CME Group Overview

September 2020

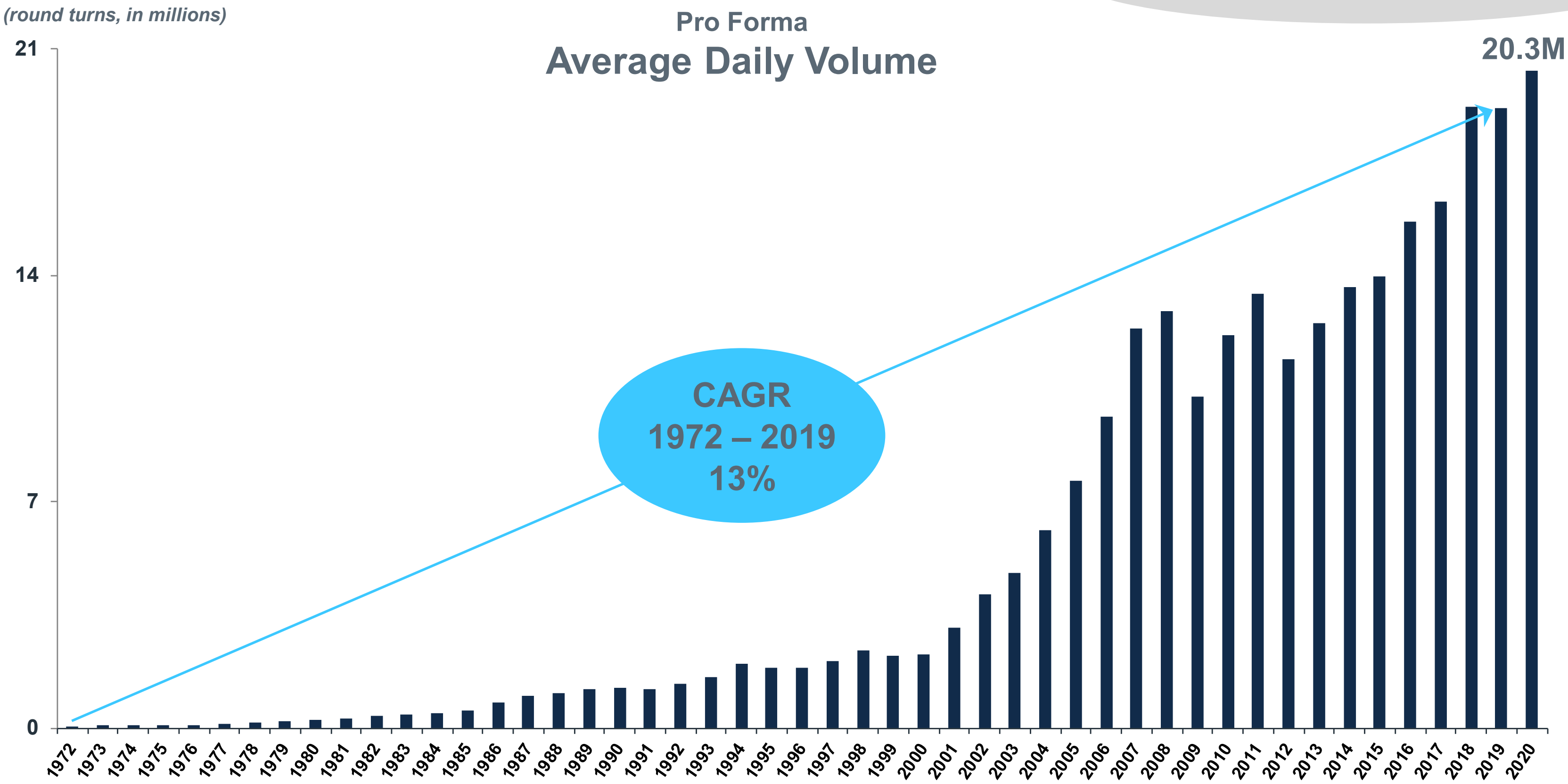
Forward Looking Statements

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 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 policy 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 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; 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; volatility in commodity, equity and fixed income prices, and price volatility of financial benchmarks and instruments such as interest rates, credit spreads, 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; the impact of the (COVID-19) pandemic and response by governments and other third parties; 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, control the costs and achieve the synergies associated with our strategy for acquisitions, investments and alliances, including those associated with the acquisition of NEX; 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 ability to maintain our brand and reputation; and the unfavorable resolution of material legal proceedings. 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.

NOTE: Unless otherwise noted, all references to CME Group volume, open interest and rate per contract information in the text of this document is based on pro forma results assuming the merger with CBOT Holdings and the acquisition of NYMEX Holdings were completed as of the beginning of the period presented. All data exclude CME Group's non-traditional TRAKRS^{SM} products, for which CME Group received significantly lower clearing fees of less than one cent per contract on average. Unless otherwise noted, all year, quarter and month to date volume is through 8/31/2020.

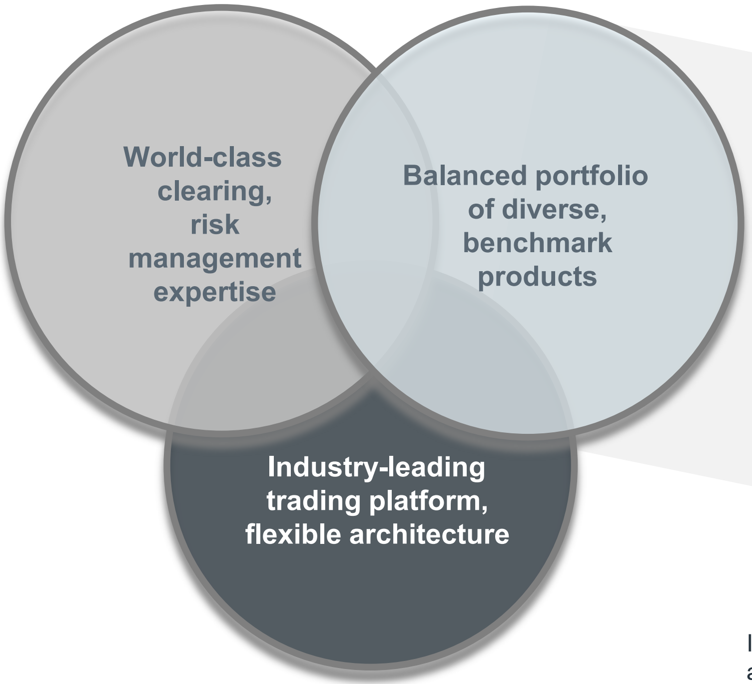
Long-Term Growth in a Variety of Environments

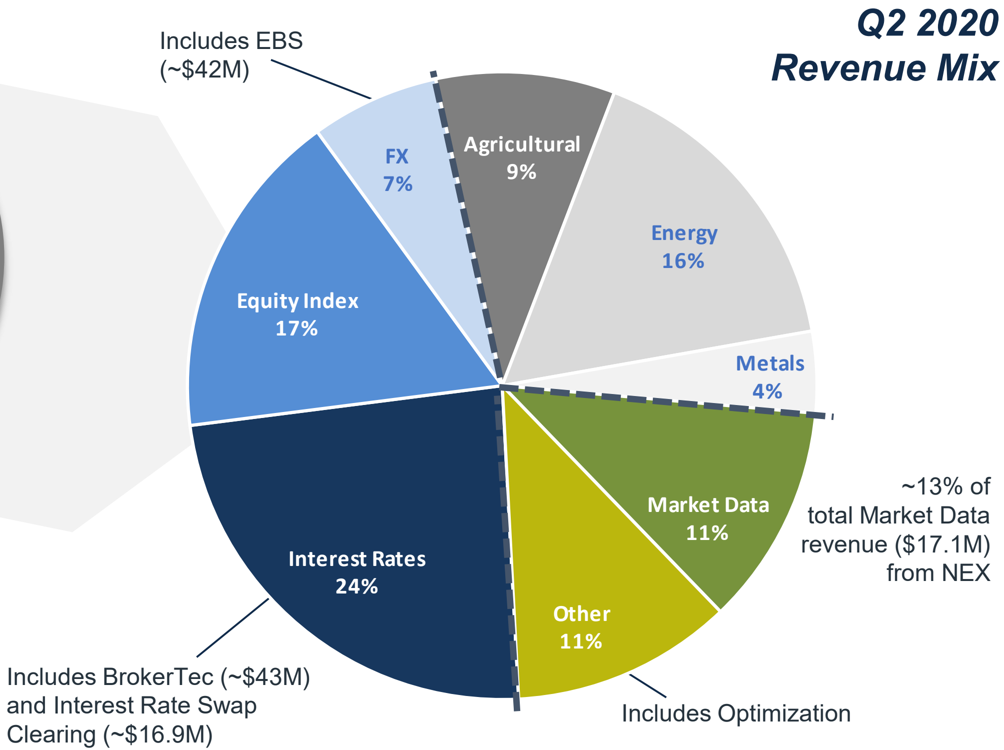
2020 YTD **up 2%** vs. 2019 YTD



Note: Volumes are all pro forma as if CME owned NYMEX and CBOT over the illustrated period and 2020TD ADV is through 9/11/2020

Unique Assets Provide Competitive Advantages





2020 YTD Activity Solid Despite Macroeconomic Headwinds

Year-Over-Year Growth Across 4 of 6 Asset Classes

Product Line	YTD 2020 ADV	Year-Over-Year Growth	2Q20 Average RPC
	ADV in thousands, growth compared to same time period in the prior year		*Dollars*
Interest Rates	8,934	-19%	0.510
Equities	5,782	66%	0.574
Energy	2,595	8%	1.191
Ag Commodities	1,392	-10%	1.316
FX	884	2%	0.786
Metals	745	12%	1.518
Total	**20,332**	**2%**	**0.731**

Note: 2020 year-to-date ADV is through 9/11/2020

During 1Q 2020, CME Group Undertook Several Actions to Support the Health of Employees, Clients and Markets

- Implemented work from home mandates and travel restrictions to protect employees across our global offices. Assisted global customers in transitioning to work from home – for example, quickly onboarded hundreds of FX clients to our EBS Global Access, a browser-based trading solution, providing a secure access point to all manually-traded EBS instruments on EBX Markets and EBS Direct
- Closed our open outcry trading floors and successfully assisted many clients who traded on the floor to the screen, leveraging our own front-end platform in order to quickly register and onboard a significant number of new users over a short time period. The majority of this historically floor-traded activity – primarily Eurodollar options – has held up well with interest rate options as a percentage of interest rate futures remaining at roughly the same levels as for the full year, and are actually ahead of where they were on the last few days that the trading floors were open
- Technology systems and processes performed extremely well – providing consistent response times with peak order traffic. We coordinated actions with stock markets and were in regular contact with customers, Futures Commission Merchants (FCMs) and regulators. Our operational tools – including circuit breakers and velocity logic – worked as designed. As to be expected during peak volatility periods, our liquidity for highly active contracts did decline, but on average considerably less than the magnitude of the market moves that our clients experienced, which means that we remained the most liquid and active venue for our clients
- Working in close collaboration with our clearing house risk committees, regulators and other clearing houses, we maintained our industry-leading clearing function to provide safeguards for every trade, and raised margins on many products across most asset classes in response to record activity and volatility
- Shifted our client engagement to virtual mediums – calls, emails and video conferences – very early on in the quarter, and productivity remained high. With more than 50% of our global sales organization residing outside of the U.S., non-U.S. activity came in at record levels. We saw over a 122% increase in new retail customers during 1Q 2020 as our compelling product set and broker partners have continued to attract new participants
- Client Development & Sales teams also used this time period to continue to progress key integration projects and accelerate product education to drive cross-selling activities globally. We completed over 290 cross-selling meetings to clients from both our traditional futures business, and those of the cash and optimization businesses we acquired. For reference, that compares to 400 of those cross-selling meetings during the full year of 2019

Following the unprecedented activity in 1Q20:

Despite the difficult circumstances the coronavirus pandemic has caused around the world, and the universal impacts to the global exchange market, CME Group continues to help clients to manage their risk and navigate uncertainty. CME Group's highly diverse product set, global distribution, and consistent outreach to market participants through our salesforce worldwide, positions the company well to continue to create capital and operational efficiencies for clients as the trading environment evolves

Positive Momentum in Global Client Engagement

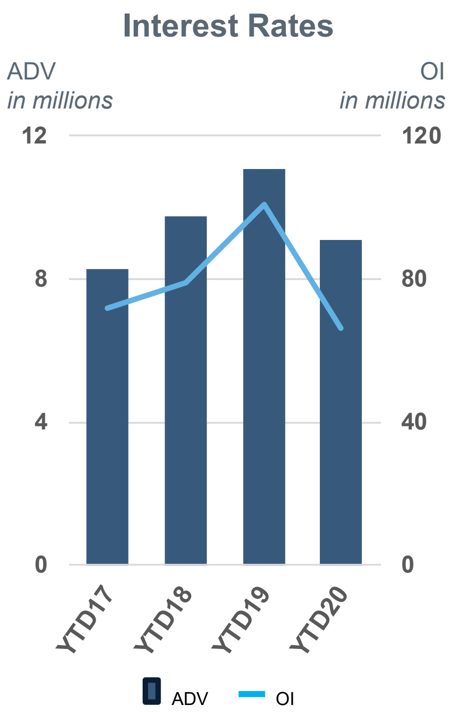
We now have Sales staff located in **15 countries and 19 cities** covering more than **10,000 clients** worldwide.

