

**CME Group**

**1Q 2018 Earnings**

**Q&A Conference Call**

# **APPENDIX SLIDES**

April 26, 2018

As a replacement to conference call prepared remarks, please see the CME Group 1Q 2018 Quarterly Earnings Commentary document posted with all other CME Group 1Q 2018 earnings documents at the following link:

<http://investor.cmegroup.com/investor-relations/results.cfm>

# Forward Looking Statements

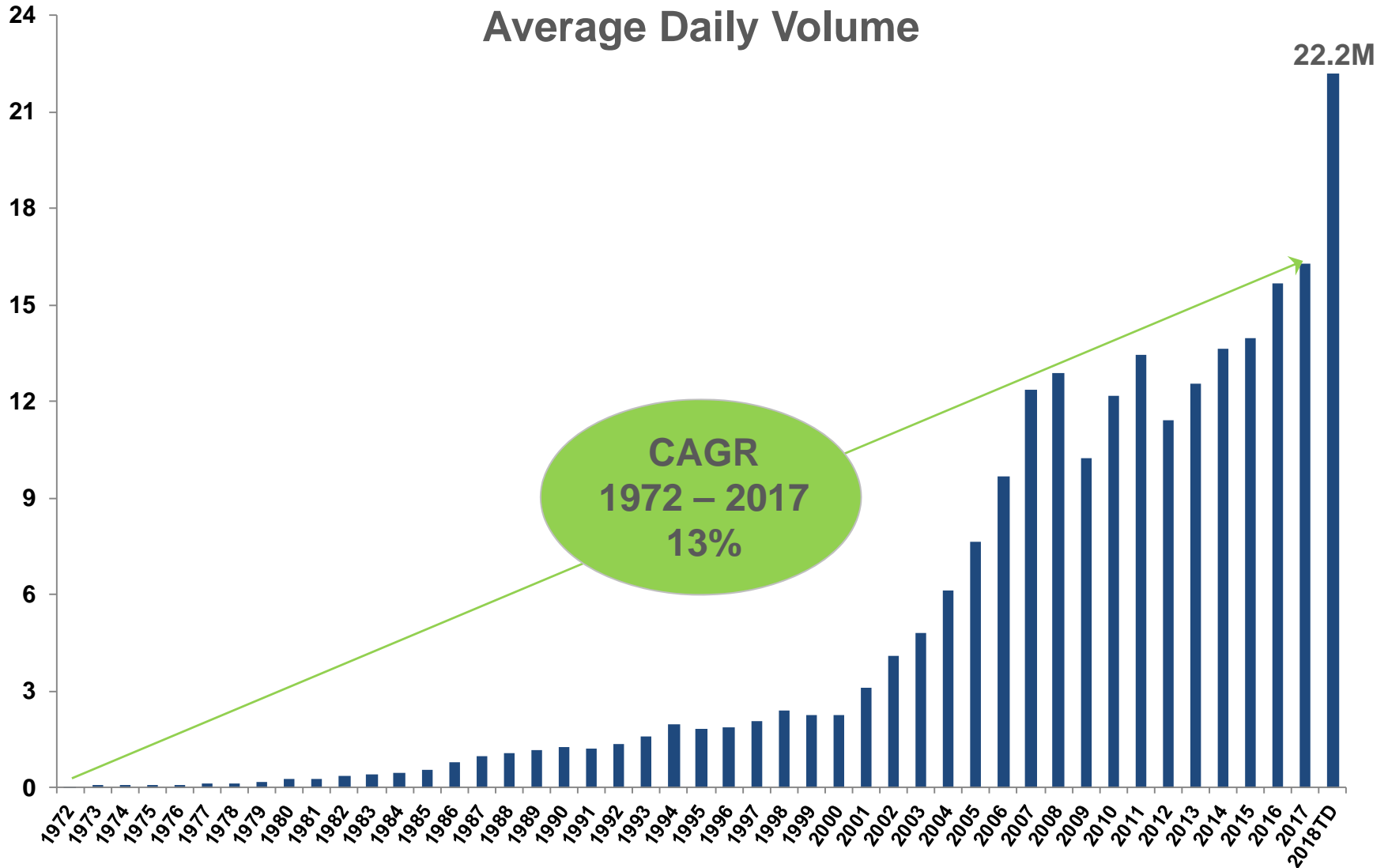
*Statements in this presentation that are not historical facts are forward-looking statements. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what 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 Cut 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.*

