2Q 2019 Summary

- 2Q19 average daily volume (ADV) marked the second-highest quarterly ADV ever with 20.9 million contracts, up 14% from 2Q18
  - Quarterly ADV record reached in Agricultural Commodities
  - OTC clearing volume grew 46% year-over-year to a record $154 billion
- Open Interest (OI) at the end of 2Q19 was 141 million contracts, up 23% from 2Q18; if including only benchmark products within Energy, overall OI was up 27% year-over-year*
- 2Q 2019 non-U.S. ADV grew 24% from 2Q 2018 to a record 5.4 million contracts, including 22% growth in Europe, 28% growth in Asia, and 81% growth in Greater Latin America
- 2Q19 options ADV rose 33% to 4.7 million contracts – the second-highest quarterly ADV, and included quarterly ADV records across Interest Rates, Agricultural Products, Metals and Eurodollars
- Continued to launch/advance innovative new products, tools and services to support customer needs, and to create capital and operational efficiencies for market participants
- Solid quarter for BrokerTec driven in part by record quarterly European Repo volume
- Strategic execution led to adjusted net income attributable to CME Group of $631.6 million and adjusted diluted EPS of $1.76

* 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 2Q19 versus 2Q18 unless otherwise noted, any information labeled as “to date in 2019 or 3Q19” is through July 24, 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)
2Q 2019 Highlights

- 2Q19 ADV marked the second-highest quarterly ADV ever with 20.9 million contracts, including quarterly ADV records:
  - Agricultural products - 1.8 million contracts, up 6%
  - Eurodollar options - 2.2 million contracts, up 82%
  - Ultra 10-Year Treasury futures - 236K, up 33%
- May 2019 and June 2019 ADV represented the second and third highest ADV months respectively
- OI at the end of 2Q19 was 141 million contracts, up 23% from 2Q18; if including only benchmark products within Energy, overall OI was up 27% year-over-year
- Reached all-time high total OI of 153 million contracts on June 13, 2019, including all-time high Interest Rates OI of near 111 million contracts

All-time high daily volume reached during the quarter – contracts / date (notional value):

- Interest Rate options – 8.8 million / June 3
- Eurodollar options – 7 million / June 3
- Agricultural futures/options – 3.2 million / May 29
- Fed Fund futures – 1.3 million / June 19
- Ultra 10-Year Treasury futures – 1.1 million / May 28
- Corn options – 551,889 / May 29
- Micro E-mini S&P 500 futures – 416,873 / June 3 ($5.7B)
- Micro E-mini NASDAQ 100 futures – 269,913 / June 3 ($3.8B)
- Brent Crude Oil futures – 250,803 / May 23
- Hog futures – 142,408 / May 7

All-time high OI reached during the quarter – contracts / date:

- Interest Rates futures/options – 110.7 million / June 13
- Interest Rates options – 79.4 million / June 13
- Eurodollar options – 71 million / June 13
- Treasury futures – 16.7 million / May 17
- 10-Year Treasury futures – 4.7 million / May 24
- 2-Year Treasury futures – 4.4 million / May 15
- Metals futures/options – 3.3 million / June 24
- Fed Fund futures – 2.5 million / May 31

All-time high Large Open Interest Holders (LOIH) during the quarter:

- Despite the challenging global FX environment with persistent low volatility impacting volumes market wide, CME Group FX futures large open interest holders reached a record 1,198 on May 28, 2019, indicating a positive underlying adoption trend and continued progress of market/client development efforts
- Strong quarter for OTC clearing including:
  - 2Q 2019 OTC ADV grew 46% to $154 billion across all products and currencies – its highest level since 2015
  - Strong results supported by continued strength in Latin American currencies, as well as U.S. dollar OIS/FRAs
    - Latin American volume in June reached a record $48 billion, with over 245 participants clearing to date
    - U.S. dollar volume across all products reached a record $129 billion ADV in June, up 110% versus June 2018
    - OIS/FRA volume reached a record $74 billion ADV in June
  - Resurgence in US dollar IRS clearing volume driven by clients’ increased usage of portfolio margining and focus on the short-end of the curve
  - 2Q 2019 OTC revenue reached $17.3 million, up 2%
**2Q 2019 non-U.S. ADV grew 24% to a record 5.4 million contracts**

- Particular strength across Interest Rates and Equity Index, with non-U.S. ADV up 37% and 43% respectively, as well as significant options activity across all regions.
- Record 2Q19 European ADV of 4 million contracts, up 22% – double-digit growth across Interest Rates, Equity Index and Agricultural Commodities.
- Record 2Q19 Asian ADV of 1.1 million contracts, up 28% – over 60% year-over-year growth in Interest Rates and Equity Index; 12% growth in Agricultural Commodities.
- Record 2Q19 Latin American ADV of 173,000 contracts, up 81%.

