note futures ADV 267,000 contracts, up 65%
  - SOFR futures ADV 58,000 contracts
  - BrokerTec illustrated solid growth with U.S. Treasuries average daily volume up 34% to \$179 billion and U.S. Repos up 22% to a record \$271 billion

- Significant growth across Interest Rates and Equity Index products, up 39% and 47% respectively
- August 2019 ADV represented the second highest ADV month on record; July 2019 ADV and August 2019 ADV were the highest ADVs on record for their respective months
- OI at the end of 3Q19 was 127 million contracts, up 6% from 3Q18; if including only benchmark products within Energy, overall OI was up 8% year-over-year
- All-time high OI reached during the quarter:
  - · Gold options 2 million / August 26
  - · Gold futures 658,944 / September 24, and surpassed again on October 25
  - Platinum futures 99,311 / September 13
- Record Large Open Interest Holders (LOIH) during the quarter:
  - FX futures 1,210 on July 30, 2019

Systems, innovative solutions and overnight liquidity supported activity through recent market dynamics, and following unprecedented market events

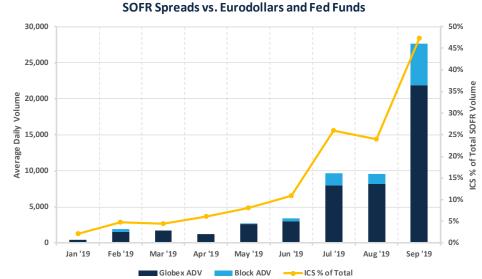
#### **During September 2019**

- ECB and Fed monetary policy decisions
- Repo market stresses, which impact cross currency basis dynamics
  - · Elevated basis volatility between money markets
- Total FX futures traded an all-time daily high \$256 billion notional on September 12, driven primarily by record Euro FX futures daily volume of \$138 billion notional, as markets reacted to the same day ECB announcement
- CME FX Link a Proxy for OTC Swaps traded \$4.3 billion notional (41,000 contracts) on September 18 in response to the abovementioned market characteristics
- SOFR futures reached record daily volume of 152,649 contracts on September 17, and OI reached an all-time high of 351,662 contracts at the end of the same day, following upward pressure in the repo overnight lending market which pushed the SOFR benchmark published by the Federal Reserve up to 2.43% on September 16, compared to 2.20% on September 13. This was an off-cycle spike, which drove the September 17 New York Fed announcement that it would initiate \$75 billion in repo transactions, injecting cash into the financial system to boost liquidity
  - Since launch in May 2018, over 295 global market participants have traded more than 8.3 million SOFR futures contracts at CME Group. A record 133 large open interest holders held open positions in SOFR futures as of October 22, 2019



# Systems and overnight liquidity supported activity through recent market dynamics, and following unprecedented market events - continued

- New trading strategies allow for additive SOFR activity and leverage CME Group's existing liquidity pools to provide a
  unique value proposition
- Elevated basis volatility between money markets in September helped drive 47% of SOFR volume being executed as an inter-commodity spread (ICS) vs. Fed Funds or Eurodollars with over 27.6K in ICS ADV (79% Globex, 21% Blocks)



CME Globex listed ICS on Interest Rate futures allow for more efficient execution of the most commonly traded spreading strategies, with reduced leg risk on executions, automatic margin offsets and increased matching opportunities

- The unprecedented September 14 attack on Saudi Aramco's production facilities caused a very significant disruption of 5.7 million barrels of crude oil for more than two weeks with preattack output levels not resumed until October 3
- In the immediate aftermath of the attack, oil prices surged 14.6%. CME Group Energy products reached several daily volume records and liquidity remained robust throughout the entire session

#### Strong quarter for OTC clearing

- 3Q 2019 OTC ADV grew 60% to \$139 billion across all products and currencies
- Strong results supported by continued strength in Latin American currencies, as well as U.S. dollar Overnight Index Swaps/Forward Rate Agreements (OIS/FRAs)
  - Latin American volume in 3Q19 reached a record \$44 billion, across all 4 currencies
  - 3Q19 U.S. dollar volume across all products grew 65% to \$95 billion
  - Resurgence in US dollar IRS clearing volume driven by clients' increased usage of portfolio margining and focus on the short-end of the curve
- The adoption of SOFR Swap clearing continues with a record \$6.4 billion cleared in September 2019
- 3Q 2019 OTC revenue reached \$16.8 million, up 34%

