

# CME Group Overview

December 2024

# Disclaimer

## Forward Looking Statements

*Statements in this document that are not historical facts are forward-looking statements. These statements are not guarantees of futures 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, futures 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 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 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; our ability to adjust our fixed costs and expenses if our revenues decline; our ability to maintain existing customers at substantially similar trading levels, develop strategic relationships and attract new customers; our ability to expand and globally offer our products and services; changes in regulations, including the impact of any changes in laws or government policies with respect to our products or services or 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 or changes to regulations in various jurisdictions; 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 credit and liquidity risk management practices to adequately protect us from the credit risks of clearing members and other counterparties, and to satisfy the margin and liquidity requirements associated with the BrokerTec matched principal business; the ability of our compliance and risk management programs 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; our dependence on third-party providers and exposure to risk through third parties, including risks related to the performance, reliability and security of technology used by our third-party providers and third-party providers that our clients rely on; volatility in commodity, equity and fixed income prices, and price volatility of financial benchmarks and instruments such as interest rates, equity indices, fixed income instruments and foreign exchange rates; economic, social, 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 messaging 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, control the costs and achieve the synergies associated with our strategy for acquisitions, investments and alliances, including those associated with the performance of our joint ventures with S&P Dow Jones (S&P Dow Jones Indices LLC) in index services and in trade processing/post trade services (OSTTRA), our primary business and distribution partners' actions and our partnership with Google Cloud; variances in earnings on cash accounts and collateral that our clearing house holds for its clients; impact of CME Group pricing and incentive changes; impact of aggregation services and internalization on trade flow and volumes; any negative financial impacts from changes to the terms of intellectual property and index rights; our ability to continue to generate funds and/or manage our indebtedness to allow us to continue to invest in our business; industry, channel partner and customer consolidation and/or concentration; decreases in trading and clearing activity; the imposition of a transaction tax or user fee on futures and options transactions and/or repeal of the 60/40 tax treatment of such transactions; increases in effective tax rates, borrowing costs, or changes in tax policy; our ability to maintain our brand and reputation; and the unfavorable resolution of material legal proceedings. For a detailed discussion and additional information concerning these and other factors that might affect our performance, see our other recent periodic filings, including our Annual Report on Form 10-K for the year ended December 31, 2023, as filed with the Securities and Exchange Commission ("SEC") on February 27, 2024, under the caption "Risk Factors".*

### Certain Terms

All references to "options" or "options contracts" in the text of this document refer to options on futures contracts.

Any mention of products or services that have yet to be launched are pending regulatory review.

### Information about Contract Volume and Average Rate Per Contract

All amounts regarding contract volume and average rate per contract are for CME Group's listed futures and options on futures contracts unless otherwise noted.

To supplement CME Group's financial statements on a GAAP basis, this document includes financial measures that are not in accordance with GAAP, consisting of non-GAAP net income and earnings per share. Management believes that the presentation of non-GAAP net income and earnings per share provide important supplemental information to management and investors about financial and business trends relating to CME Group's financial condition and results of operations. Management believes that the use of these non-GAAP financial measures provide a better measure of comparability with the company's prior financial reports. Management acknowledges that non-GAAP adjustments may include recurring items. These non-GAAP measures should be considered as a supplement to, and not as a substitute for, or superior to, the corresponding measures calculated in accordance with GAAP. A reconciliation of the non-GAAP financial results mentioned to the respective GAAP figures can be found at the end of each quarter's CME Group financial statements.

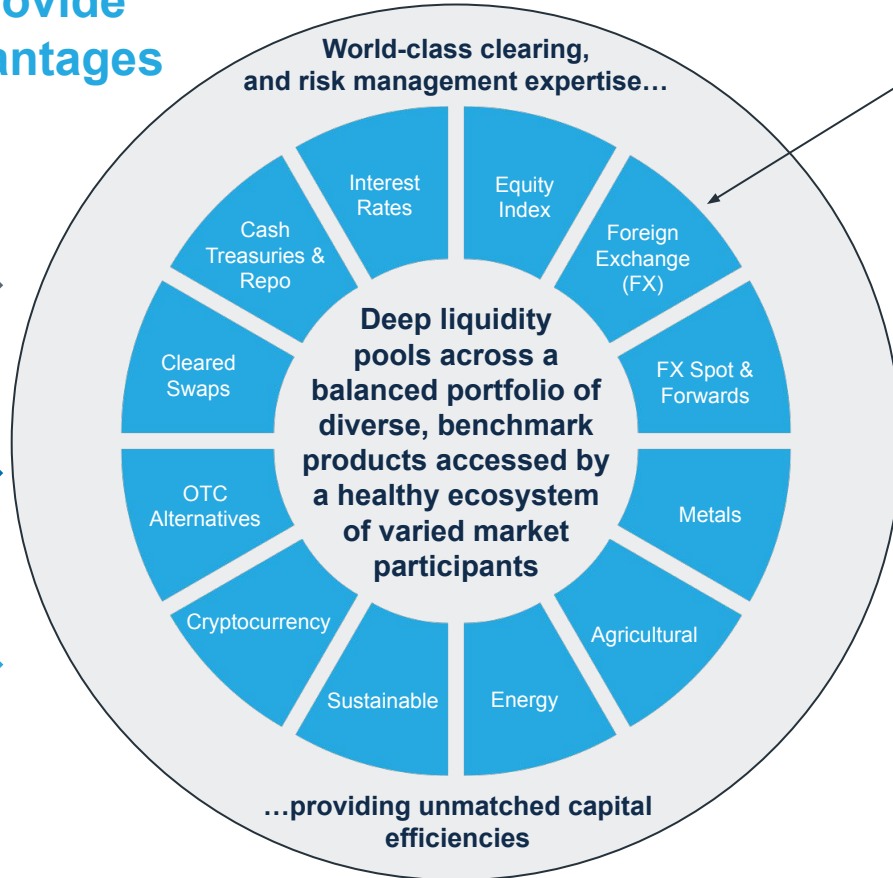
# Unique Assets Provide Competitive Advantages

Network fueled by:

Customer focus through unique global sales organization and customer demand driven innovation