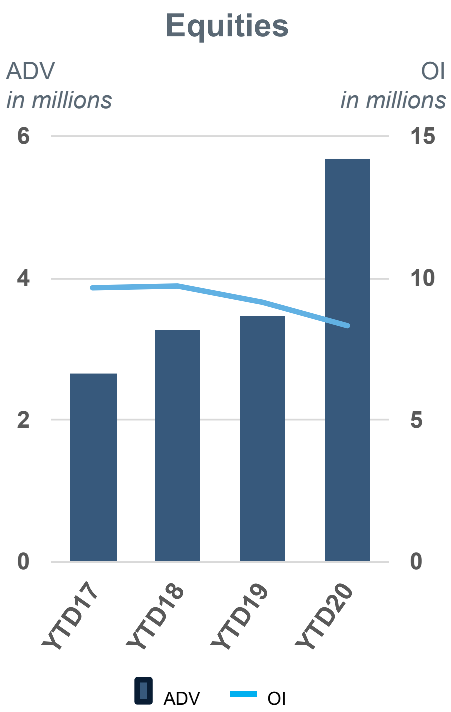
- In 2Q20, client engagement was up 66% versus the same period last year, driven primarily from an increased number of client calls, WebEx meetings and emails. Year-to-date activity is up 81%
- Cross-introduction & cross-sell efforts to capitalize on the NEX acquisition remain a primary focus for our teams
  - May represented a record high month with more than 300 cross-introductions across teams, more than the entire first quarter combined (290). A total of 500 cross-introductions were made in 2Q20
- CME Group's global sales force has an intense focus around campaign-selling to help bring key products and services to market. A great example of this was the recent collaboration across product, sales and marketing to launch the new 3-year treasury product which had more than 40 clients participating on Day 1 of trading
- While the intense market turmoil of late 1Q and early 2Q has subsided, clients continue to express their appreciation to CME Group's Client Development and Sales Organization for being highly responsive through the peak of the crisis and delivering value-added solutions across product lines

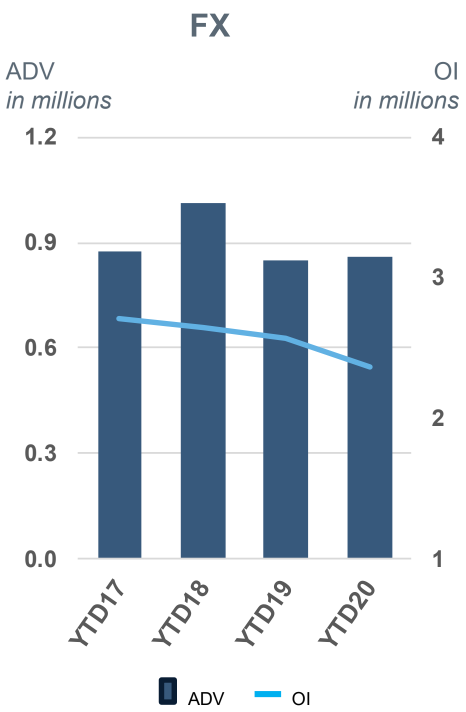
- 56% of sales staff are now located outside the U.S. (up from 44% the same time 3 years ago)
- Through the integration, we've added 10 new Sales Offices around the world
- Singapore and Hong Kong now represent a larger concentration of Sales staff than Chicago

Balanced Portfolio of Diverse, Benchmark Products

YTD 2020 Product Detail - Financials



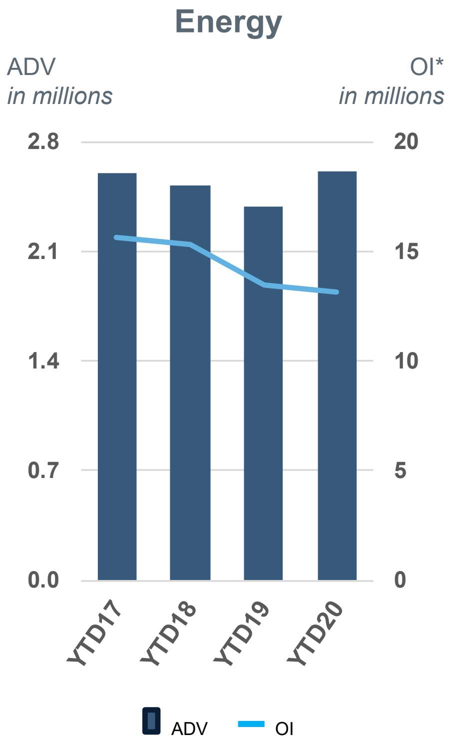


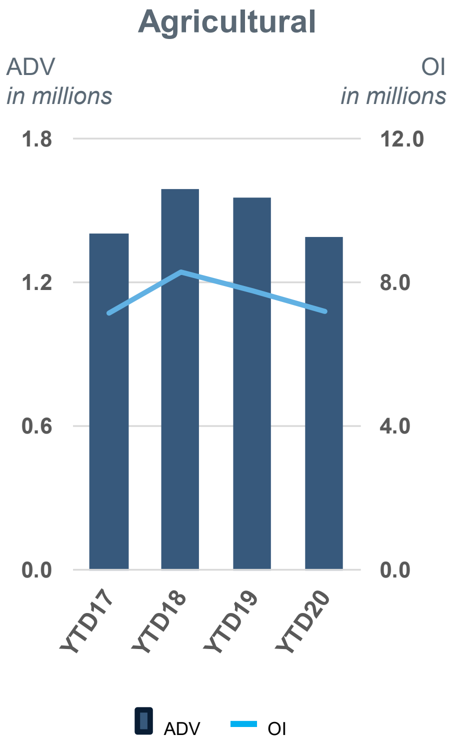


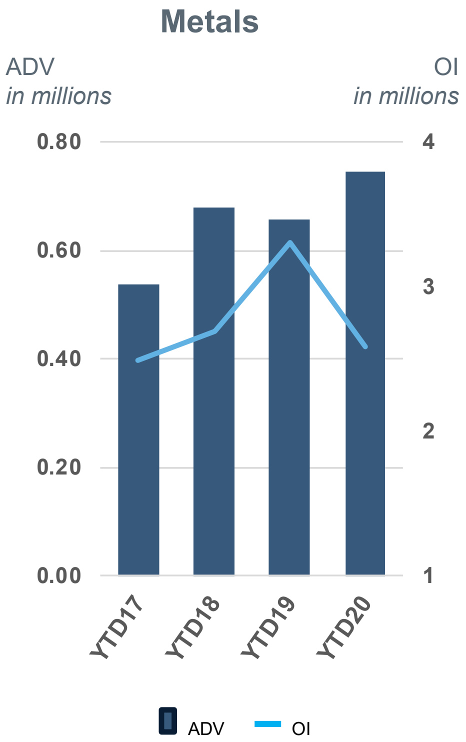
Note: 2020 year-to-date ADV is through August 31, all other years through the same time period YTD through August month-end

Balanced Portfolio of Diverse, Benchmark Products

YTD 2020 Product Detail - Commodities





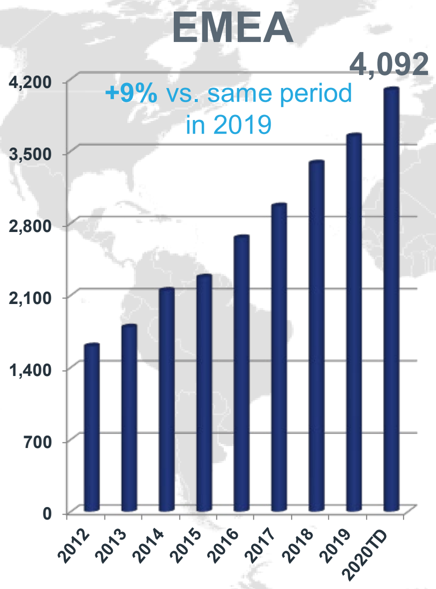


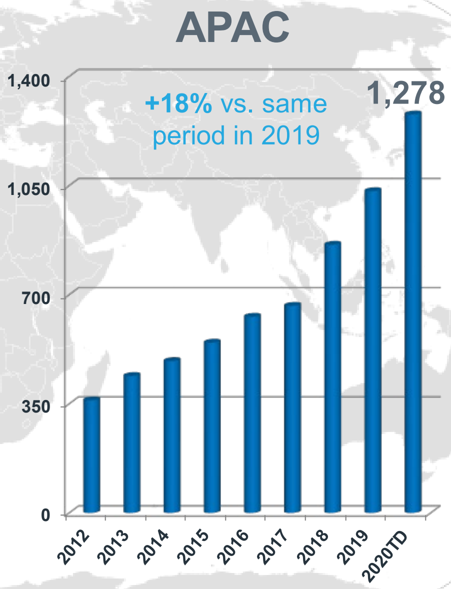
**Energy OI includes benchmark products only – Crude Oil, Natural Gas and Refined*

Note: 2020 year-to-date ADV is through August 31, all other years through the same time period YTD through August month-end

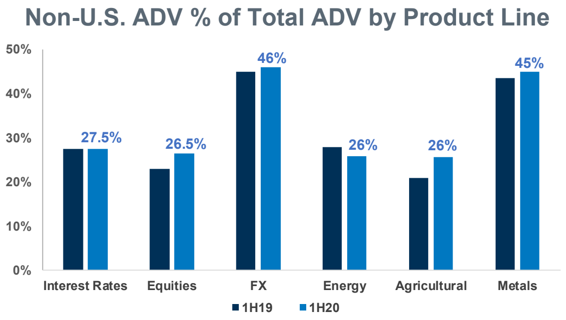
Investments in Globalization Are Paying Off

Electronic ADV based on origin of trade, in 000s





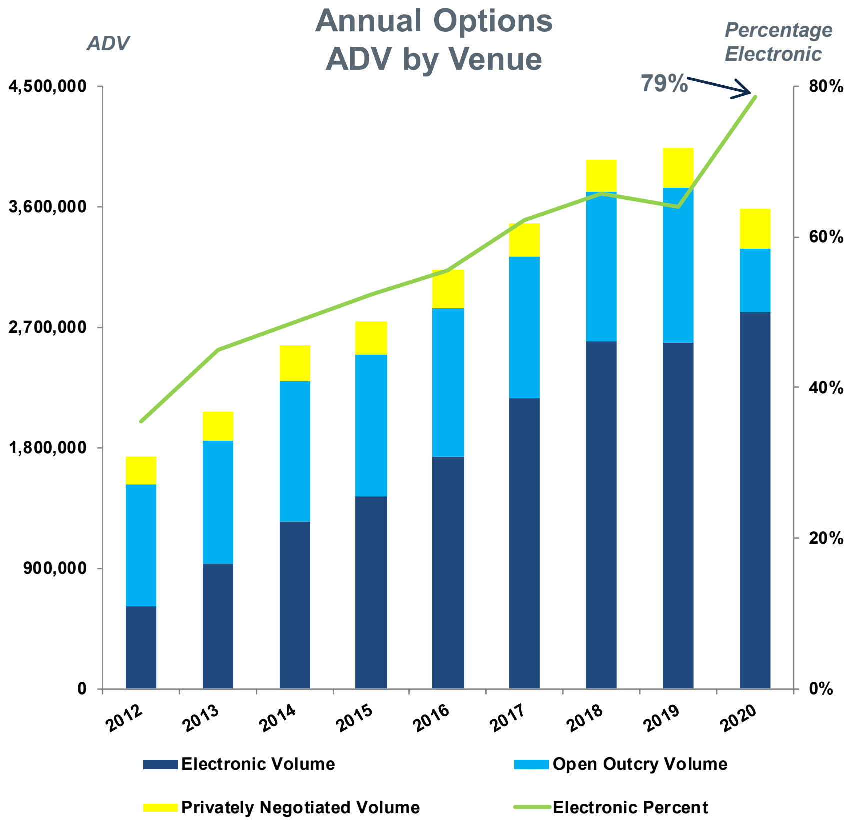
Note: 2020TD ADV is through 9/11/2020



1H20 Non-U.S. ADV grew 21% to 6.1 million contracts, with solid growth across Equities, Energy and Metals

- **1H20 Non-U.S. ADV highlights:**
  - Equity Index ADV grew 111% to 1.6 million contracts
  - Energy ADV grew 12% to 751,036 contracts
  - Metals ADV grew 22% to 316,280 contracts
- **2Q20 Equity Index Non-U.S. ADV increased 80% to 1.5 million contracts**
- **2Q20 ADV out of Asia grew 1% to 1.1 million contracts**

Options Business – Continue to Innovate



- Despite a lower volatility environment, relative to 1Q20, CME Equity Index options ADV have grown year-over-year
  - 2Q20 E-mini options ADV increased 5% to 628,430 contracts compared with 2Q19
  - E-mini options ADV grew 20% year-over-year in both June and July of 2020

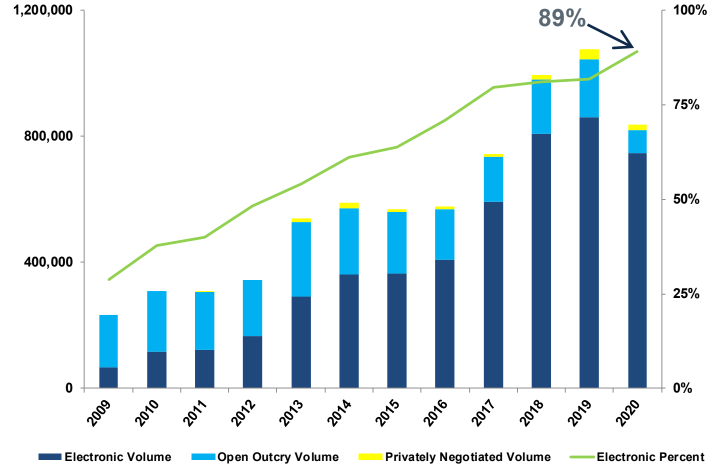
- Even though 1H20 Options ADV was down 4% versus 1H19, Options revenue grew 3% for the same timeframe with strong rate per contract (RPC) growth driven by client mix and product mix