*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<sup>SM</sup> 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 3/31/2018.*

# Long-Term Growth in a Variety of Environments

(round turns, in millions)

## Pro Forma Average Daily Volume



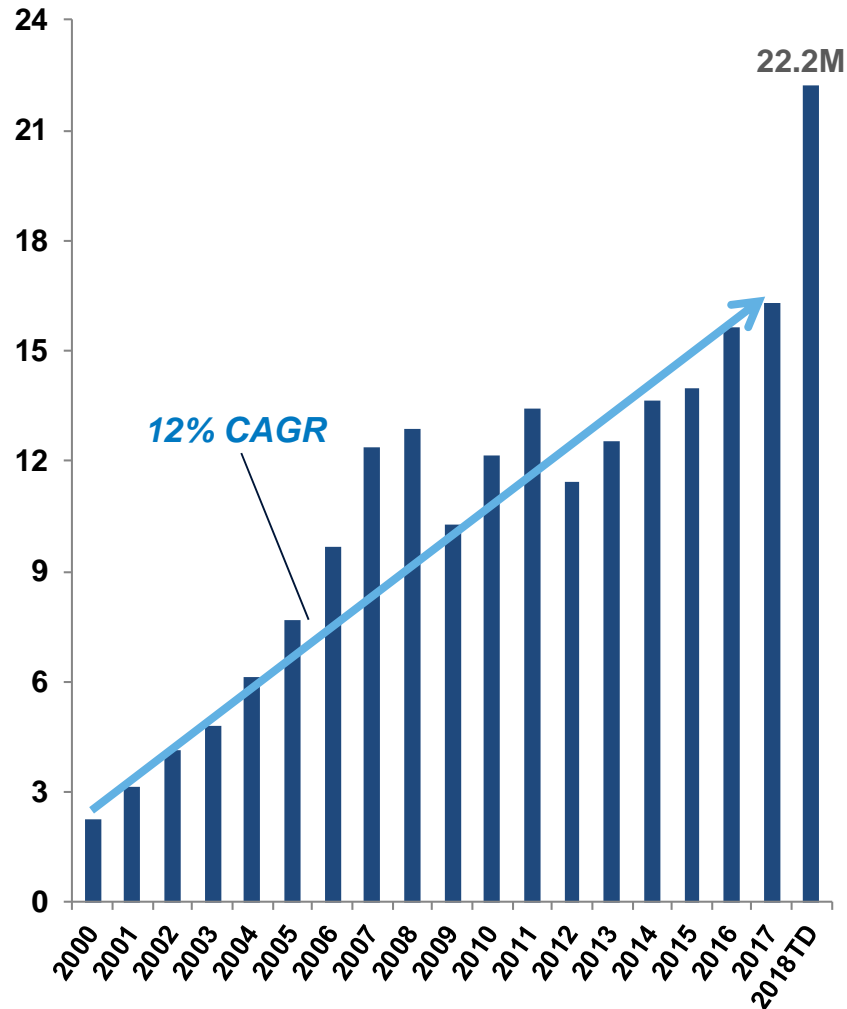
Note: Volumes are all pro forma as if CME owned NYMEX and CBOT over the illustrated period and 2018TD ADV is through 3/29/18