Proprietary market data supports trading and serves as an important tool for new customer acquisition

Technology investments / Google strategic partnership



CME Group's broad set of products are important risk management tools for traders and end-users around the world, including but not limited to:

## Interest Rates

- U.S. Treasuries
- SOFR
- Fed Fund

## Energy

- WTI Crude Oil
- Henry Hub Natural Gas

## Equity Index

- S&P 500
- Nasdaq
- Russell

## Agricultural

- Corn
- Soybeans
- Wheat

## FX

- Eur-USD
- GBP-USD
- JPY-USD

## Metals

- Precious (Gold, Silver)
- Industrial/Base (Copper, Aluminum)

*Futures, options on futures, and micro-sized products across asset classes*

# Summary of Recent Performance

## Key Highlights Q3 2024

**+18%**

Revenue growth year-over-year

**69.1%**

Adjusted Operating Margin

**+19%<sup>1</sup>**

Earnings growth year-over-year

**4.7%<sup>2</sup>**

Dividend yield

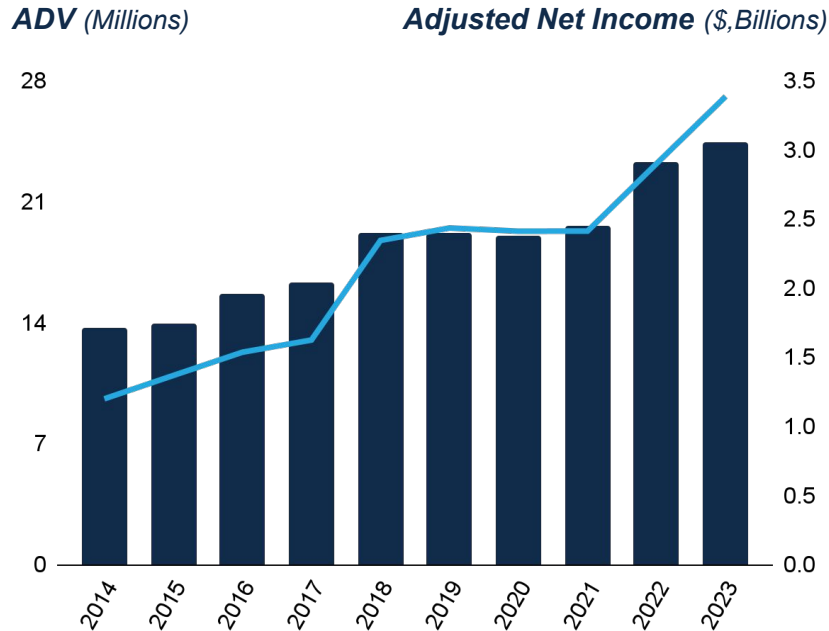
## Average Daily Volume (ADV) by Asset Class Q3 2024 (Thousands)

Product Line	ADV	YoY Change
Interest Rates	14,881	36%
Equity Index	7,407	17%
Energy	2,571	21%
Ag Commodities	1,614	13%
FX	1,089	16%
Metals	728	38%
<b>Total</b>	<b>28,289</b>	<b>27%</b>

Q3 2024 had year-over-year (YoY) growth in both average daily volume (ADV) and open interest (OI) across every asset class – the second consecutive quarter with this broad-based growth since 2010

# Strong History of Volume and Net Income Growth

**ADV Growth:** 7% CAGR  
**Adjusted Net Income Growth:** 12% CAGR



**ADV YTD<sup>1</sup>**  
(Millions)

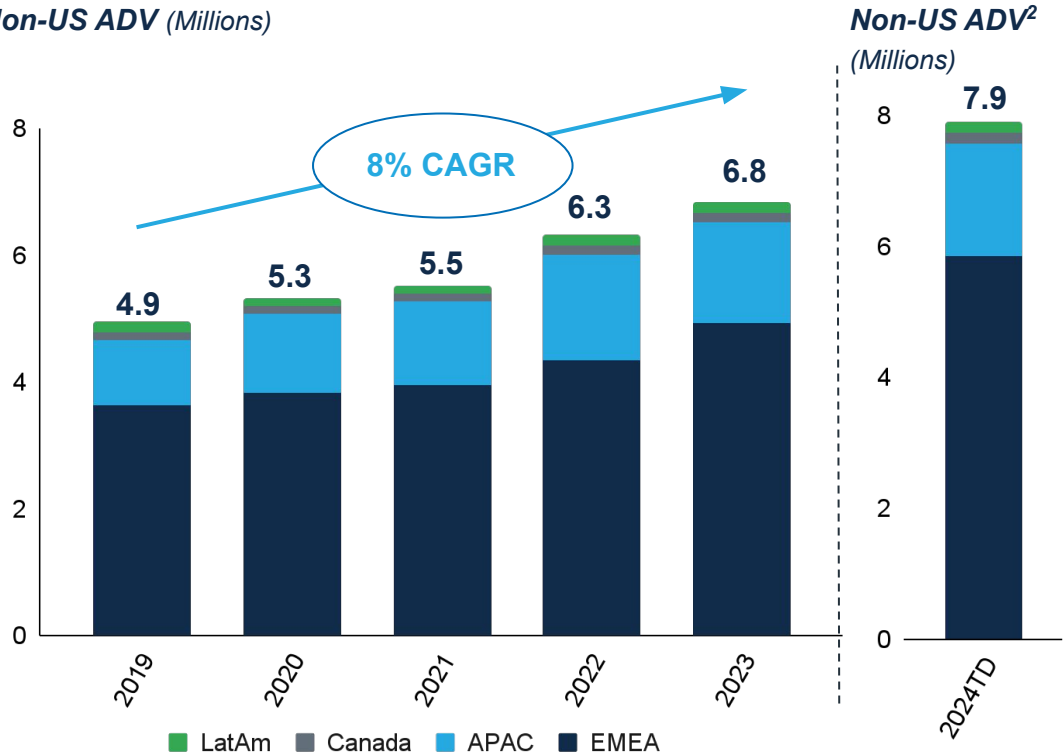


- Average annual volume increased in 44 of the past 51 years (13% growth CAGR over this period)
- Long-term positive trends maintained throughout various business cycles
- Volume maintained during the pandemic when large sectors of the economy shut down and we were in a zero-interest rate environment
- Strong operating leverage and expense discipline
- Record 2023 ADV of 24.4M, up 5% YoY, with records across interest rates, agricultural, options and non-U.S.
- % of individual trading days >25M
  - 15% in 2021 - 35% in 2023
  - 30% in 2022 - 54% in 2024TD