- Options activity tends to increase with market volatility, and investor interest in using more complex strategies has grown with time. CME Group continues to innovate to meet the needs of market participants
  - Seeing strong global uptake of CME Group's enhanced suite of Options analytics and tools
    - Highest utilization months for Quikstrike Analytics in April and May of 2020
  - Options on the popular Micro E-mini S&P 500 and Nasdaq 100 futures begin trading on August 31, 2020

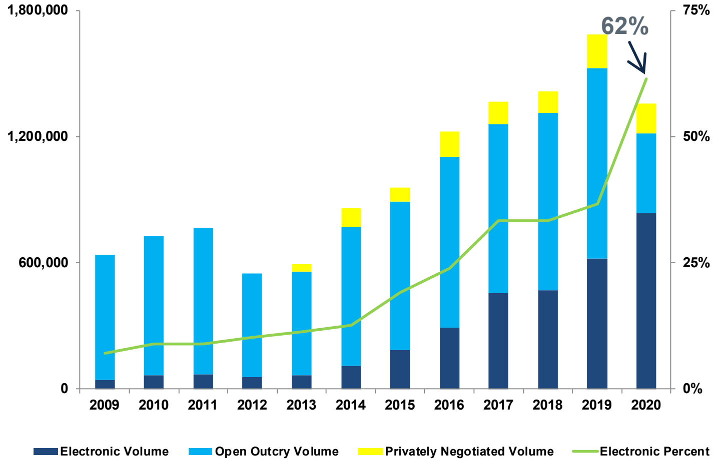
Note: 2020TD ADV is through 8/31/2020

Interest Rate Options

Treasury Options



Eurodollar Options



2019 Highlights

- Record ADV of 1.1 million contracts traded daily, +8% YoY
- Record 82% traded on CME Globex
- Record open interest of 11.3 million contracts on August 22
- Friday Weekly options averaged a record 205K contracts daily
- Wednesday Weekly options averaged 32.3K+ contracts daily

Expanded Product Offering:

- 2 expirations every week on Wed and Fri (104 expirations per year) on each tenor
- Create calendar spreads between weeklies, serials and quarterlies
- Treasury options expiration calendar

2019 Highlights

- Record 1.69 million contracts traded daily, +19% YoY
- Record 41% traded on CME Globex
- Record open interest of nearly 71 million contracts on June 13
- Record average open interest of 56 million contracts, +27% YoY

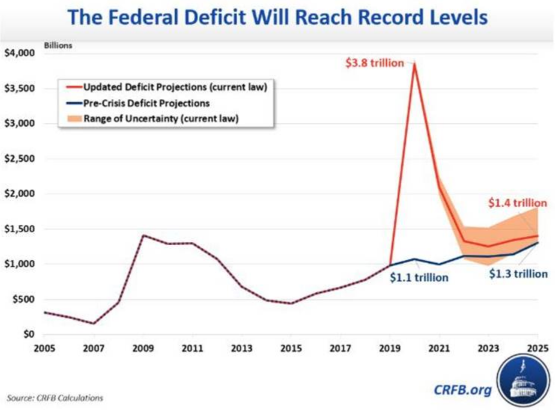
Expanded Product Offering

- 80 different expirations now available with expirations from 1 week to 4 years listed
- Eurodollar options expiration calendar

- **On July 27, 2020, CME Group implemented changes to the committed cross protocol, which has seen growing usage in Interest Rate options**
  - **Enhanced Better Price or Volume Match (BPVM) / BPVM percentage increased from 35% to 45%**

Note: 2020TD ADV is through 8/31/2020

U.S. Treasury Net Issuance Likely to Add Up Increasing the Need for the Highly Developed U.S. Treasury Futures Liquidity Pools for Hedging and Risk Management Purposes

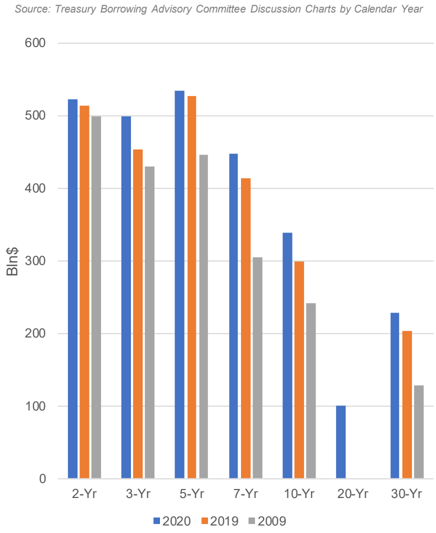


Treasury Issuance 2020 - $3T in Q2 2020 Surpasses Net Issuance in 2019

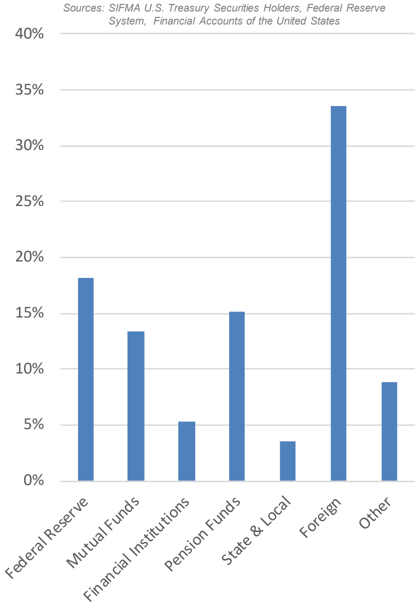
- Record Net Issuance Levels announced in Treasury fiscal year Q2 2020 ($2.99T), Q3 2020 ($677B), and Q4 2020 ($947B)
  - The Q4 2020 estimate of $947B compares to $2.753T of realized borrowing in Q3 2020 (original announced estimate of $677B)
  - The Q4 2020 borrowing need will ultimately depend on the final provisions of the additional legislation. The borrowing estimate is $270 billion higher than announced in May 2020

Increasing use of longer coupons than expected; this means more duration and the potential for more use of CME Group products for risk management purposes

Coupon issuance 2020, 2019, 2009



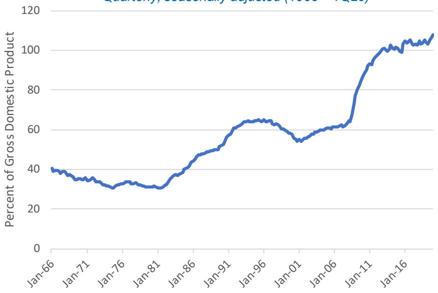
Holders of Treasury Debt



- Debt to GDP levels expected to grow significantly in next two years (CBO estimate)
  - *"Projected to be 20 percentage points higher at the end of 2020 and 26 percentage points higher at the end of 2021 than in CBO's March baseline projections" - CBO*
  - *US Debt to GDP is forecast to rise above the all-time high in 1946 (Economist) and (Balance)*

Total public debt as % of gross domestic product

Quarterly, seasonally adjusted (1966 – 1Q20)



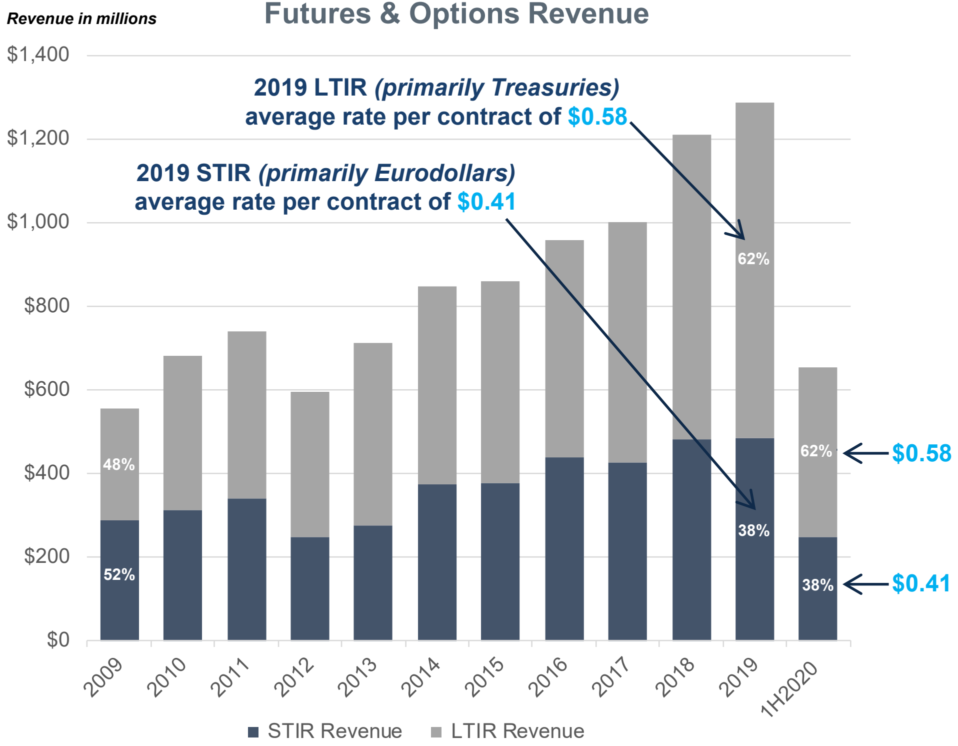
Source: Federal Reserve Bank of St. Louis Database

Additional sources for Treasury Issuance discussion can be found on the final slide of this presentation. For more information, please see a recent CME Group whitepaper https://www.cmegroup.com/campaigns/us-treasury-issuance-drivers-mechanics-and-holders.html?utm_source=pardot&utm_medium=email&utm_campaign=rates_recap&utm_content=hyperlink_082020

U.S. Treasury Department Targeting Greater Longer-Dated Issuance

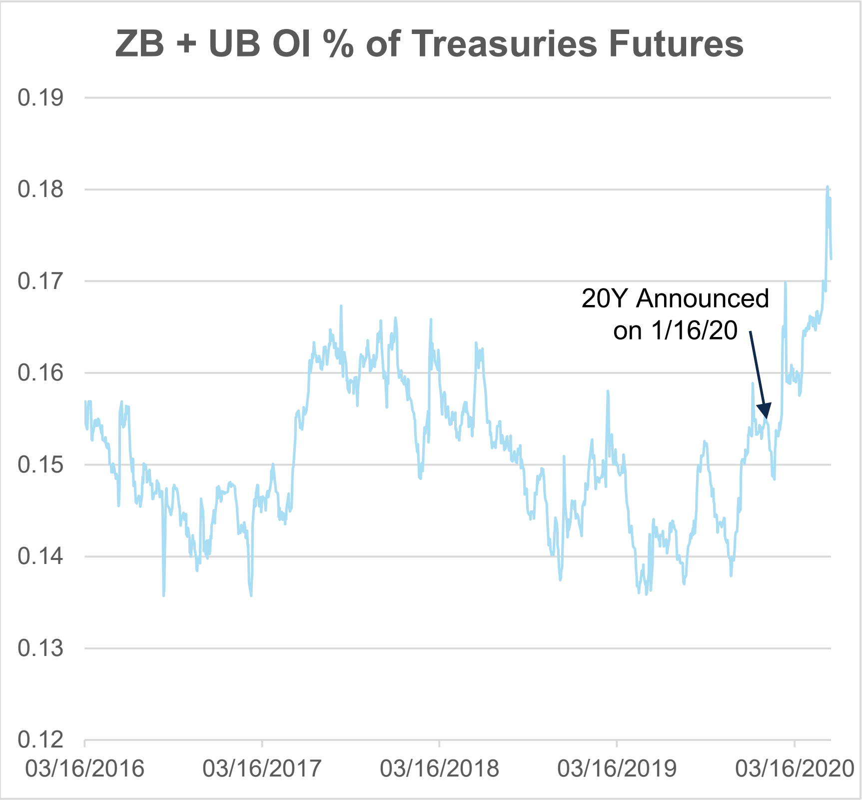
- U.S. Treasury Department targeting greater Longer Dated Issuance
  - *Mnuchin says he wants to "lock in this $3 Trillion for a very, very long period of time". (CNBC)*
  - *"Committee members favored increasing issuance of long-term securities in light of the large increase in financing needs, the importance of managing rollovers, and the historically low level of interest rates"* – TBAC Minutes
  - *From August Federal Reserve Quarterly Refunding Statement – "Treasury will continue to shift financing from bills to longer-dated tenors over the coming quarters, using long-term issuance as a prudent means of managing its maturity profile and limiting potential future issuance volatility. Treasury intends to increase auction sizes across all nominal coupon tenors over the August-October quarter, with larger increases in longer tenors (7-year, 10-year, 20-year, and 30-year)."*
- Higher percentage of Rates business coming from Treasury futures (2009 vs Today)
  - Cash Market Penetration index % in 2009 – 53.8%, 2019 – 117.7%
  - STIR Revenue % in 2009 – 52%, 2019 – 38%
  - LTIR Revenue % in 2009 – 48%, 2019 – 62%

CME Group Interest Rate Futures & Options Revenue



STIR revenue is comprised of revenue generated by the Eurodollar, Fed Funds, SOFR/SONIA contracts
LTIR revenue is comprised of revenue generated by the Treasury contracts

20-Year Bond Auction drives increase in ZB & UB OI



20-year finds welcome home between Classic & Ultra Bond CTDs

- The Treasury's first 20-year bond since 1986 was met with healthy demand (2.53 bid-to-cover, $20B accepted, $2.1B to SOMA). Here are some key takeaways:
- The 20-year May 2040 sits almost squarely in the middle of the Classic Bond (ZB) CTD of Feb 2036 and the Ultra Bond (UB) CTD of Nov 2045, and it belongs to the ZB basket with eligibility through Mar 2025 (view current basket).
- Based on client feedback and increased trading activity coinciding with the auction, ZB and UB are key instruments meeting the hedging and risk management needs of the new 20-year point on the curve.
- The proportion of UST futures OI held in ZB+UB reached 18% on May 22, the highest level since Jan 2015.
- In the first three days after the auction, ZB accounted for 9.1% of UST futures ADV vs. 7.8% in 2019. UB accounted for 7.7% vs. 4.3% in 2019.
- Ongoing 20-year issuance will significantly increase the ZB basket in the quarters ahead.
- Current ZBM0 basket is 32 CUSIPs, $1.173T and is projected to grow to 43 CUSIPs, $1.747T with the ZBZ1 basket.
- The new 20-year cash point and its relationship to ZB and UB CTDs will provide a rich set of risk management, spread, basis, and box trading opportunities.
- For example, the Bond-Ultra (BOB) yield curve spread on CME Globex offers an efficient proxy for the May 2040-Nov 2045 cash spread.