#### All-time daily volume highs on September 16:

- WTI Crude Oil (CL) futures 3.7 million contracts, surpassing previous record by more than 1 million contracts
- WTI Crude Oil (CL) futures during extended trading hours –
   1.3 million contracts
- CL futures maintained strong liquidity with the bid/ask spread briefly widening to 1.28 ticks
- WTI Crude Oil options (LO) traded during non-U.S. hours over 130K contracts
- Heating Oil futures 464,204 contracts
- Brent Crude Oil futures 324,375 contracts on September 17

### Portfolio Margining Savings and Account Usage



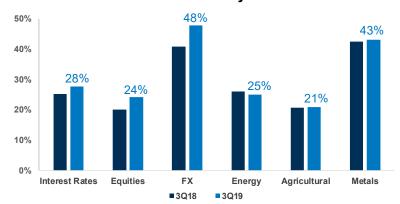
 Portfolio margining solution generated a record \$5.7 billion savings currently in October, more than double the savings in 3Q18

#### 3Q 2019 non-U.S. ADV grew 40% to 5.3 million contracts with Asia Pacific regional record

- Particular strength across Interest Rates and Equity Index, with non-U.S. ADV up 54% and 77% respectively, as well as significant options activity across all regions
- 3Q19 European ADV of 3.8 million contracts, up 34% – record quarterly ADV for Equity Index and Metals products, up 65% and 27% respectively
- Record 3Q19 Asian ADV of 1.2 million contracts, up 61% – over 100% year-over-year growth in Interest Rates and Equity Index; 44% growth in Metals
- 3Q19 Latin American ADV of 152,000 contracts, up 87%

#### Non-U.S. ADV by Product Line in millions 3.0 +54% 2.5 2.0 1.5 +77% 1.0 +7% 5% 34% 0.5 +1% Interest Rates **Equities** Energy Agricultural Metals ■ 3Q18 ■3Q19

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

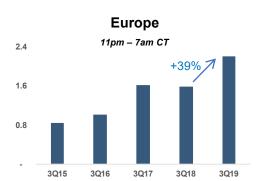


- Overall non-U.S. ADV grew from 26% of total ADV in 3Q18 to 28% of total ADV in 3Q19
- The non-U.S. proportion of total ADV increased across 5 of 6 product lines year-over-year

#### ADV by Time Zone in millions







#### 3Q 2019 options ADV of 4.1 million contracts increased 32% versus 3Q 2018

- Highest volume for a third quarter on record at 1.6 billion contracts
- Metals options ADV up 83% to a record 108,000 contracts
- Interest Rates options ADV up 48% to 2.8 million contracts
- Equity Index options ADV up 15% to 709,000 contracts
- Calendar spread options average daily volume on both Crude Oil and Natural Gas grew 167% to 24,324 contracts in September, representing the second-highest monthly year-over-year growth to date

- Strong options ADV growth across regions with highest quarterly year-over-year growth rates to date in each:
  - North America up 29%
- Asia up 63%
- Europe up 36%
- Latin America up 90%
- 3Q19 options revenue increased 33% from 3Q18
- CME Group options OI has illustrated positive year-over-year growth for 54 consecutive months
- Continuing to electronify our Options business, with five of six product lines seeing increased trading on Globex YTD through September, led by Agricultural products growing from 77% electronic in 2018 to 85% in 2019

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

#### Micro E-mini

 Over 69 million contracts traded since launch, with diverse participation, both from a customer segment perspective and a regional perspective; 3Q19 ADV up 35% sequentially

#### Record daily volumes reached in August - contracts (notional value):

- Micro E-mini S&P 500 futures 766,135 (\$10.9B) on Aug. 7
- Micro E-mini NASDAQ 100 futures 474,482 (\$7.1B) on Aug. 15
- Micro E-mini Dow Jones futures 161,989 (\$2.15B) on Aug. 1
- Micro E-mini Russell 2000 futures 90,483 (\$702M) on Aug. 1

#### Bitcoin

- Despite the pullback in Bitcoin prices during the quarter, Bitcoin institutional interest continued to build with LOIH up 37% vs. 3Q 2018, and 454 new accounts added during the guarter compared to 231 added in 3Q 2018
- Announced the 1Q 2020 launch of Bitcoin options

#### BTIC / TACO

- BTIC on major indices 3Q19 ADV of 45K, up 21%, representing a record 40% of the market-on-close volume at NYSE and Nasdag
- BTIC / TACO offering expanded to BTIC+ / TACO+ whereby market participants can execute a basis trade relative to an upcoming S&P 500 Index cash close or open, days ahead of settlement