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

- Overall non-U.S. ADV grew from 25% of total ADV in 2Q18 to 28% of total ADV in 2Q19.
- The non-U.S. proportion of total ADV increased across all product lines year-over-year.

**ADV by Time Zone in millions**
2Q 2019 options ADV of 4.7 million contracts marked the second highest quarterly ADV on record

Reached several quarterly ADV records:
- Interest Rate options ADV up 56% to 3.3 million contracts
- Agricultural Commodities options ADV up 10% to 359,000 contracts
- Metals options ADV up 39% to 78,000 contracts
- Record overall options daily volume of 10.8 million contracts on June 3, 2019
- June 2019 monthly ADV records included:
  - Interest Rates options ADV of 4.3 million contracts, up 98% versus June 2018
  - Metals options ADV of 128,000 contracts, up 117%
  - Gold options ADV of 115,000, up 141%, including weekly Gold options ADV of ~10,000 contracts
- Strong options ADV growth across regions (YTD year-over-year growth rates):
  - Latin America up 196%, Asia up 35% and Europe up 12%
- 2Q19 options revenue increased 20% from 2Q18
- In June, reached a record 69% of Globex options volume comprised of spreads, up from 60% in 2018

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

On May 6, 2019, Micro E-mini futures reached unprecedented volume, making it the most successful product launch in CME Group history
- At 1/10th the size of their classic E-mini counterparts, Micro E-mini futures give all traders a simple, cost-efficient way to access the liquid equity index futures markets
- Over 25 million contracts traded since launch with strong global participation and around the clock liquidity
- Across the four contracts, the Micro E-mini futures averaged 462,000 contracts per day from May 6 – June 28
- Record daily volume reached across each contract:
  - Micro E-mini S&P 500 futures traded 416,873 contracts, or $5.73 billion notional, on June 3
  - Micro E-mini NASDAQ 100 futures traded 269,913 contracts, or $3.78 billion notional, on June 3
  - Micro E-mini Dow Jones futures traded 85,023 contracts, or $1.13 billion notional on June 3
  - Micro E-mini Russell 2000 futures traded 55,178 contracts, or $424 million notional, on May 17

Continue to run successful Equity Options compression cycles
- Have run 11 successful multilateral equity options cycles since the October 2018 launch with a group of customers who are most affected by capital constraints imposed by Basel III
- 9 firms and 2 futures commission merchants (FCMs) have participated in successful runs with 3.76 million total sides compressed, driving CME Group revenue and providing our customers with significant capital and trading relief
Providing market participants with greater flexibility to trade S&P 500

• Effective July 29, the listing cycle for Monday and Wednesday options will be extended to provide market participants with greater opportunities to fine-tune their trading strategies

• Listing cycles will be extended from 2 to 4 expirations in both Standard and E-mini Monday and Wednesday S&P 500 options on futures

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

• Following record activity in 1Q19, the premium rate Invoice Spread trading volume (packaged trades between Treasury futures and swaps) continued to be strong in 2Q19; year-to-date 2019 ADV through 2Q increased 29% year-over-year. This first half ADV corresponds to annual revenue of approximately $58 million

Continue to enhance the full trade lifecycle FX solutions for market participants, and allow them to access the liquidity as well as the capital and margin efficiencies of CME Group’s centrally-cleared and transparent market

• CME Group offers quarterly expiries across every contract, monthly expiries on six pairs, and CME FX Link which connects the OTC FX market with FX futures electronically for the first time, as well as FX options and OTC FX clearing

• CME FX Link activity continues to build, and given the upcoming regulatory changes – uncleared margin rules (UMR) – and the increasing cost pressure on the Foreign Exchange Prime Brokerage (FEPB) industry, it is likely to play a crucial role allowing participants to efficiently move exposure from the bilateral uncleared world to a cleared listed environment

• Single day volume record on June 20 of 33,169 contracts ($3.23B notional), June 2019 ADV of 17,662 marked the best month since launch, and YTD year-over-year ADV is up ~200%

• In June, Greenwich Associates published a paper which states that buyside firms could achieve significant savings on execution costs, up to 70% on some trades, by shifting some of their trading to listed FX options. In addition, for those impacted by UMR, funding costs could potentially be reduced by 86%. Their research also shows that listed FX options can be more cost-efficient alternatives to bilateral trading, independent of the incoming regulations, as the electronification of FX options accelerates and liquidity responds