Recent Innovation Continues To Provide More Granularity Across the Curve

3-Year Treasury Future was re-introduced on July 13, 2020, providing a new source of liquidity & opportunity to spread with cash or other UST Futures

What's New

- **Reduced tick size** to 1/8 of 1/32 for outrights and spreads (from 1/4 of 1/32)
  - *Builds upon the success of the 2-Year Note futures (ZT) tick cut in January 2019 which improved cost-to-trade by up to 32% and attracted more end user participation*
  - *Brings greater alignment between 2s and 3s for seamless spread trading*
- **New matching algorithm** of 100% FIFO for outrights (from 40% FIFO/60% Pro-Rata)
- **A more robust deliverable basket** through the addition of aging 7-year notes with remaining term to maturity that ranges from 2 years, 9 months to 3 years
  - *Will increase the size of the delivery basket from roughly 8 issues/$288B to 12 issues/$450B*

Why Now?

Much has changed since the original 2009 launch

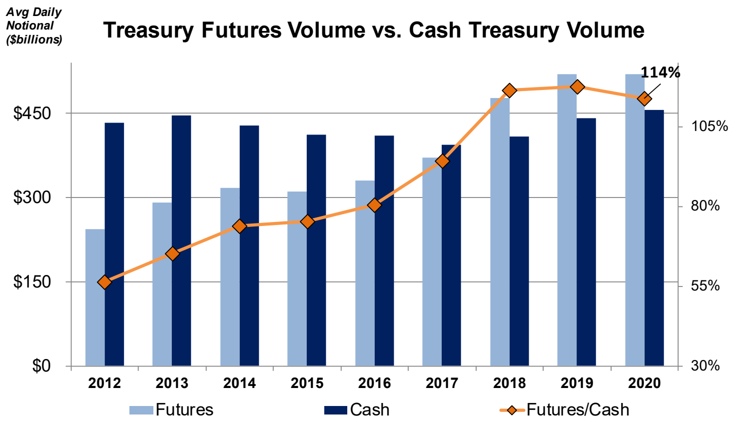
- **Treasury futures account for a much larger share of the daily risk transfer in Treasury markets having seen exponential growth in the institutional user base, trading volumes and open interest**
- **Investors have demonstrated a strong appetite for additional tenor points on the UST futures curve as evidenced by the success of the Ultra T-Bond (Launched 2010) and Ultra 10-Year Note futures (launched 2016)**
- **Spread trading between Treasury futures has become more efficient with the rise of CME Globex-listed Inter-Commodity Spreads (ICS)**

3-Year Treasury Future re-introduction was among the most successful interest rates product launch based on CME Globex Day 1 volume

- Over 40 institutional participants traded 1,610 contracts of enhanced 3-Year Treasury futures on CME Globex surpassing Ultra 10's Day 1 CME Globex volume. Ultra 10 grew to 1 million contracts in open interest in just four years. Ultra 10's current YTD ADV is 267,000 +23% on the year and its OI is 973,000 +28% on the year
- This is especially impressive when you recall that Ultra10 was launched on Jan 10, 2016, on a day when interest rates volume was 8.6 million contracts. On the contrary, the 3-Year was relaunched on a very slow summer day
- Strong debut after 3 weeks:
  - New single-day record of 7,722 3-Year Treasury futures contracts on Friday, July 31, 2020
  - Week 3 ADV of 5,726 contracts, up 79% versus prior week
  - 55+ participants with well over 50% of participants from global banks and buy-side firms
  - Open interest near 5,000 contracts
  - Average book depth: 195+ lots at the top of book (900+ at top two levels)
  - Bid/ask spreads increasingly at new 1/8th minimum price increment
  - Active relative value trading in short-end curve spreads vis 3-Year vs. 5-Year (TOF) and 2-Year vs. 3-Year (TYT) inter-commodity spreads on Globex
  - Cash-futures basis trading via EFP

Business led initiatives have led to significant growth of UST Futures

- Over several years, there has been significant growth from buy-side customers and banks, as reflected in our Large Open Interest Holders (LOIH) aggregate index, which stands at **1,865** as of August 25
- Treasury Futures Volumes have largely outpaced the adjacent US Treasury Cash market, based on primary dealer data. Market-driven growth drivers are new products, extensions, margin efficiencies, rule optimization, Globex functionality enhancements, and tools. Examples:
  - ✓ 2-Year Note Futures: Minimum tick reduction (by ½) implemented January 2019, and added approximately 170K ADV in 2019
  - ✓ Ultra10: Launched in January 2016 and among the most successful new product launches, current OI of 960k +39% YoY
  - ✓ Amendments to EFRP Rule 538 enabled more flexibility to trade packages of Swaps/Futures (Invoice Spreads) and Cash/Futures Basis). Combined, these trades represent over $100 million annualized revenue.
  - ✓ Synergies with OTC Clearing by strengthening the capital efficiency of our products via Portfolio Margining and opportunity to cross-sell listed products to 680+ OTC Clients
    - **In 2020 to date, 55 clients are utilizing portfolio margining between CME Group OTC swaps and interest rate futures, and on average we've achieved approximately $5.4 billion worth of margin savings for our clients (all-time high in terms of average for YTD time period)**



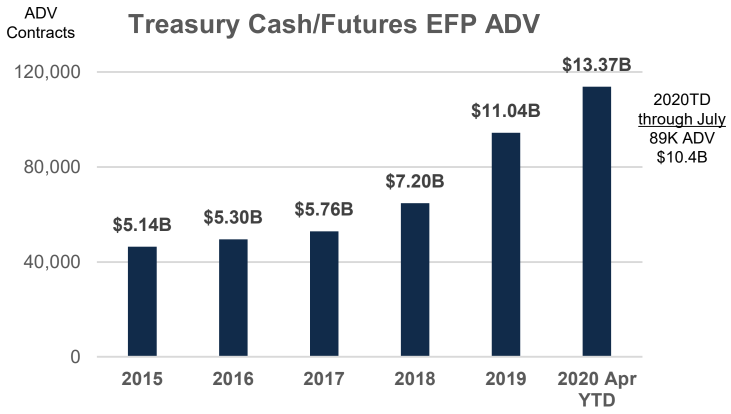
Cash data is primarily sourced from New York Fed
Cash and futures are complementary, cash shown as a relative performance metric to serve as a proxy for overall level of market activity

- ✓ 2-Year Note Cash: In mid-November 2018, BrokerTec made a change to the Cash 2-Year Note minimum price increment (1/4th to 1/8th) and volumes and price action have increased as a result
- ✓ New RV functionality will allow spread trading of Cash Treasuries on BrokerTec

Relative Value Trading and Spread Opportunities in EFP and EFR Trades

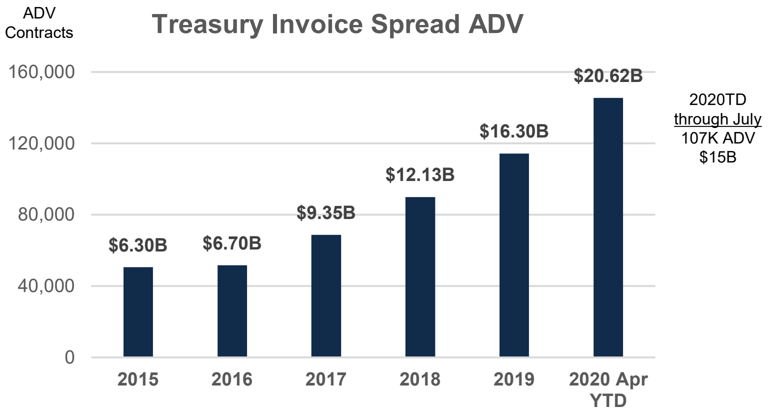
Treasury Cash/Futures Basis (EFP) Package

- Clients trade package via privately negotiated EFP transaction
- Primarily dealer-to-client voice trading, some electronic trading via TP-ICAP marketplace accessed via BrokerTec's Global Front End (GFE)
- CME will support growth with tools, marketing, and analytics trading of cash/futures basis as appropriate



Treasury Invoice Spreads (EFR)

- Provides off-balance sheet, liquid alternative to spreading swaps versus cash treasuries (cash/swap)
- Portfolio margining offers unique margin savings of up to 81% relative to regulatory margin and capital requirements



History of Innovation

New Financial and OTC products launched since 2010 generated over $193 million in revenue in 1H 2020 (compares to over $310 million for all of 2019); in addition to listed products, 0.89 million Treasury futures risk-equivalent ADV came from OTC clearing in 1H 2020

Products – (Year Launched)

Interest Rates

- Ultra T-Bond Futures *(2010)*
- Eurodollar Mid-Curve Options *(2010-2013, 2018)*
- Eurodollar Green & Blue Quarterlies *(2011 & 2013)*
- Treasury Wed & Fri Weekly Options *(2011, 2017, 2018)*
- MAC Swap Futures *(2012)*
- Ultra 10-Year Futures *(2016)*
- SOFR & SONIA Futures *(2018)*
- Eris Swap Futures *(2019)*

Equities

- S&P Select Sector Futures *(2011)*
- Basis Trade at Index Close (BTIC) *(2015)*
- S&P 500 Dividend & Total Return Futures *(2016)*
- Mon & Wed Weekly S&P 500 Options *(2016 & 2017)*
- Russell 2000 Futures *(2017)*
- Bitcoin Futures & Options *(2017, 2020)*
- Trade at Cash Open (TACO) *(2018)*
- Micro E-mini Equity Futures *(2019)*
- BTIC+, TACO+ *(2019)*
- S&P 500 ESG Futures *(2019)*

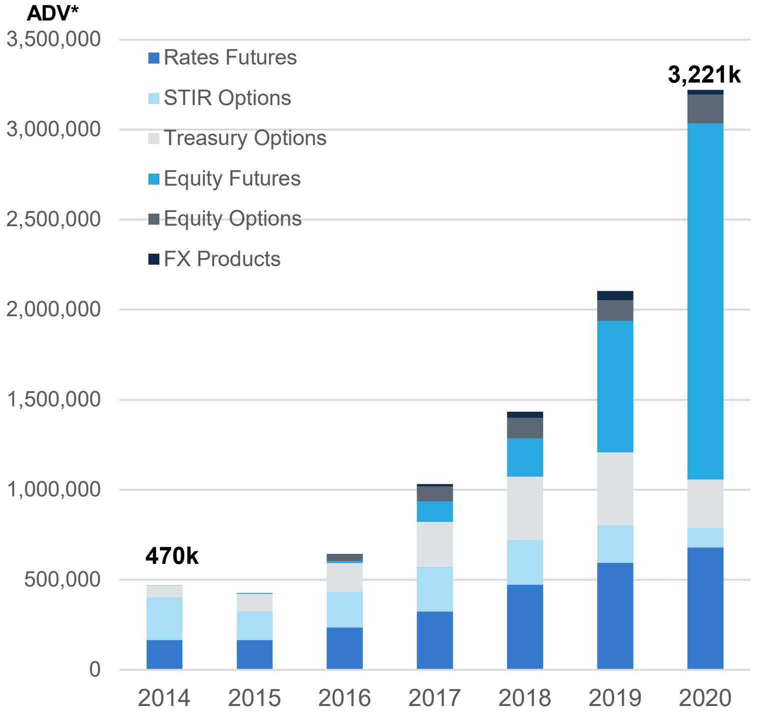
FX

- Vol Quoted Options *(2017)*
- FX Monthly Futures *(2017)*
- FX Wed & Mon Weekly Options *(2017, 2020)*
- FX Link *(2018)*

OTC

IRS Clearing

- U.S. Dollar *(2010)*
- MXN *(2013)*
- BRL *(2015)*
- CLP & COP *(2018)*



*ADV of listed Financial products launched since 2010.