#### Announced E-mini S&P 500 ESG futures to launch on November 18

Environmental, Social and Governance (ESG) is an investment theme that has gained both attention and
implementation over the last several years and the need for capitally efficient ESG solutions has grown, and these
contracts will allow market participants to gain price exposure to an index that closely tracks the performance of
the S&P 500, while adhering to ESG principles

#### SOFR – Expanded futures listings and announced Options to launch in January 2020

- Three-Month SOFR futures (SR3) listings expanded to 10 years (39 quarters) and One-Month SOFR futures (SR1) listings expanded to 13 months
- As the first listed non-linear product on the SOFR benchmark, SOFR options will further assist with the market's adoption of SOFR as the alternative reference rate, and in its usefulness as a Treasury Repo Index

#### FX futures – MPI reduction in EUR/USD and JPY/USD calendar spreads

- Following the successful minimum price increment (MPI) reduction in GBP/USD non-consecutive monthly calendar spreads in 2Q19, CME Group reduced the MPI in EUR/USD and JPY/USD non-consecutive monthly calendar spreads in August, lowering the cost of execution
- EUR and JPY are now quoted at 0.2 and GBP is quoted at 0.5 nearly the entire roll, representing significant cost improvement for end users of 60% and 50% respectively

#### FX options – New monthly expiries offer more precision

 Five additional monthly listings (Serials) went live in September in six of the major pairs: EUR/USD, JPY/USD, GBP/USD, CAD/USD and CHF/USD

#### Announced the October launch of U.S. Liquefied Natural Gas (LNG) Export futures

• First-ever physically delivered LNG contract, aligning with the complex logistics of the LNG markets, and expanding CME Group's already robust suite of global natural gas futures and options. In addition, it will complement the world's leading gas benchmark – Henry Hub Natural Gas futures

#### Launched Black Sea Sunflower Oil Financially Settled (Platts) futures

 Following the successful launch of CME Group's financial settled Black Sea Wheat and Black Sea Corn contracts, which have traded over 325,000 contracts since launch, this contract addresses client demand for risk management tools to manage price volatility in the global sunflower oil market

#### Shanghai Gold (USD)Futures and Shanghai Gold (CNH) Futures launched earlier in October

• The bilateral product-licensing agreement between CME Group and Shanghai Gold Exchange (SGE), and the launch of these new products, mark a key milestone in promoting cross-market cooperation that will enhance the global liquidity of CME Group's COMEX Gold futures by aligning with the world's largest physical gold market in China through SGE. This will also provide global investors access to China's physical gold market through CME Shanghai Gold futures while also trading COMEX gold futures for maximum capital and margin efficiencies

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

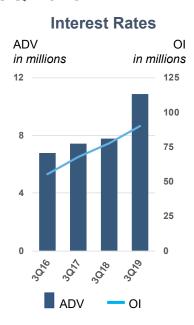
#### Rolling out next generation EBS Direct platform

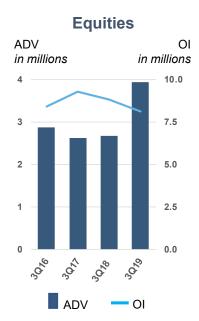
 This new platform that will be transitioned to clients in phases over the next 18 months will feature faster market data and will provide greater certainty of execution and improved fill ratios

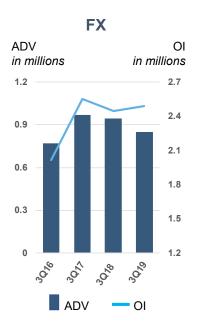
#### TriOptima - completed first cleared Inflation Swap compression run in LCH Swapclear

Clients for the first time could 'co-mingle' cleared inflation swaps with vanilla swaps by leveraging the new triReduce
low touch compression service which was launched in late 2018. The new service minimizes the number of clicks
required to run a compression cycle and provides enhanced data validation checks to streamline the user experience,
allowing clients to benefit from a reduction in capital, risk and operational costs