# Investments in Globalization are Paying Off

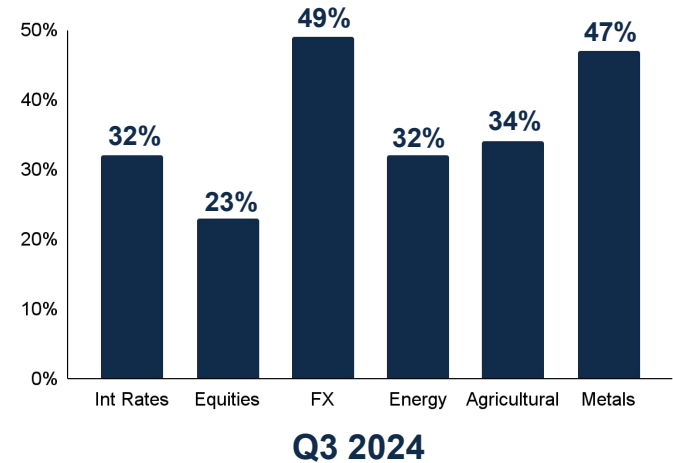
## Non-US ADV<sup>1</sup>

Non-US ADV (Millions)



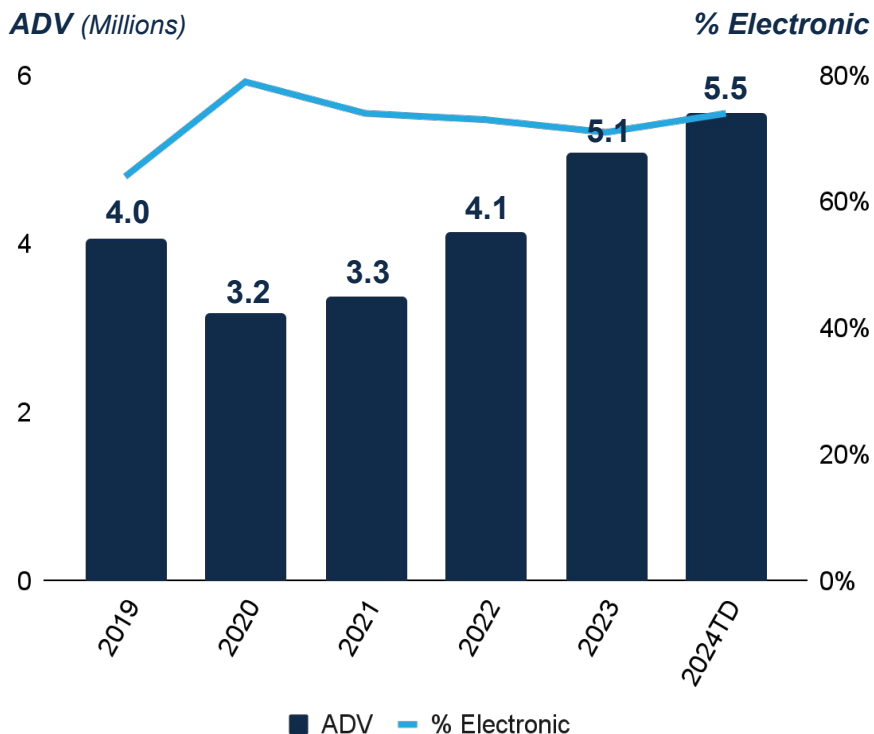
- We now have a sales presence in 11 countries, covering ~20,000 clients worldwide
- London is our single largest sales center and 66% of front office sales staff are now located outside the U.S. (up from 44% in 2018)

## Non-US ADV % of Total ADV by Asset Class



# 2024TD Options ADV Has Increased 9% From the Record 2023 Level

## Options ADV<sup>1</sup>



- Customers trading options are often hedging those options with our underlying futures, bringing additional volume to CME Group
- CME Direct (our proprietary front-end with ~12,000 users) primarily caters to options traders and transaction volume was up 18% in 2023
- In 2023, options ADV made up 21% of overall ADV and came in at a record 5.1M contracts, up 23% versus 2022, and included double-digit YoY growth across 5 of 6 asset classes

### 2024TD Options YoY ADV Highlights<sup>1</sup>

- 2024TD options ADV of 5.5M, up 9% vs. 2023TD
- Energy up 43%
- Henry Hub Natural Gas up 51% (3Q24 vs. 3Q23)
- Metals up 50%
- Equity Index up 13%
- FX up 14%

# Known for New Product Innovation Driven by Customer Demand

New products launched over the last 5 years generated 2.8M ADV in 2023 and ~\$254M in revenue; 52% CAGR 2019-2023

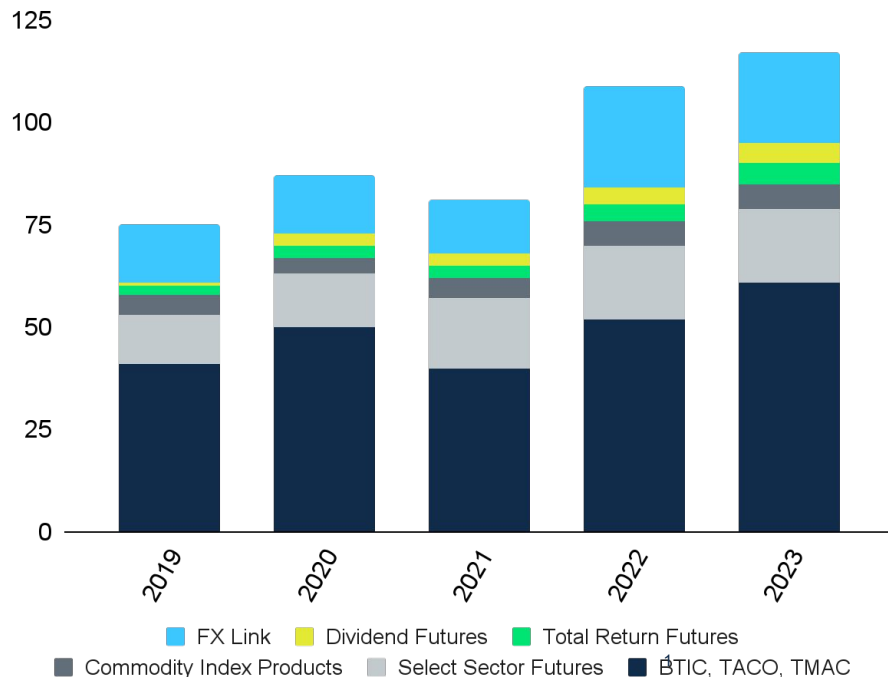
Since 2023, select new product launches include:

- **Rates:** T-bill futures, Monday/Wednesday weekly Treasury options, TBA futures coupon expansion, Micro Treasuries, options on €STR futures, clearing service for Mexican F-TIE Overnight Index Swaps, Corporate Bonds and Mortgage-Backed Securities on BrokerTec Quote, U.S. Credit futures (based on Bloomberg corporate bond indexes), €STRWatch tool, Mortgage Rate futures (January 2025), CME Term €STR Reference Rates
- **Equity Index:** Micro E-mini S&P Mid Cap 400 & Small Cap 600 futures, E-mini Russell 2000 Tuesday and Thursday weekly options, Micro E-mini options expansion, options on S&P 500 Annual Dividend Index futures, E-mini S&P 500 Equal Weight futures, Adjusted Interest Rate S&P 500 Total Return (SOFR) futures, options on Bloomberg Commodity Index futures, options on E-mini Select Sector futures and Dow Jones U.S. Real Estate Index futures, Yen- and U.S. Dollar denominated Micro Nikkei futures
- **FX:** Offshore Renminbi options (monthly/weekly), BTIC+ on EUR/USD FX futures
- **Energy:** Monday/Tuesday/Wednesday/Thursday WTI Crude Oil weekly options, Micro Henry Hub Natural Gas futures/options, Transatlantic Crude Spread futures, NY Harbor ULSD vs. Brent Crack Spread APO, Freight Route TC20 Middle East to UK Continent (Baltic) futures, EU Emissions relaunch, Argus Bakken Crude Oil Differential futures, series of Weather futures, CBL Australian Carbon Credit Unit (ACCU) futures
- **Crypto:** Three new Metaverse reference rates and real-time Indices, Event contracts on Bitcoin futures, APAC Reference Rates for Bitcoin and Ether, Ether/Bitcoin Ratio futures, series of weekly options, Micro Euro-denominated Bitcoin & Ether futures, two new cryptocurrency reference rates and real-time indices for XRP and Internet Computer (ICP), Bitcoin Friday futures
- **Metals:** Molybdenum Oxide (Platts) futures, Options on Micro Gold futures, Micro Platinum, Lithium Carbonate futures, Cobalt Hydroxide futures, Tuesday/Thursday weekly options on Gold, Silver and Copper, Spodumene futures, 1-Ounce Gold futures (January 13, 2025)
- **Agricultural:** New Crop weekly options, Wheat Spread futures



# OTC Alternative Product Suite Brings Traditional OTC Functionality to CME Group Market Participants

## Annual ADV (Thousands)



## Equity Index

- These OTC alternative products meet customer's needs under enhanced capital requirements while benefiting from the capital efficiency afforded by our Equity Index franchise
- These premium products command fees of 3 to 4 times the standard Equity Index average rate per contract

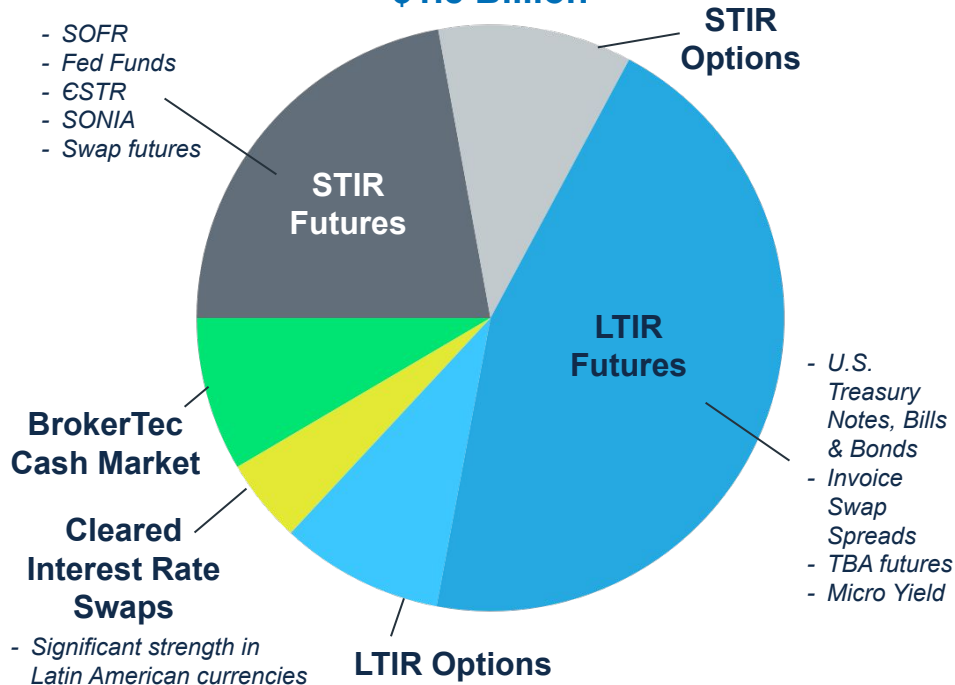
## Foreign Exchange

- CME FX Link creates a seamless connection between the FX futures contract and the OTC FX marketplace as a CME Globex-traded basis spread. The spread results in a simultaneous execution of FX futures cleared by CME, and OTC spot FX, subject to OTC documentation and credit relationships
- CME FX Spot+ planned for 2H 2024 - a new all-to-all spot FX marketplace will connect cash market participants with CME's FX futures liquidity