Investing in Core Business to Optimize Products/Services that Address Customer Needs

Delivering improved capital and operational efficiency to market participants

Several Recent Product Launches / Extensions

- Nasdaq-100 Volatility Index Futures
- Enhanced 3-Year U.S. Treasury Note Futures
- E-mini S&P 500 ESG Futures
- Block Cheese Futures / Options
- Micro E-minis Futures / Options
- Bitcoin Futures / Options
- SOFR Futures / Options
- Eurodollar Mid-Curve Options
  - 5th qtrly and 3- / 6- / 9-month Term
- SONIA Futures
- Japanese Yen-Denominated TOPIX Futures
- E-mini S&P Communication Services Select Sector Futures
- Total Return Index Futures on Nasdaq-100, Russell 1000 and 2000, and Dow Jones Indexes
- TRY/USD Futures
- Basis Trade at Index Close (BTIC) / Trade at Cash Open (TACO)
- FX Monthly Futures / FX Link
- Physical WTI Houston Crude Oil Futures and Options – new enhancements
- Freight Route TD20 (Baltic) Futures
- Many shorter-term duration options contracts across product lines
- Physical LNG Futures
- Freight Route Liquid Petroleum Gas (Baltic) BALMO Futures
- Freight Route TD3C (Platts) Futures
- Micro European and Singapore Fuel Oil Futures
- Indonesian Coal Futures
- Ethanol Swap Futures
- Black Sea Wheat FOB (Platts) and Black Sea Corn FOB (Platts) Futures and Options
- Black Sea Sunflower Oil Financially Settled (Platts) Futures
- Brazilian Soybean Futures (Q320 – CME Group and B3 joint development)
- South American Soybean (Platts) Futures
- CME Fresh Bacon Index
- Copper Premium Grade A CIF Shanghai (Metal Bulletin) Futures
- U.S. Midwest Aluminum Premium Futures
- U.S. Midwest Domestic Hot-Rolled Coil Steel Index Futures
- North European Hot-Rolled Coil Steel (Argus) Futures
- OTC SOFR Swaps Clearing
- OTC Chilean Peso and Colombian Peso Interest Rate Swaps Clearing
- FX Non-Deliverable Forwards (NDFs)
- Shanghai Gold (USD) and Shanghai Gold (CHH) Futures
- New Gold futures contract with expanded, flexible delivery in 100-ounce, 400-ounce or 1-kilo bars
- TriOptima expanded triResolve margin to offer SWIFT payment infrastructure
- Several Traiana service enhancements
- BrokerTec Quote RFQ trading solution for European Repo markets
- BrokerTec and TriOptima delivering first end-to-end Repo workflow solution

Product Adjustments and Services Improving Operational Efficiency

- Examples include minimum price increment (MPI) adjustments, adjusting expiration times to fit market needs, modifying contract characteristics / specs to meet market participant challenges, etc.

Equity Index Products

2Q 2020 Highlights:

- 2Q20 Equity Index ADV grew 60% to 5.6 million contracts, representing the second-highest quarterly Equity Index ADV to date
- Record Micro E-mini ADV of 1.9 million contracts / both the Micro E-mini S&P 500 and Russell 2000 futures had record trading days in June of 1.96 million and 280,000 contracts, respectively
- E-mini Russell 2000 futures grew 52% during the quarter and were the third-highest adopted new product by global institutional clients following WTI Crude Oil futures and WTI Crude Oil options*
- S&P Total Return futures achieved a record volume of 43,933 contracts ($7 billion notional) on June 18
- S&P 500 Annual Dividend futures reached a record high Large Open Interest Holders (LOIH) in June

Continued Innovation:

Nasdaq-100 Volatility Index Futures

- Introduced by Nasdaq in early 2019, the VOLQ Index measures 30-day implied volatility of the Nasdaq-100 Index (NDX), which helps market participants better understand and manage portfolio volatility

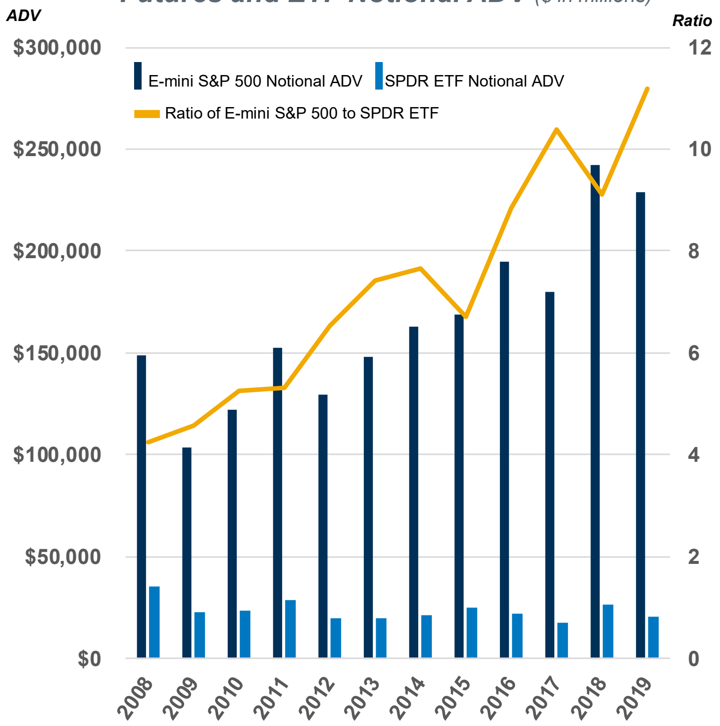
Micro E-mini options

- Based upon the success of CME Group's micro-sized equity futures contracts and increased client demand, the company announced a late August launch (pending regulatory review) for options on Micro E-mini S&P 500 and Micro E-mini Nasdaq-100 futures
- Leveraging CME Group's rapidly developed robust and liquid underlying Micro E-mini futures market, the options contracts will offer market participants greater flexibility amid continuing economic uncertainty

Trade at Cash Open (TACO) extended to E-mini Nasdaq-100 and Russell 2000 futures

- TACO allows market participants to execute a basis trade on the E-mini S&P 500, Nasdaq-100, and Russell 2000 futures relative to the day's official cash index opening level – before the market open – adding lead time to capture the certainty of the cash open days instead of hours ahead

Futures and ETF Notional ADV *($ in millions)*

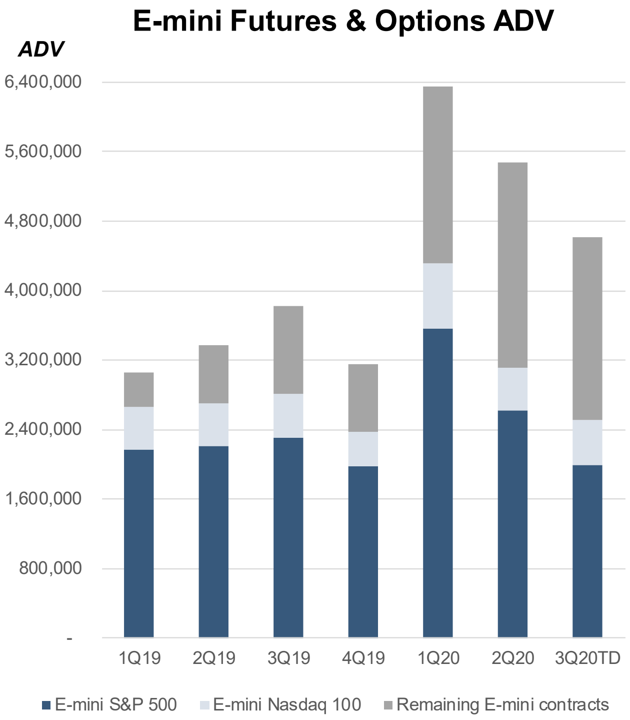


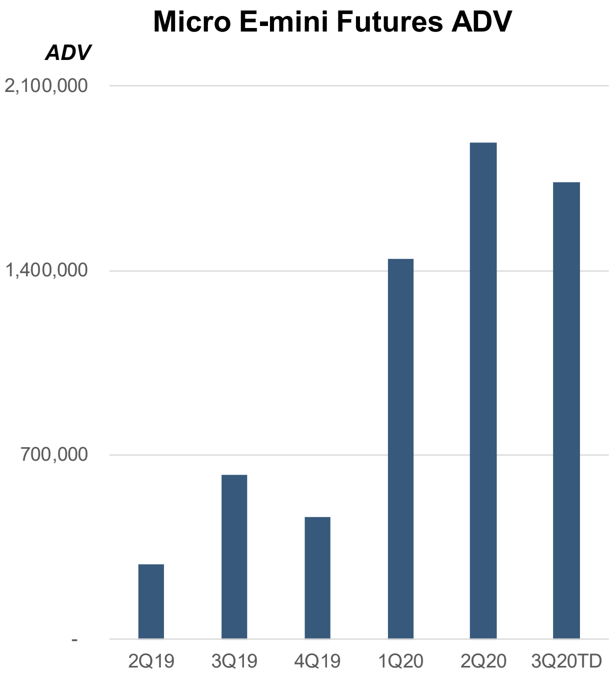
Liquidity, low cost and capital efficiency of futures*

- Cheaper to replicate the S&P 500 with futures than with exchange-traded funds
- CME Group E-mini S&P 500 futures notional ADV was over 11 times that of the SPDR ETF notional ADV in 2019 on average

For more information on this topic and to view the Equity Index Futures vs. ETFs Total Cost Analysis Tool – www.cmegroup.com/tools-information/quikstrike/big-picture-tca-tool.html

Equity Index Products





Micro E-mini Futures Highlights from year one:

- 215 million+ contracts traded at one-year anniversary; over 330 million contracts since launch
- ADV of 865K contracts across 4 indices
- Single-day record volume of 3.9 million contracts on February 28, 2020
- Global participation: ADV of over 190K contracts traded during non-U.S. hours before the cash open
- 27% of volume came from outside of the U.S. with trades submitted from 160+ countries

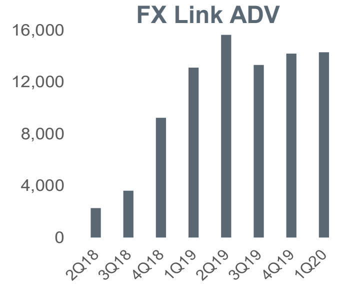
3Q20-to-date ADV through August 31, 2020

Offering Suite of Cost and Capital Efficient FX Products That Address the Needs of the Changing FX Marketplace

CME Group Listed FX Options
OTC FX Options Clearing

- FX Options Vol Converter Tool launched[2] – prices CME Group's listed options liquidity in over-the-counter (OTC) terms
- Wed Weekly Options represented 9% of total FX Options volume in 2019
- See June Greenwich Associates paper (at cmegroup.com/fxotca) 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

CME Group FX Link (Monthly/Quarterly)



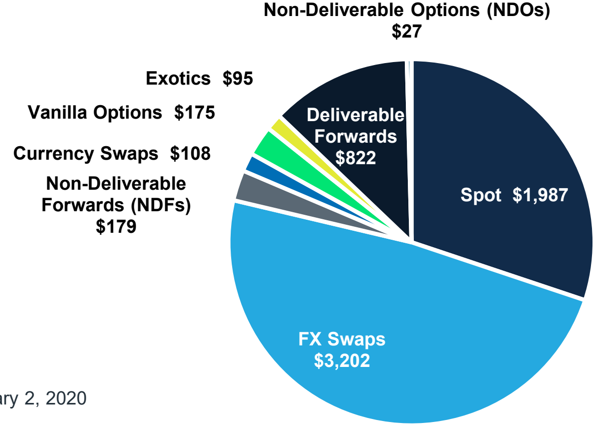
FX Link reached record volume of 42,068 contracts on January 2, 2020 ($4.1 billion notional) *chart data through February 21, 2020*

FX Swap Rate Monitor[1] launched - The tool creates market intelligence that helps identify opportunities, which traders can use to identify potential areas of underperformance or investment opportunities. More than 1,100 customer have visited the page since June launch

FX Opportunity

Turnover of OTC & exchange traded foreign exchange instruments $6.6 trillion per day (April 2019), up from $5.1 trillion in April, 2016

Turnover of OTC foreign exchange instruments, April 2019
Daily averages, in U.S.$ billions*



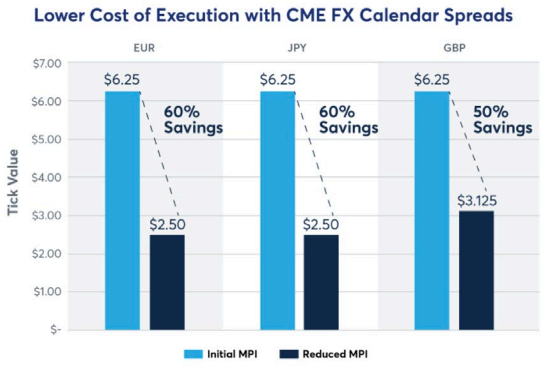
**Source – Bank of International Settlements (BIS) Triennial – April 2019*
Other subset totals expected in Dec-2019 report

CME Group OTC FX NDF Clearing

FX Non- Deliverable Forwards (NDF) As of the end of 2019, CME Group has cleared $63 billion notional of NDF and Cash-Settled Forward (CSF) trades across 24 currency pairs, driven by dealers impacted by Uncleared Margin Rules (UMR) that are shifting positions to CME for capital efficiencies. It is estimated that well over 1,000 firms will be part of UMR by 2020