• To read the full report, visit cmegroup.com/fxotca

• To date it has primarily been large dealers directly impacted by UMR, but phases 4, 5 and 6 between September 2019-2021 will have a broader impact across the derivatives ecosystem including many regional banks, asset managers and hedge funds. To understand UMR more fully – and the available solutions at CME Group, visit cmegroup.com/umr

Announced 4Q19 launch of new gold futures contracts in partnership with the Shanghai Gold Exchange

• In 4Q19, pending regulatory reviews, CME Group will launch two new financially-settled gold futures contracts, denominated in U.S. dollars and Renminbi, promoting cross-market cooperation that will connect the global liquidity of CME Group’s COMEX Gold futures to the world’s largest physical gold market in China through the Shanghai Gold Exchanges (SGE). SGE is granting CME Group a license to use, create and list futures contracts based on SGE’s Shanghai Gold Benchmark PM Price

Announced new CME Fresh Bacon Index

• In May, CME Group began publishing a new CME Fresh Bacon Index to establish a transparent price reference for fresh pork bellies used to make bacon, coming to play amid significant bacon price volatility driven by rapidly growing consumer demand, global trade disputes and disease. Prices for pork bellies are the most volatile of all the pork primal cuts, with volatility peaking at over 40% in 2018. This index will provide producers, packers, processors, wholesalers, foodservice, retailers and others across the bacon supply chain with a transparent weekly price to track supply and demand dynamics of bacon transacted on the cash market
Several Traiana products/services enhancements during 2Q19

- Announced enhancements to Credit Risk Hub in April to boost FX Prime Broker control, allowing FX prime brokers to now define trade information in more detail to increase credit risk controls and reduce the risks of credit over-allocation.
- Announced in May that Traiana has provided direct central clearing connectivity to Eurex – allowing market participants to submit trades executed on electronic trading venues for clearing, as well as benefit from Traiana’s Credit Risk Hub which provides pre-trade checks for client orders placed on regulated trading venues and post-trade checks for voice executed trades; both requirements under MiFID II in Europe and Dodd-Frank in the U.S.

Announced BrokerTec Quote RFQ Trading Solution for European Repo Markets

- Provides market participants trading European Repo with a new, enhanced Request for Quote (RFQ) capability, providing a more intuitive and efficient means of trading, enabling participants to make more informed trading decisions and it will provide significant enhancements to negotiation and execution.

2Q 2019 Product Detail - Financials

Interest Rates

Equities

FX

2Q 2019 Product Detail - Commodities

Energy

Agricultural

Metals

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

• 2Q19 revenue was $1.27 billion, including $187 million generated by NEX activity
• 2Q19 clearing and transaction fees revenue totaled $1.1 billion, including approximately $121 million from NEX. EBS generated $49 million of transaction revenue during the quarter and Brokertec added $49 million
• Overall 2Q19 RPC was 69.3 cents, down 3% sequentially driven primarily by higher volume discounts, as well as the successful launch of the Micro E-mini during the quarter, which have a lower RPC than the average Equity Index RPC
• Market Data revenue in 2Q19 was $128 million including $17.2 million from NEX, down sequentially due to lower subscriber counts
• 2Q19 Other revenue was $93 million, including $49 million associated with NEX activity. 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
• 2Q19 adjusted expense excluding license fees was $406 million
• Adjusted non-operating income of $27.5 million in 2Q19, up 27% sequentially driven by strength in the S&P JV
• Adjusted net income attributable to CME Group was $632 million and adjusted diluted earnings per share were $1.76
• Adjusted effective tax rate for the quarter was 25.6%
• Capital expenditures, net of leasehold improvement allowances, for 2Q19 totaled $71 million
• As of June 30, the company had $1 billion in cash (including $100 million deposited with Fixed Income Clearing Corporation (FICC) and included in other current assets) and $4.1 billion of long-term debt. The company paid dividends during the second quarter of $268 million

Integration Progress

• Announced new leadership for the legacy NEX business and completed the first phase of what we expect to be a three-year process of staffing the combined company
• Announced the sale of NEX Exchange to Acquis earlier in July
• Going forward, focused on the migration of BrokerTec to CME Globex in 4Q 2020, followed by the migration of EBS which will be completed in late 2021

Notes & Guidance

Full Year 2019 – Expense Guidance reduced $10M

• Adjusted operating expense excluding license fees reduced to between $1.64 billion and $1.65 billion
• 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%
• The company expects to achieve $50 million in run rate expense synergies by the end of 2019
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 second-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 1-800-263-0877 if calling from within the United States or +1-323-794-2094 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.