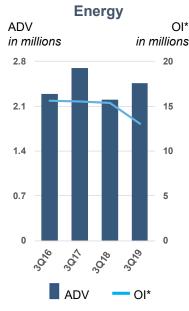
## 3Q 2019 Product Detail - Financials

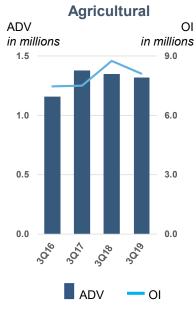


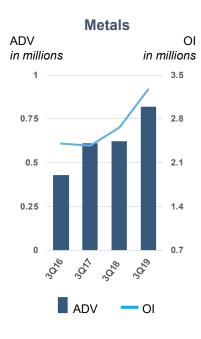




## 3Q 2019 Product Detail - Commodities



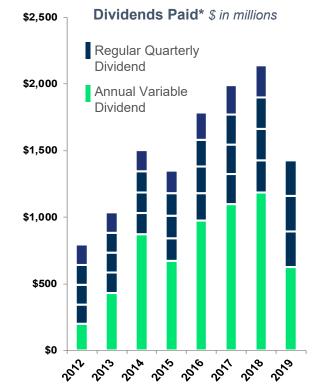




<sup>\*</sup>OI includes benchmark product areas only - Crude Oil, Natural Gas and Refined

### **Financial Results**

- 3Q19 revenue was \$1.28B, including \$194 million generated by legacy NEX businesses
- 3Q19 clearing and transaction fees revenue totaled \$1.04 billion, including approximately \$125 million from NEX. EBS generated \$50 million of transaction revenue during the quarter and BrokerTec added \$51 million
- · Overall 3Q19 RPC was 69.3 cents, in line with 2Q19
- Market Data revenue in 3Q19 was \$130 million, up \$1.5 million from 2Q19, and including \$17.1 million from NEX
- 3Q19 Other revenue was \$107 million, up \$14 million sequentially driven mainly by a \$10 million increase in non-cash collateral revenue and \$3 million from insurance reimbursements of litigation costs associated with the legacy NEX businesses. Total Other revenue from legacy NEX businesses was \$52 million
- 3Q19 adjusted expense excluding license fees was \$409.5 million
- Adjusted non-operating income of \$32.3 million in 3Q19 was up sequentially, primarily driven by the S&P joint venture contribution
- In Spring of 2019, proposed federal regulations related to the taxability of foreign income were released, pursuant to U.S. tax legislation enacted in 2017. As a result of these regulations and the nearing completion of the company's 2018 tax returns, we have revised our income tax calculations for 2018 and 2019 to reflect the new guidance and have recorded an \$89 million tax benefit in the current quarter GAAP results. Approximately \$52 million related to 2018 was adjusted out this quarter in non-GAAP results, and the remaining \$37 million related to the first three quarters of 2019. This catch up has been included in the 3Q19 tax provision resulting in an adjusted tax rate of 20.5% for the third quarter.
- Adjusted net income attributable to CME Group was \$679 million and adjusted diluted earnings per share (EPS) were \$1.90
- Capital expenditures for 3Q19 totaled \$59 million bringing the year-to-date total to \$179 million and includes \$25 million of leasehold improvements, the majority of which will be reimbursed over time, and \$30 million in one-time capital expenditures associated with the integration
- As of September 30, the company had 1.3 billion in cash (including \$100 million deposited with Fixed Income Clearing Corporation (FICC) and included in other current assets) and \$3.9 billion of long-term debt. The company paid dividends during the third quarter of \$268 million



\*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

#### **Integration Progress**

- Announced new leadership for the legacy NEX businesses and completed the first phase of a planned three-year process of staffing the combined company
- Leveraging the combined sales teams to enable crossselling and to offer the full portfolio of products and services
- Moved legacy NEX employees to our new facility in London, combined offices in Hong Kong, Tokyo and New York City with London & Singapore planned for 2020
- Moved the majority of legacy NEX businesses to our administrative systems
- Announced divestitures of businesses that did not fit with going forward strategy: NEX Exchange/NEX Treasury/ ENSO
- Focused on data center consolidation and migration of BrokerTec to Globex in 4Q 2020, and EBS in late 2021

## Notes & Guidance

- Full-year 2019 adjusted effective tax rate expected to be about 23.5% (changed from original guidance which was between 24.5% and 25.5%)
- Reiterate full-year 2019 capital expenditures guidance of between \$180 million to \$200 million, net of leasehold improvement allowances, and excluding any one-time expenditures associated with the integration
- The company expects to achieve \$50M in run rate expense synergies by the end of 2019, and expects to realize approximately \$30M in P&L impact during this year, up from the original \$25M expected

### 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.

## 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 third-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. 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 1-800-367-2403 if calling from within the United States or +1-334-777-6978 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.