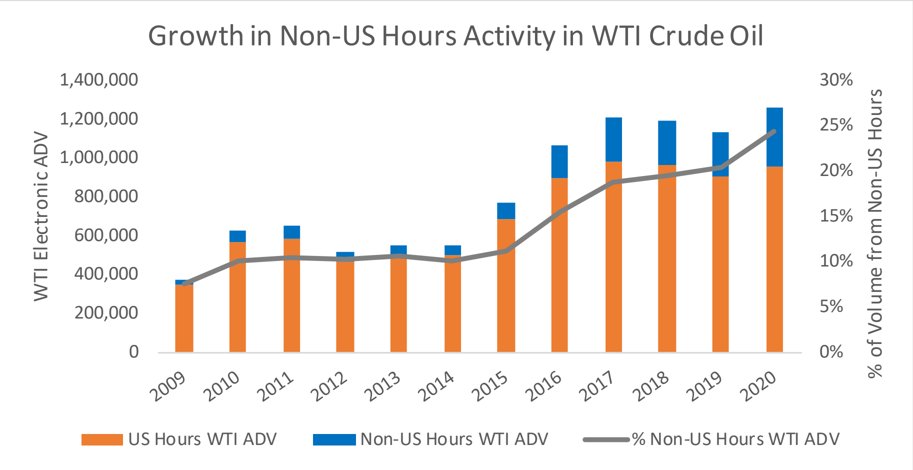
CME Group FX Futures (Quarterly)

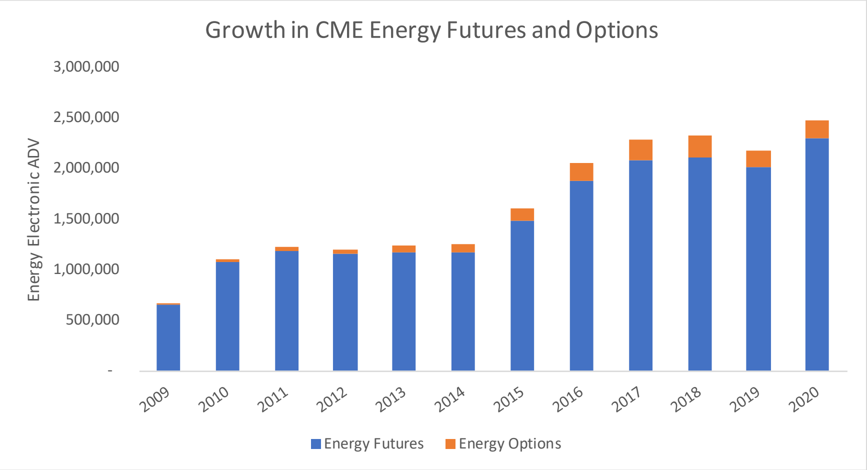
- In 2019 CME Group successfully reduced the Minimum Price Increment (MPI) in our GBP/ USD, EUR/USD and JPY/USD quarterly to quarterly roll spreads
- MPI reductions delivered improved risk transference and price discovery, enabling market participants to execute in larger size, with firmer liquidity at a lower cost



1. For more information https://www.cmegroup.com/education/articles-and-reports/cme-fx-swap-rate-monitor-data-in-context.html
2. For more information https://www.cmegroup.com/trading/fx/cme-fx-options-vol-converter.html

Energy – WTI Growth Driven by non-US Customers and Options Expansion



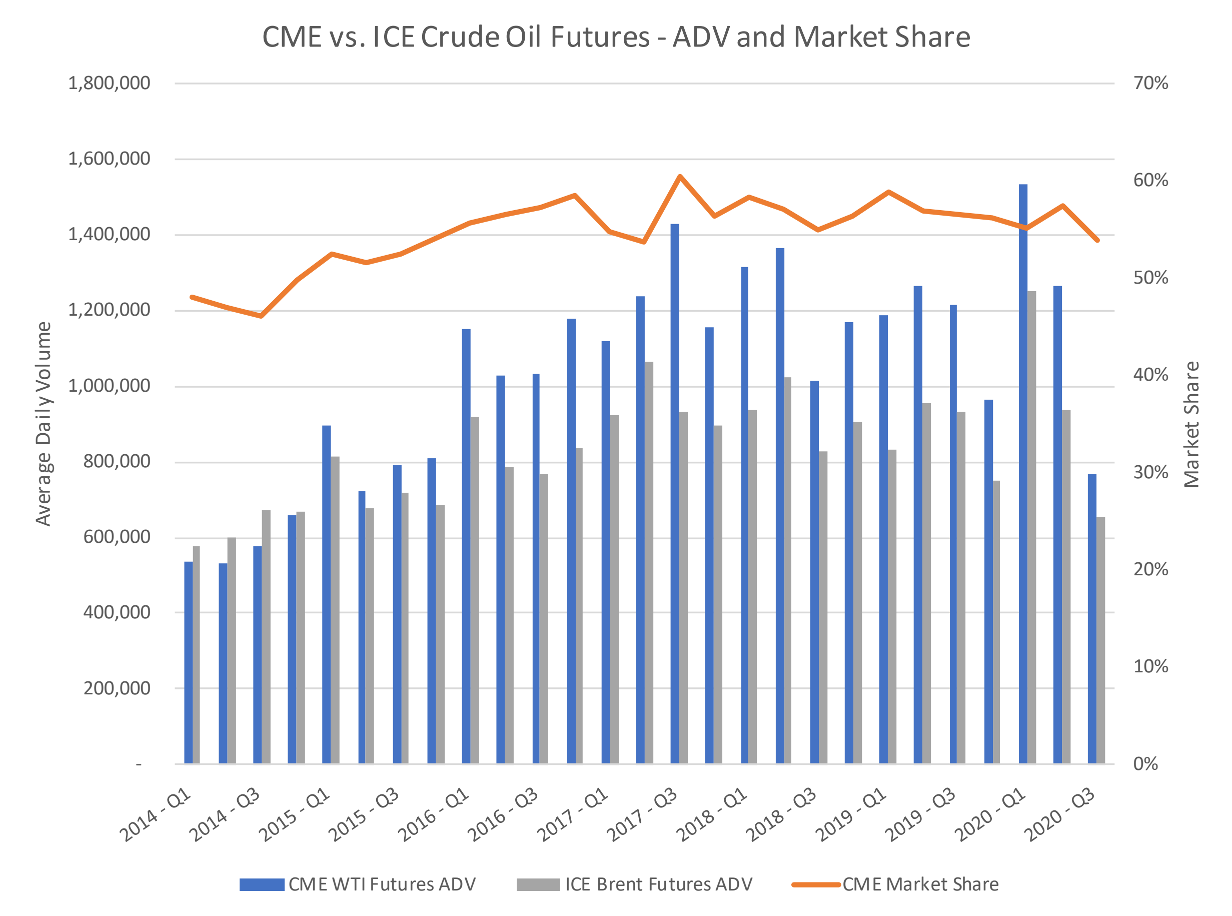


- *Following the lifting of the Crude Oil export ban in 2015 and the resulting significant investment in US energy infrastructure, t**he US has become the swing producer in the global Crude Oil market***
- *Driven by focused Sales efforts on new client acquisition in Europe and Asia, we continue to drive significantly stronger growth outside the US.*
- *Non-US volumes now account for **24%** of WTI ADV, up from **7%** in 2009.*

- *Energy Options continue to outperform Futures, and now represent 7**%** of total Energy volumes vs **1.5%** in 2009.*
- *Global customers are increasingly adopting CME's WTI Options, with **non-US volumes increasing to 20% of overall volume YTD** as international traders take advantage of around-the-clock screen-based liquidity.*
- *We continue to expand our electronic Options trading functionality, with over **80% of WTI Options volume traded on-screen** for 4 consecutive quarters*

2020 ADV data as of 8/7/2020

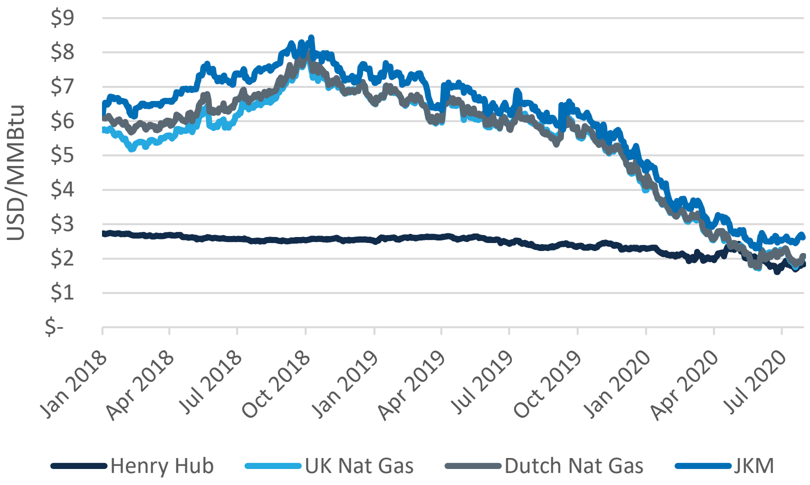
Energy



Q3 2020 ADV data as of 8/7/2020

Energy – Henry Hub Natural Gas Transitioning to a Global Benchmark

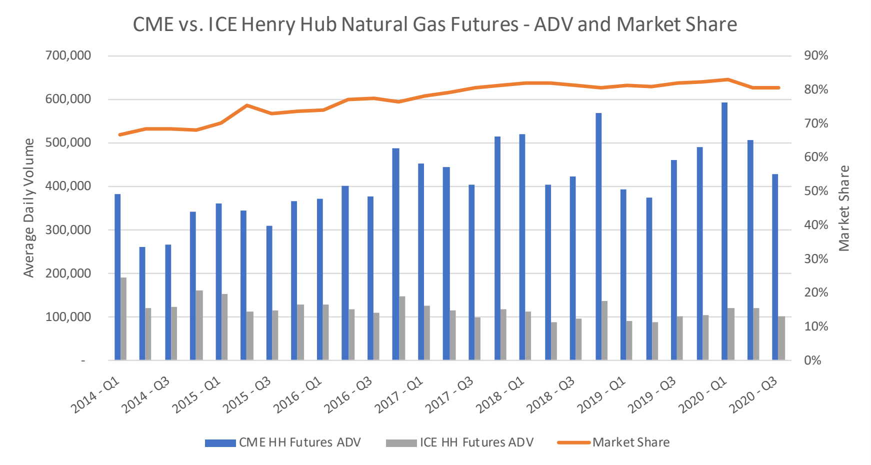
NYMEX Henry Hub: International Gas Pricing Points Converge with our Benchmark



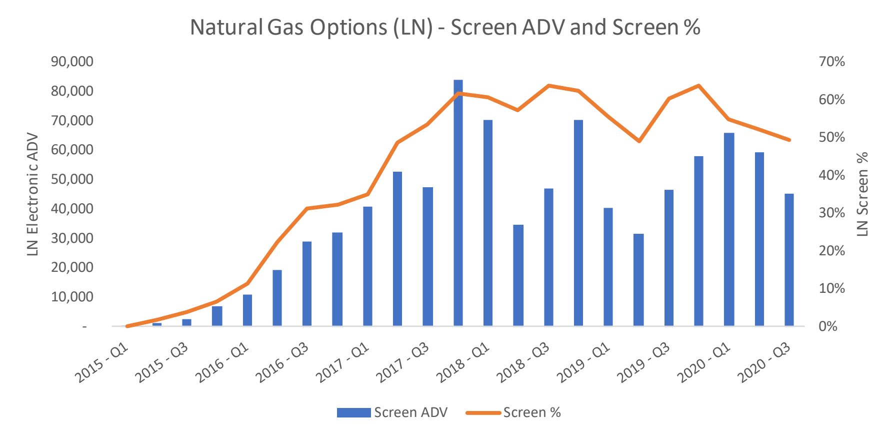
Main reasons behind convergence are:

- **Low Oil Prices** – Oil-indexed prices overseas fall as a result, U.S. crude production declines (and gas production along with it). Our gas moves up a bit while overseas gas is moving down in price.
- **Glut of Supply** – LNG supply has increased by more than 40% in the last 5 years. European gas prices fell as storage is nearly full there and demand hasn't been that high.
- **COVID Demand Hit**– Concerns over lower gas demand, especially from the countries with large populations that have larger than average gas intake

Energy – Henry Hub Natural Gas Transitioning to a Global Benchmark



- *NYMEX Henry Hub futures continue to represent the majority of trading, with **market share levels near all-time highs.***
- *NYMEX Henry Hub Natural Gas benchmark pricing now extends beyond interstate pipelines and domestic borders.*
- *U.S. Gulf Coast LNG continues to reach more destinations in Europe and Asia **solidifying NYMEX's Henry Hub Futures contract as the international benchmark.***

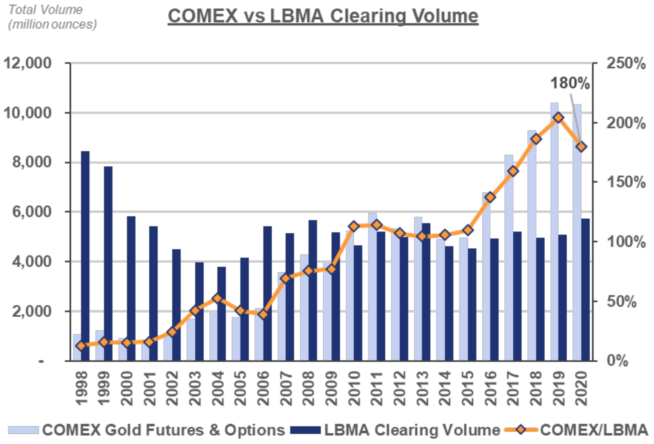


- *Continued investments in Options functionality and front end capabilities have helped us **transition the Henry Hub Options market from 4% electronic to over 50% electronic in just five years.***
- *Growth in Henry Hub Options driven by electronic trading with **over 60% volume executed as RFQs.***
- *Even during historic low volatile times, **CME's Henry Hub Options on Globex have been the preferred venue for the participants in the market.***

Q3 2020 ADV data as of 8/7/2020

Business Led Initiatives Drive Consistent Outperformance in Precious Metals

- Gold futures volumes have grown at a 20% CAGR since 2015 with London OTC mainly flat (chart top right). Precious Metals volumes continue to see strong international growth. Non-US hours volume has grown from 23% of overall volume in 2012 to 37% in 2020 YTD. Initiatives include:
  - ✓ Shanghai Gold: Representing the first collaboration between CME Group and the Shanghai Gold Exchange, these products offer exposure to the Shanghai Gold Benchmark price, via cash settled futures in either USD or CNH.
  - ✓ Gold Options: Continued Internationalization of our options suite. Non-US hours trading volume has grown from 3% of overall volume in 2012 to 22% 2020 YTD.
  - ✓ Micro Gold and Silver: Large scale adoption of our MGC and SIL products, with 2020 YTD ADV of 78k contracts (+367% YoY) and over 7k contracts (+685% YoY) respectively (chart bottom right).
  - ✓ Capital Efficiencies: CME continues to offer best in class capital efficiency to its client base. The Gold Warrants as Collateral facility, first offered in Nov '19, has over 1,000 Gold Warrants pledged, representing over 1.0M oz of Gold with a notional value of $2.0+B.