# CME Group's Most Diverse Interest Rates Offering Creates Substantial Operational and Capital Efficiencies for Market Participants

## 2023 Interest Rates Revenue

**\$1.8 Billion**



- Trading opportunities across the yield curve from one week to 30 years, including a vibrant suite of options products
- Deep liquid markets and established pools of open interest that offer narrower bid/ask spreads
- Continuous innovation driving strong ADV growth over the last decade - even including a long period of zero interest rate policy (ZIRP), market impacts from a global pandemic, and the successful multi-year transition of a major benchmark product (Eurodollar to SOFR)

- **ADV has doubled from 2014 (~7M) to 2024TD<sup>1</sup> (14.0M) / 16% CAGR 2020-2023**  
 - **2014-2023 CAGRs - LTIR 8% / STIR 6%**

- Movement in Interest Rate markets can drive activity in other asset classes

# CME Group Is Delivering Margin Efficiencies Across Interest Rate Products

## CME Group Rates Futures & Options Offsets

Consolidation and automatic offsets of positions within CME Group Interest Rates futures and options products (“one-pot”)

*CFTC Regulated*

## CME Portfolio Margining

*Up to 80% - 100% savings (\$7.5B daily average)*

CME Group Futures & Options

CME Group Cleared Swaps

Single account for positions and margining (“one-pot”)

- 100% savings for excess long option value
- 95% - 97% savings for convexity bias trades
- 80% - 85% savings for invoice spread trades

*CFTC Regulated*

## CME Cross Margining<sup>1</sup>

*Up to 80% savings<sup>2</sup>*

CME Group Futures

FICC Cleared Treasuries

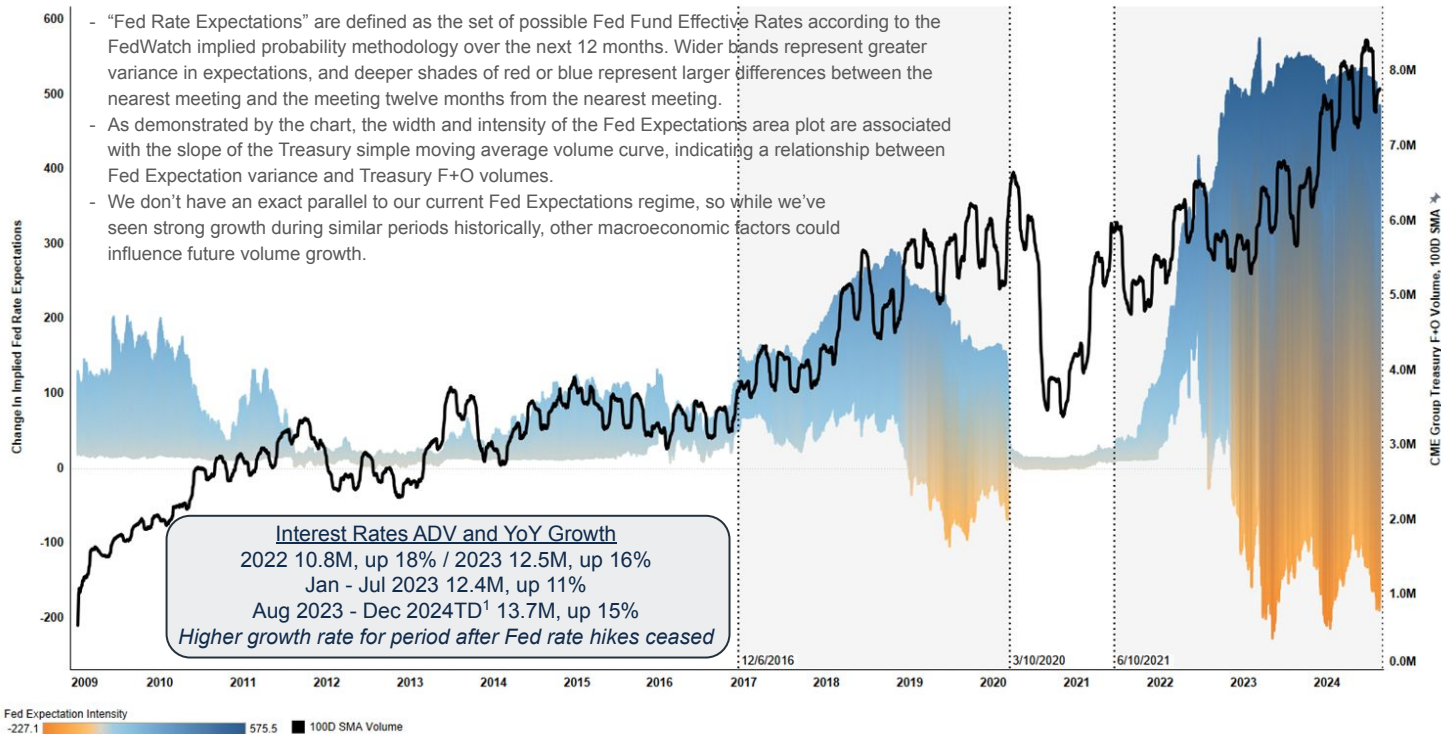
Single portfolio for positions and margining with savings allocated to each CCP (“hybrid two-pot”)  
20+ year arrangement between CME and FICC  
Highest savings for cash vs. futures basis trades\*

*CFTC & SEC Regulated*

**~\$20B Total Average Daily Margin Savings**

# Historically, Dispersion of Opinions in Forward Fed Rate Expectations Has Generally Led to Higher Interest Rates Futures & Options Volumes

CME Group Treasury F+O Volume Versus Fed Rate Expectations  
100D SMA Volume, January 2009 - August 16, 2024