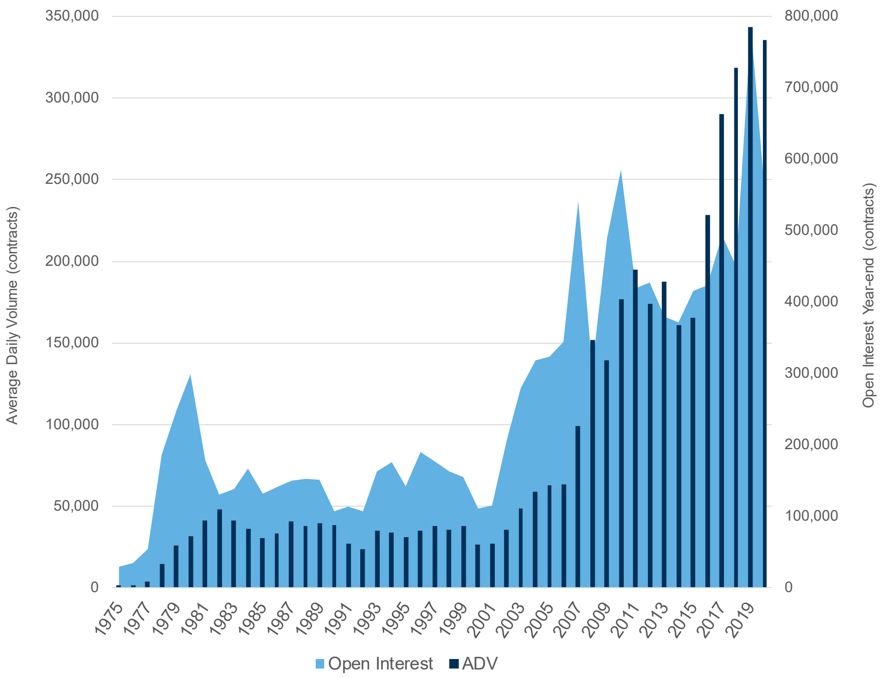
Note: 2020 Volume Annualized through H1

Note: Q3 Data as of 8/18

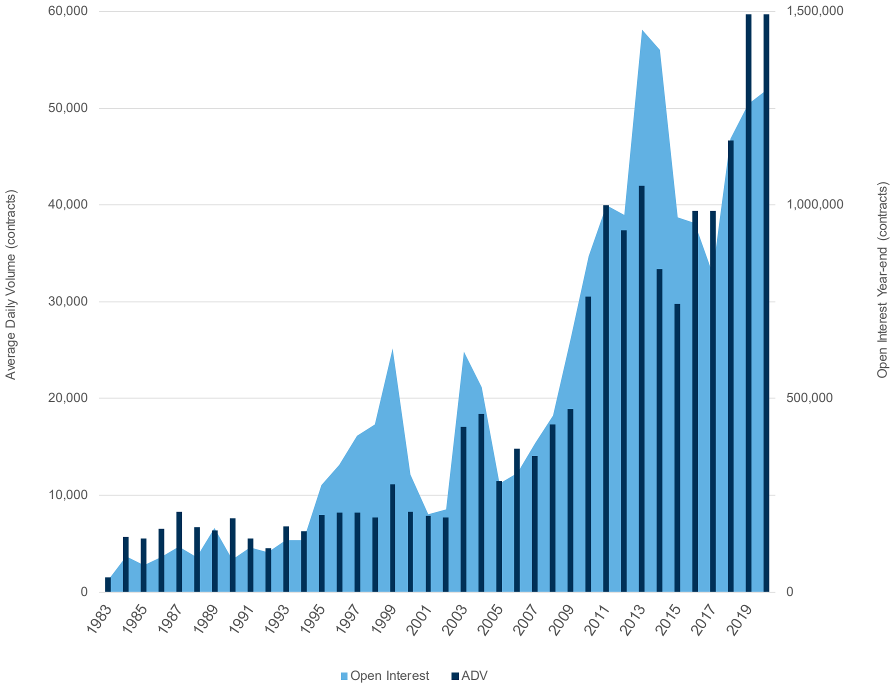
Sources: CME, Bloomberg. Data as of 8/19 unless otherwise noted.
*Non-US Hours defined as Market Open-7am CST

Annual Gold Futures and Options ADV and OI

Gold Futures (GC) ADV and OI



Gold Options (OG) ADV and OI

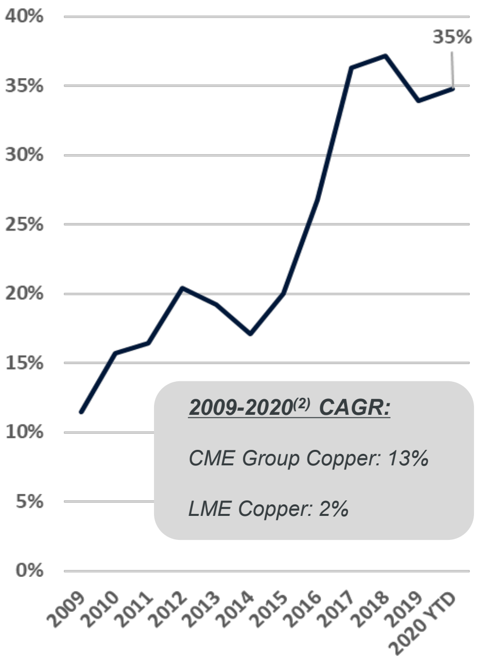


Note: 2020 to date ADV is through August 7

Further Solidify Copper Position and Penetrate Industrial Metals Markets

- **Copper:** Delivering outsized growth in Copper Futures. Continuing efforts to cater to the needs of physical market participants while also attracting new clients.
  - ✓ Options: Built screen liquidity for an underserved market that is primarily voice brokered. Copper Options 5-year CAGR: CME +85% vs. LME -11%[1].
  - ✓ Financially Settled Copper Futures: Improved collateral and targeted outreach to attract new commercial participants. YTD Open interest at 19,765 contracts, increasing 82% YoY[1].
- **Aluminum:** CME has established itself as the home for Aluminum Premium basis market trading with record volumes and open interest:
  - ✓ Aluminum Premium Futures: Volumes have set a new high every year since the first contract was launched in 2013. YTD Open Interest at 62,804 contracts, increasing 17% YoY[1].
  - ✓ Physically Delivered Aluminum Futures: Modified contract specs include global warehousing network.
  - ✓ Commodity Direct: Leveraged new CME technology to become more deeply embedded in physical traders' workflows.
- **Steel:** Steel futures volume has grown at a 53% CAGR since 2017 with 18,543 tons trading daily YTD[1]. Growth drivers include increased price transparency via Globex screen, growing client participation, product launches, and continued education.

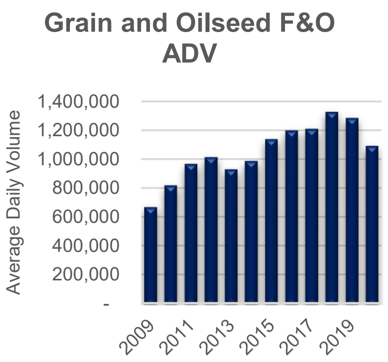
CME Group Copper ADV as % of LME Copper ADV (in metric tonnes)[1]

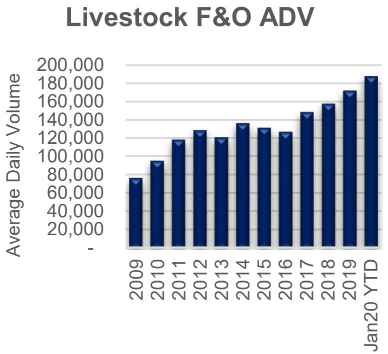


1) Sources: CME, Bloomberg, CFTC and LME. 2020 data as of July 31.
2) 2020 data annualized as of July 31.

Ag Commodities – Global Benchmarks & Regional Expansions

Core Futures and Options





Grains and Oilseed products continue to grow in both volume and open interest as more global physical market participant increasingly use them to manage risk

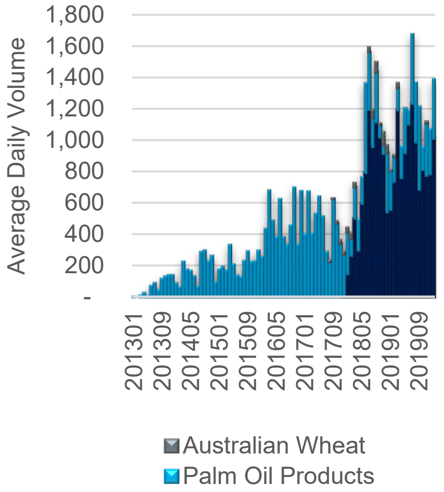
- Top 7 record Corn options volume days were in Q2 & Q3 2019
- Record Corn futures monthly ADV in June 2019 of 661,357
- Record KC Wheat Options open interest on 6/20/2019 of 109,100

Livestock and Dairy products are growing aggressively as global production challenges impact the protein markets

- Record Lean Hog Options volume day on 1/31/2020 of 61,486 contracts
- Record Lean Hog Options open interest on 10/15/2019 of 478,737
- Record Live Cattle futures open interest on 3/22/2019 of 454,749

Regional Products

CME Group is listing cash settled F&O on regional indices to provide regional risk management products, extending our customer reach.



2020 ADV Data as of 1/31/2020

CME Group 2Q 2020 Adjusted Financial Results[1]

- Revenue of $1.2 billion, including $176 million generated by cash markets and optimization services businesses
- Clearing and transaction fees revenue totaled $940 million, including approximately $112 million from cash markets and optimization services businesses; EBS generated $42 million of transaction revenue during the quarter and BrokerTec generated $43 million
- Market Data revenue was $135 million, and included $17.1 million of revenue from cash markets and optimization services businesses
- Other revenue was $107 million, including $46 million associated with optimization services businesses
- Total Operating Expense, excluding Licensing Fees, was $379.5 million
- Net Income attributable to CME Group was $583 million
- Diluted EPS of $1.63

Quarterly Average Rate Per Contract (RPC)(1)

CME Group RPC

Product Line	2Q 2019	3Q 2019	4Q 2019	1Q 2020	2Q 2020
Interest rates	$ 0.476	$ 0.500	$ 0.507	$ 0.488	$ 0.510
Equity indexes	0.676	0.612	0.654	0.616	0.574
Foreign exchange	0.713	0.720	0.732	0.721	0.786
Energy	1.139	1.137	1.133	1.108	1.191
Agricultural commodities	1.222	1.234	1.242	1.260	1.316
Metals	1.455	1.414	1.344	1.429	1.518
Average RPC	$ 0.693	$ 0.693	$ 0.717	$ 0.676	$ 0.731

1. ADV and RPC includes futures and options on futures only.

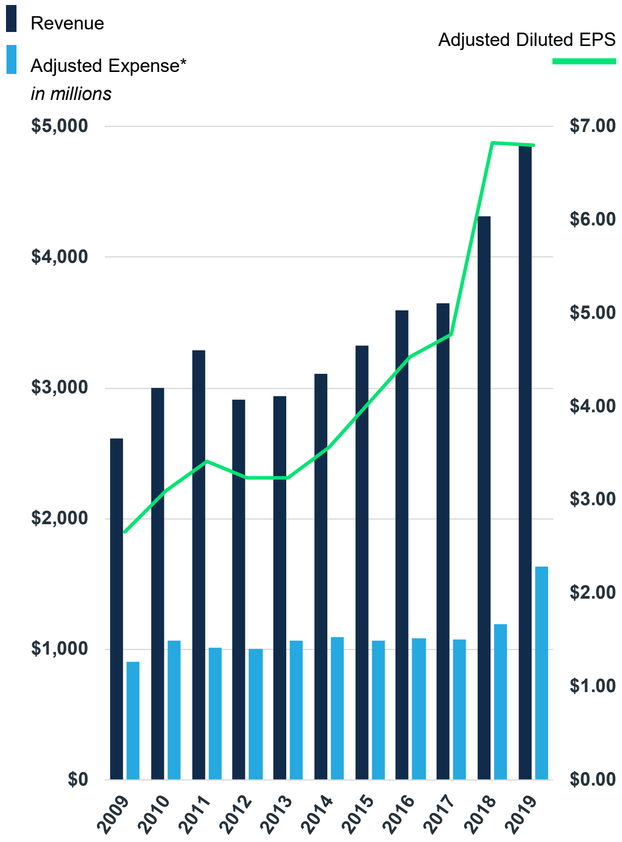
Adjusted Full-Year 2020 Guidance

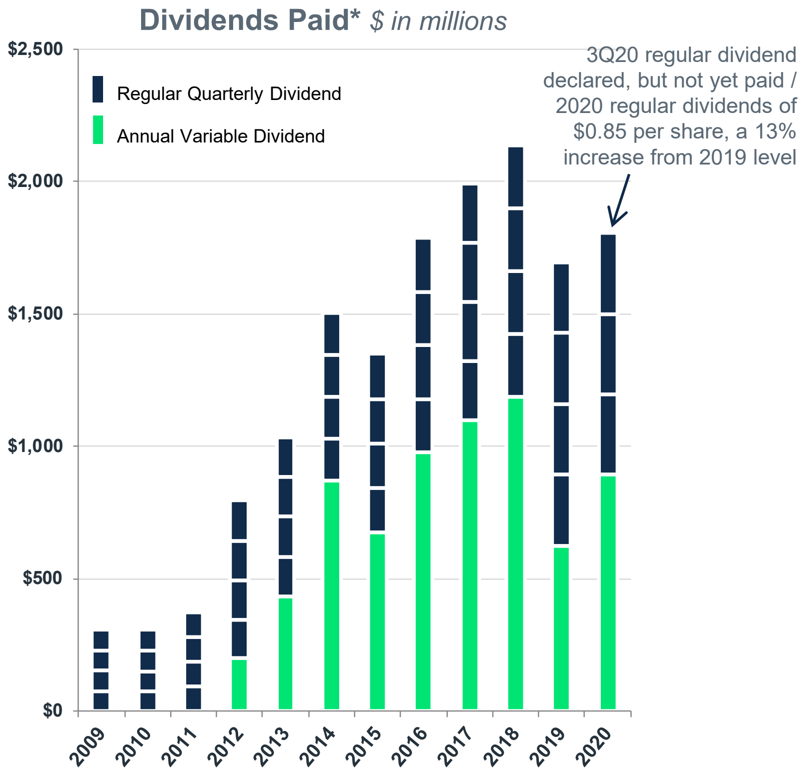
- Adjusted operating expense excluding license fees expected to be approximately $1.595 billion, reduced from original guidance of between $1.64 billion and $1.65 billion
- Capital expenditures, net of leasehold improvement allowances and any one-time costs associated with the integration, expected to be between $180 million and $200 million
- Adjusted effective tax rate expected to be between 23% and 24%
- At the end of 2019, the company reached $58 million in run rate expense synergies and $6 million in subleasing revenue synergies for a total of $64 million. At the end of 2020, we expect cumulative run rate synergies to be at $110 million and expect to realize approximately $15 million in P&L impact during the year

1) 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 in the following slides of this presentation

Note – RPC includes futures and options on futures only

Strong Adjusted Financials[1] and Cash Generation





*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

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

1 – 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 charts at the end of the financial statements each quarter / 2018 adjusted results include NEX Group plc for November and December 2018, and 2019 adjusted results include NEX Group plc for the entire year

CME Group – Compelling Investment

Strong Competitive Position

- Unmatched product diversity and 24-hour liquidity
- Leader in innovation
- Significant capital and operational efficiencies
- Tangible network effect
- Transaction destination in times of market stress
- Important partnership with S&P Financial, with “active to passive” trend underway
- Relatively stable regulatory environment in the U.S.

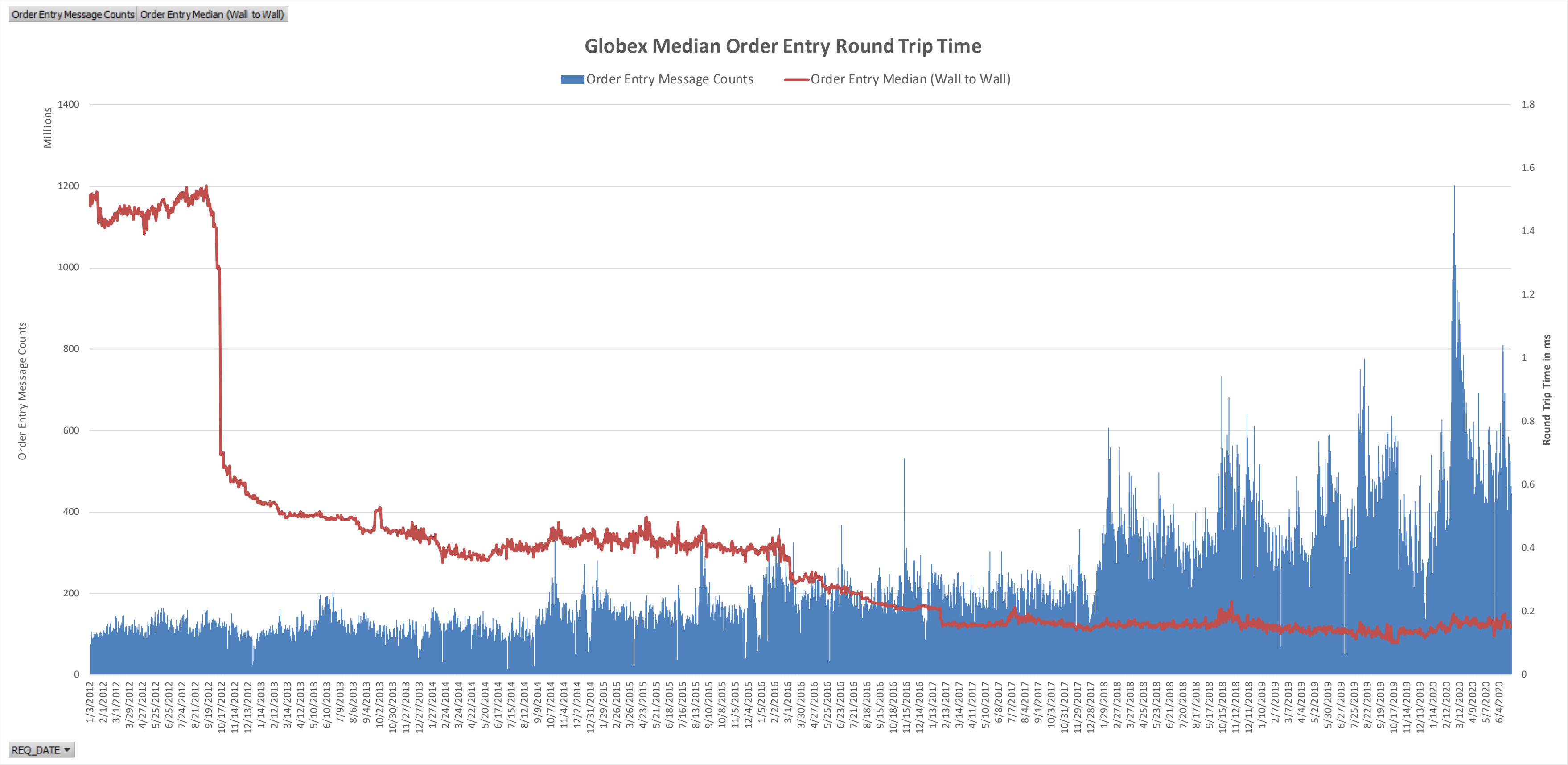
Growth Orientation

- Focused on customer challenges / working collaboratively
- Products have global appeal - have invested in global sales efforts
- World’s largest options exchange
- Recurring customer relationships
- Valuable proprietary data
- Acquisition of NEX Group plc helps diversify business across futures, cash and OTC products and post-trade services

= Compelling Investment

- Double-digit long-term volume CAGR
- Ongoing need for risk management
- Significant capital return

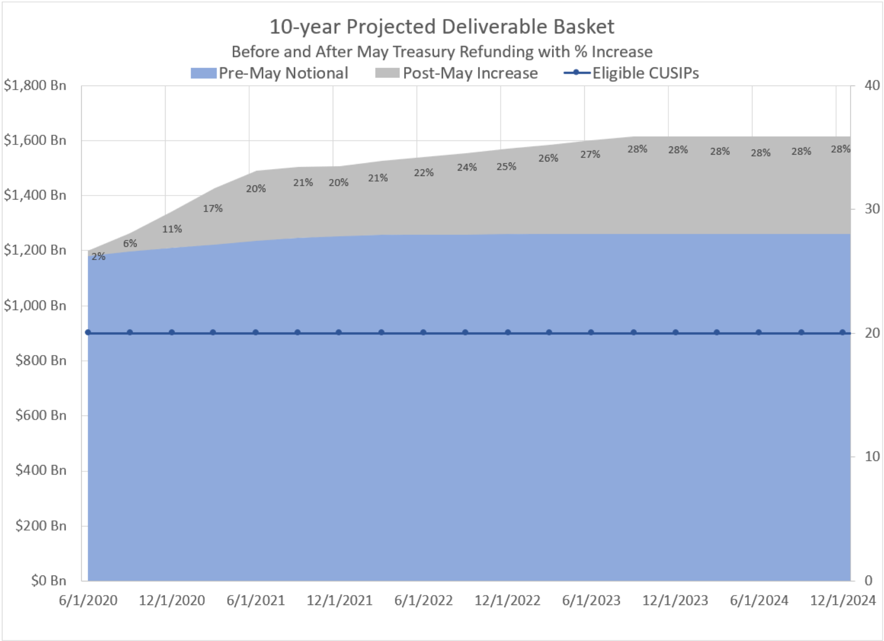
Technology Supporting Spikes in Volume Amidst Market Uncertainty

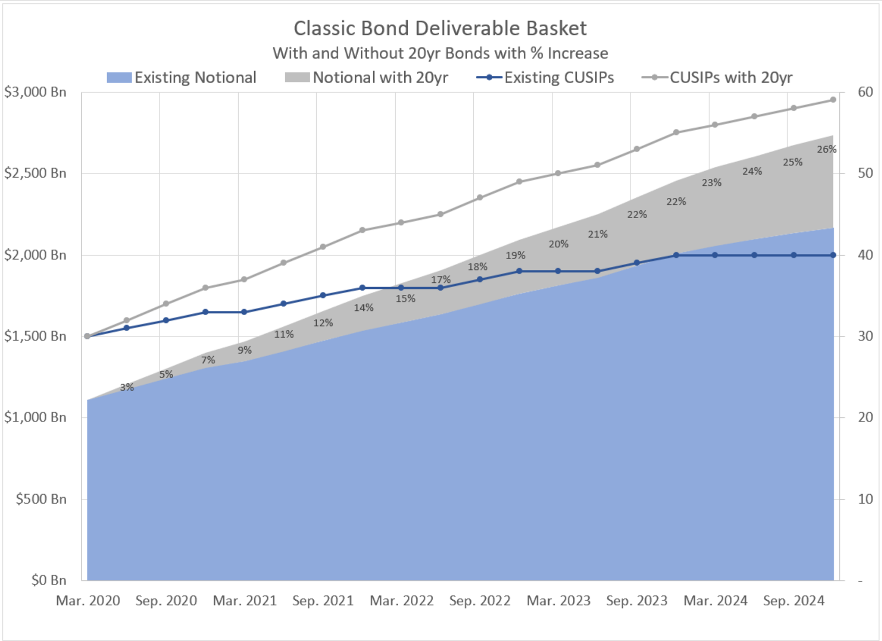


CME Group

Treasury Issuance 2020 - Appendix

Selected Future Basket Deliver Changes





Treasury Issuance 2020 - Appendix

Sources

- Amadeo, Kimberly. “See How the National Debt Has Grown Every Year Since the Crash of '29.” *The Balance*, The Balance, 29 Apr. 2020, www.thebalance.com/national-debt-by-year-compared-to-gdp-and-major-events-3306287.
- *Bloomberg.com*, Bloomberg, www.bloomberg.com/news/articles/2020-05-06/cme-tries-again-to-make-three-year-treasury-futures-a-thing.
- “The Pandemic Has Sent Public Debt Rocketing across the World.” *The Economist*, The Economist Newspaper, www.economist.com/graphic-detail/2020/05/05/the-pandemic-has-sent-public-debt-rocketing-across-the-world.
- Swagel, Phill. “CBO's Current Projections of Output, Employment, and Interest Rates and a Preliminary Look at Federal Deficits for 2020 and 2021.” *Congressional Budget Office*, 24 Apr. 2020, www.cbo.gov/publication/56335.
- Tomwfranck. “Mnuchin Says He's Comfortable Spending $3 Trillion Because Treasury Can Lock in Very Low Rates.” *CNBC*, CNBC, 11 May 2020, www.cnbc.com/2020/05/11/mnuchin-says-hes-comfortable-spending-3-trillion-because-treasury-can-lock-in-very-low-rates.html?__source=iosappshare%7Ccom.microsoft.Office.Outlook.compose-shareextension.
- “U.S. Department of the Treasury.” *Minutes of the Meeting of the Treasury Borrowing Advisory Committee of the Securities Industry and Financial Markets Association May 5, 2020*, 7 May 2020, home.treasury.gov/news/press-releases/sm1003.
- “U.S. Department of the Treasury.” *TREASURY ANNOUNCES MARKETABLE BORROWING ESTIMATES*, 7 May 2020, home.treasury.gov/news/press-releases/sm997.

- https://www.cbo.gov/publication/56335
- https://home.treasury.gov/news/press-releases/sm997
- https://home.treasury.gov/news/press-releases/sm1003
- https://www.cnbc.com/2020/05/11/mnuchin-says-hes-comfortable-spending-3-trillion-because-treasury-can-lock-in-very-low-rates.html?__source=iosappshare%7Ccom.microsoft.Office.Outlook.compose-shareextension
- https://www.bloomberg.com/news/articles/2020-05-06/cme-tries-again-to-make-three-year-treasury-futures-a-thing