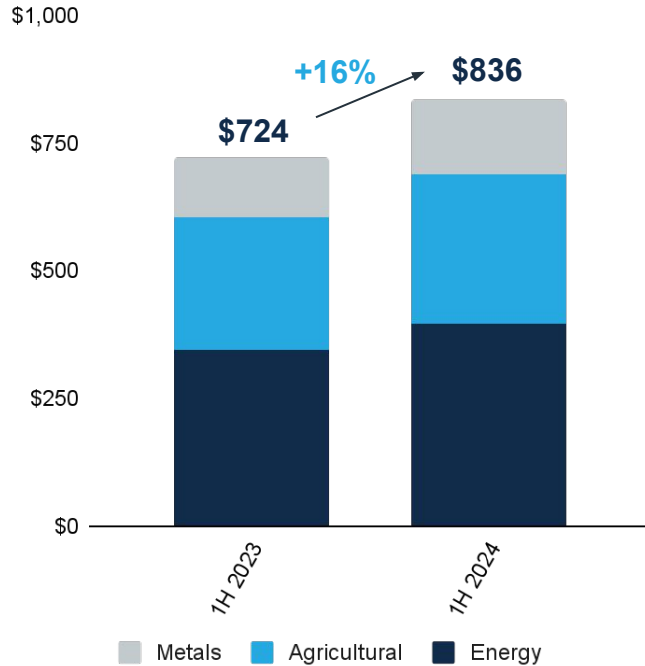
As we sit today, in 2024, dispersion is near historic highs

We don't have an exact parallel to our current Fed Expectations regime, so while we've seen strong growth during similar periods historically, other macroeconomic factors could influence future volume growth

# Total Physical Commodities Products Make Up an Increasingly Meaningful Part of the Business

For the first half of 2024, total physical commodities ADV represented **19%** of total futures and options ADV, and **34%** of clearing and transaction fee revenue

Total Commodities Revenue (Millions)



## The world's benchmark commodity products, all in one place

### Energy

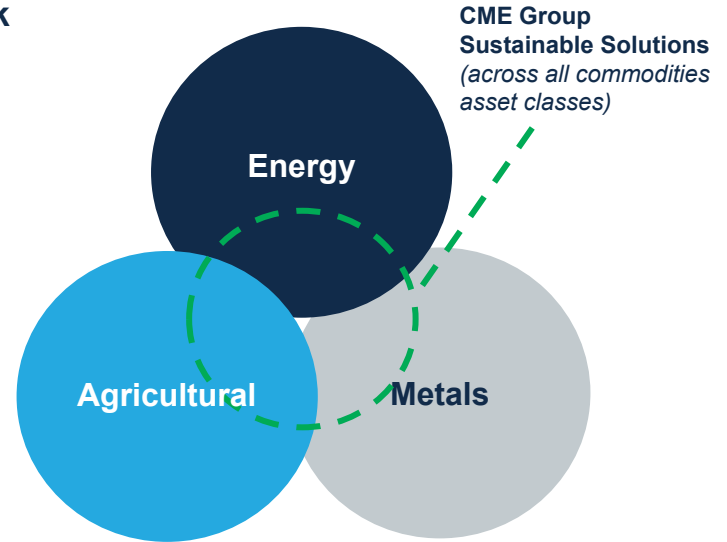
WTI Crude Oil  
Henry Hub Natural Gas  
Refined Products

### Agricultural

Grains & Oilseeds  
(Corn, Wheat, Soybean) and  
Livestock

### Metals

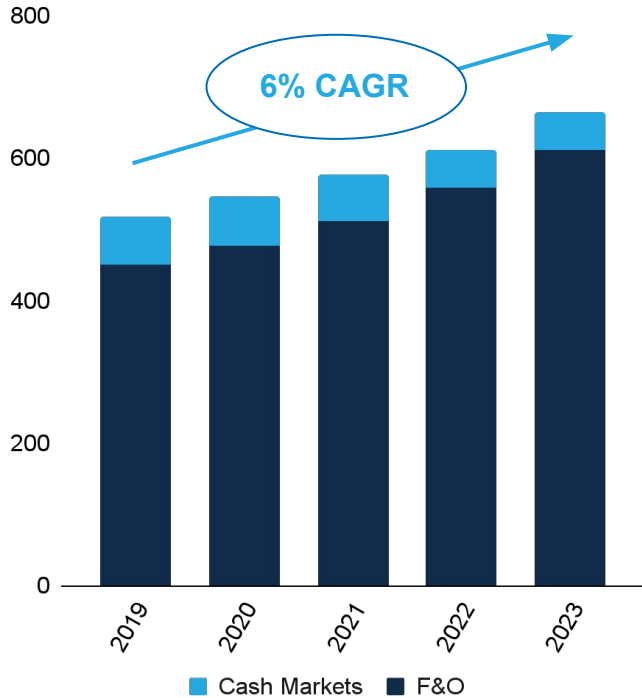
Precious (Gold, Silver, Platinum) and  
Base/Industrial  
(Copper/Aluminum)



# Data Components of our Business Reinforce Transaction Revenue

## Part of Total Revenue

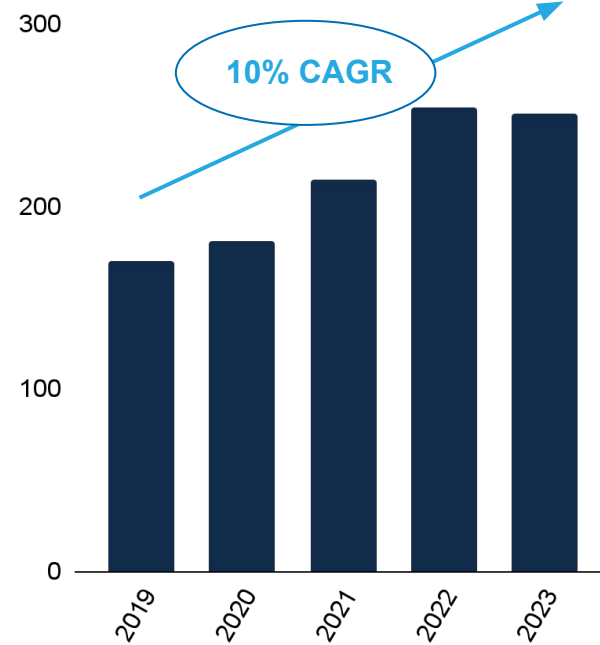
Market Data Revenue (Millions)



## Other Below The Line Income

S&P DJI Non-Operating Income<sup>1</sup>

(Millions)<sup>2</sup>



- OSTTRA JV with IHS Markit (now a part of S&P Global) (50% of earnings) - totaled
  - ~\$83M in 2023, up from
  - ~\$75M in 2022
- CME Group's portion of income generated from customer cash balances held on deposit at the clearing house, as well as income on investing corporate funds was
  - ~\$468M in 2023, up from
  - ~\$320M in 2022

# Google Cloud Strategic Partnership

*In November 2021, CME Group announced a long-term strategic partnership with Google to accelerate our move to the cloud and to transform how global derivatives markets operate with technology*



## Google Cloud

**CME Group and Google will jointly focus on co-innovation as we seek to deliver the next generation of products, services, opportunities, and efficiencies that benefit our customers around the globe**

- Capital markets expertise
- Early cloud-migration focus on data-related applications including Referential Data Warehouse, Margin Calculator, Elysian Dairy Auction, and SDR Reporting

- As markets eventually migrate in the years, this will allow us to reduce idle capacity more efficiently scale capacity up and down based on market needs

coming as we

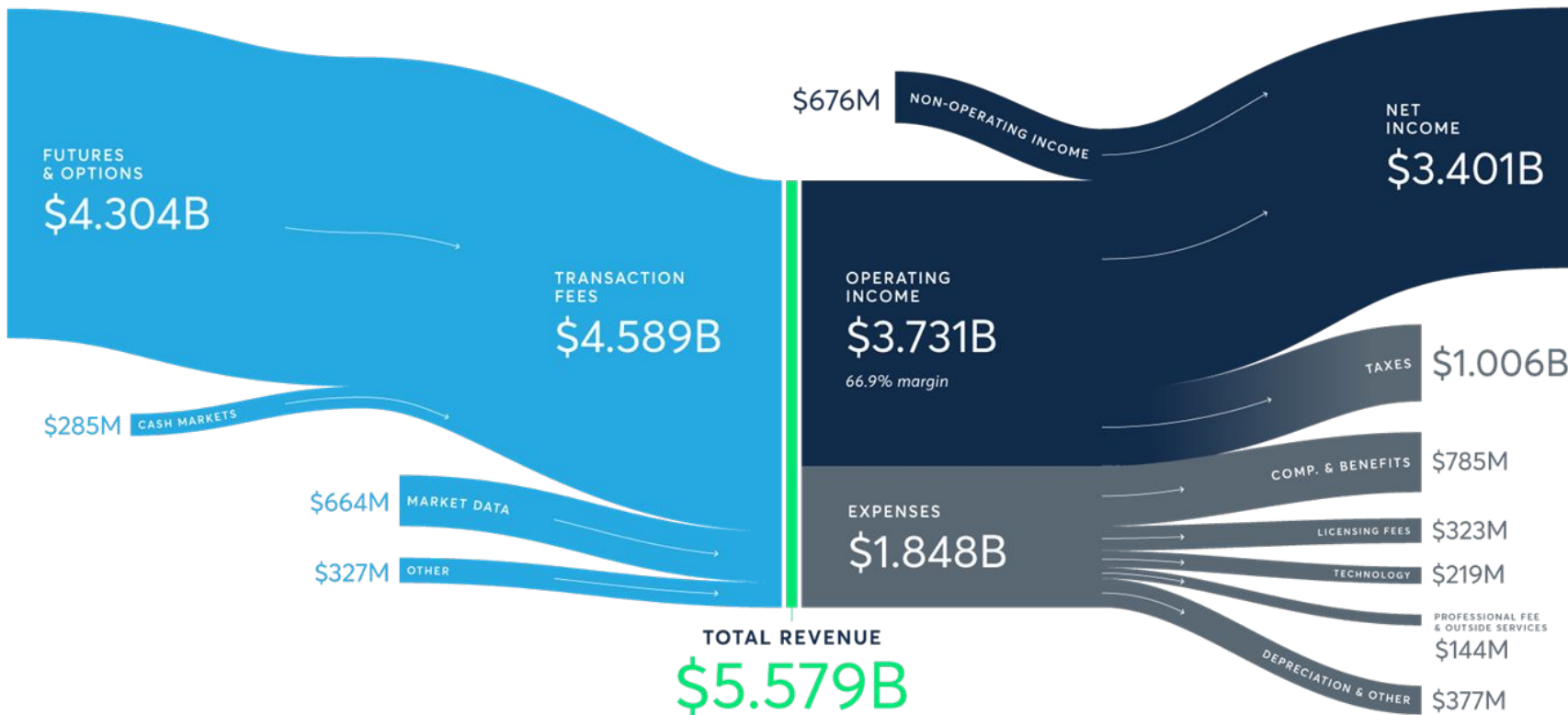
- Cloud migration expertise
- Data and analytics expertise
- \$1 billion equity investment in a new series of non-vot convertible preferred stock of CME Group

- Over time, capital expenditures will decrease, while technology expense (migration and development / cloud consumption) will increase, with the target of reaching net cash costs neutral ~4 years in

- Early years were foundational, while more recently our application migration is accelerating
- Announced significant step in 2Q24 of plans to build a new private Google cloud region, and a co-location facility, in Aurora, Illinois, designed to support global trading of our F&O markets in the cloud with next-generation cloud technology, ultra-low latency networking and high-performance computing
  - Will build on the benefits we provide our clients today through a broader range of connectivity options and faster product development
  - In addition to our state-of-the-art trading infrastructure, our clients will also be able to utilize Google's artificial intelligence and data capabilities to help develop, test and implement trading strategies to manage their risk more efficiently

# 2023 CME Group Adjusted Income Statement Summary<sup>1</sup>

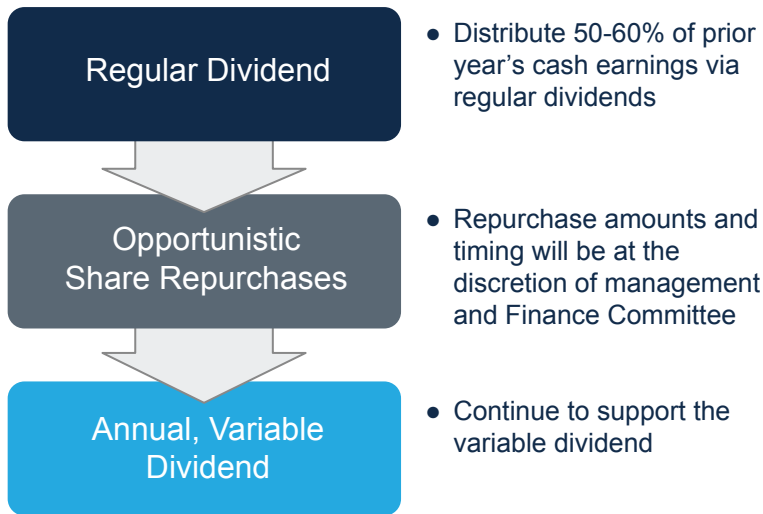
Strong operating model and cost discipline





# Capital Return Policy Now Includes Opportunistic Share Repurchases

## New Capital Return Framework



- Diversifies our tools and allows the flexibility to execute share repurchases (up to \$3 billion authorized share buyback)
- The 2024 annual variable dividend (payable January 16, 2025) includes ~\$150 million from Google proceeds (~\$300 million remaining)
- Beginning in 2026, the annual variable dividend payment will align with the Q1 regular quarterly dividend (announced and paid in Q1 2026)

## Capital Return History



- Increased quarterly dividend payments over 14 consecutive years
- As of January 2025, CME Group will have paid more than \$28 billion in quarterly and variable dividends since adopting the annual variable dividend policy in 2012
- Highest dividend yield in the exchange space of 4.9%<sup>1</sup>

# CME Group 2024 Futures and Options Fee Adjustments Were Effective 2/1/24

- CME Group’s pricing philosophy seeks to avoid impacting the amount of volume and liquidity coming across our platform. As a network-based business, higher volumes benefits both our customers and CME Group
- Pricing increases are very tactical and consider a number of additional factors, including market and customer health, trading behaviors, and the cost of replicating the exposure through alternative means
- Historically, pricing adjustments have had a ~1.5%-2% impact, but 2023 adjustments were a bit outsized:
  - 2023 adjustments (announced in November 2022<sup>1</sup>) were estimated to increase transaction revenue in the range of 4%-5%, assuming similar trading patterns to 2022, with roughly the same level of increase for financial products and commodity products; Market Data fee adjustments that were effective January 1, 2023 were estimated to be an ~4% increase
- For 2024, total fee adjustments are estimated to increase total revenue in the range of 2.5%-3%, assuming similar volume and customer mix as 2023 and Q423 collateral mix:
  - Futures and options adjustments (announced in November 2023<sup>2</sup>) are estimated to increase transaction revenue in the range of 1.5%-2%
  - Market Data fee adjustments (effective 1/1/24) came in at a 3%-5% increase; the ultimate impact to revenues will be determined by a number of factors (subscriber count, customer and product mix)
  - Non-cash collateral fees increased to 10 bps from 7 bps effective January 2024

**Rolling 3-Month Rate Per Contract by Asset Class (for the period ending)**

	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24
Interest Rates	\$0.502	\$0.491	\$0.488	\$0.480	\$0.484	\$0.486	\$0.486	\$0.485	\$0.484	\$0.482	\$0.475	\$0.468	\$0.472
Equity Index	\$0.599	\$0.605	\$0.616	\$0.642	\$0.645	\$0.641	\$0.627	\$0.628	\$0.628	\$0.631	\$0.618	\$0.616	\$0.622
Energy	\$1.323	\$1.325	\$1.338	\$1.333	\$1.338	\$1.334	\$1.331	\$1.316	\$1.297	\$1.275	\$1.258	\$1.246	\$1.239
FX	\$0.775	\$0.768	\$0.806	\$0.809	\$0.812	\$0.787	\$0.782	\$0.773	\$0.754	\$0.753	\$0.749	\$0.744	\$0.749
Agricultural	\$1.328	\$1.337	\$1.361	\$1.351	\$1.374	\$1.356	\$1.389	\$1.348	\$1.366	\$1.345	\$1.368	\$1.346	\$1.339
Metals	<u>\$1.478</u>	<u>\$1.500</u>	<u>\$1.502</u>	<u>\$1.509</u>	<u>\$1.515</u>	<u>\$1.556</u>	<u>\$1.525</u>	<u>\$1.518</u>	<u>\$1.511</u>	<u>\$1.546</u>	<u>\$1.545</u>	<u>\$1.540</u>	<u>\$1.541</u>
<b>Total</b>	<b>\$0.687</b>	<b>\$0.681</b>	<b>\$0.682</b>	<b>\$0.683</b>	<b>\$0.690</b>	<b>\$0.695</b>	<b>\$0.699</b>	<b>\$0.704</b>	<b>\$0.708</b>	<b>\$0.705</b>	<b>\$0.684</b>	<b>\$0.666</b>	<b>\$0.669</b>

# CME Group - Compelling Investment

## Marketplace Position +

- Unmatched product diversity
- Transaction destination in times of market stress, 24-hour liquidity, and strong network effects
- World's largest options exchange and valuable proprietary data
- Significant capital and operational efficiencies for customers
- Important partnerships with S&P Global (S&P Dow Jones Indexes and OSTTRA)

## Growth Orientation

- Working collaboratively with diverse market participants to drive product innovation and new opportunities
- Migrated cash markets businesses to a common platform providing efficiencies / opportunities across futures, cash and over-the-counter (OTC) products to a wider range of market participants
- Long-term strategic partnership with Google Cloud to transform global derivatives markets through cloud adoption, and co-innovate to deliver expanded access, new products and more efficiencies for all market participants

## = Compelling Investment

- Long-term volume growth
- Ongoing need for risk management around the world
- Significant capital return