# Strong ADV Growth and Healthy Open Interest

Double Digit Growth Across all 6 Product Lines

## Annual ADV

Millions



## ADV

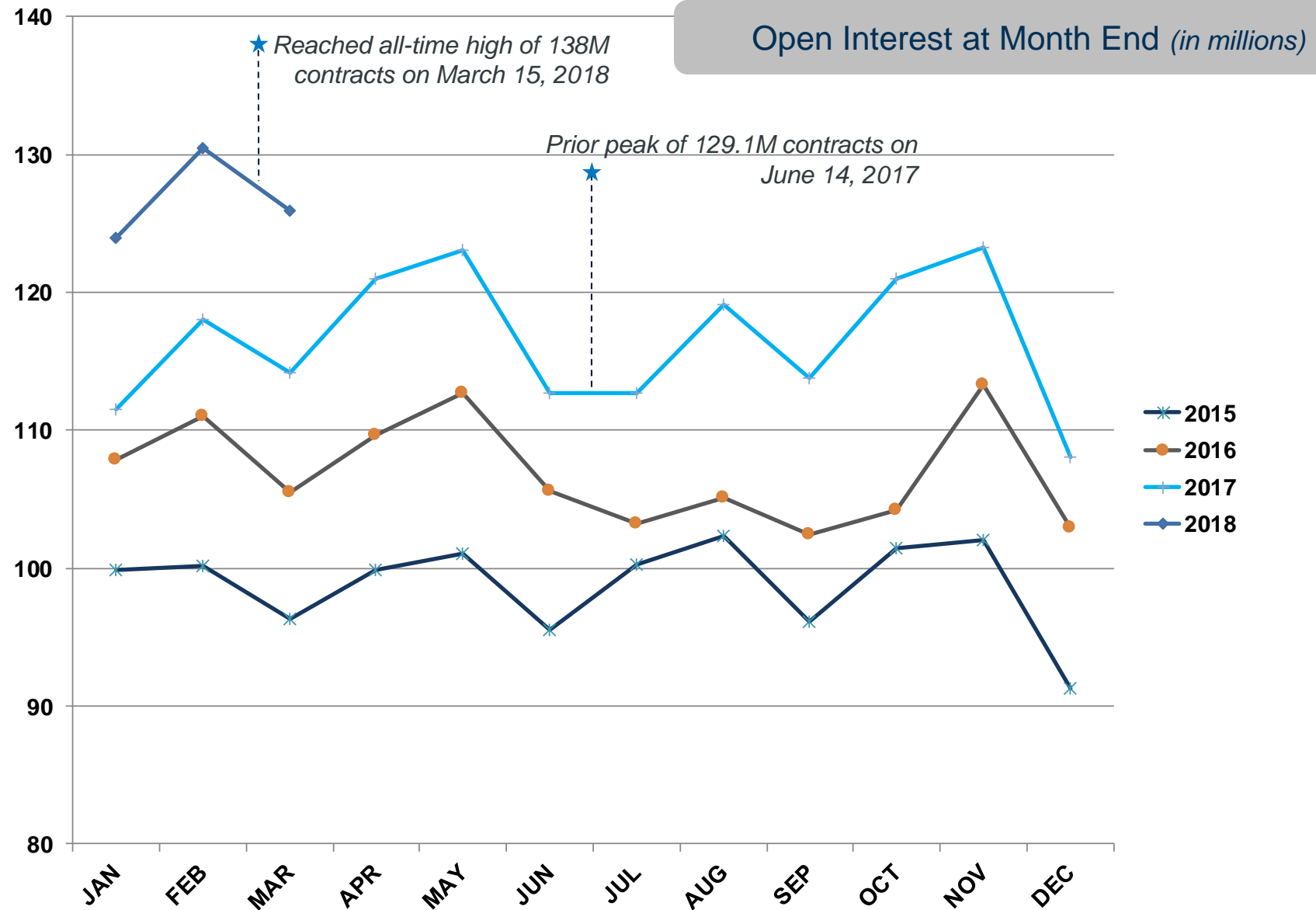
Year Over Year Growth Rates 2018TD vs. 2017TD

Product Line	Total ADV	Options ADV
Interest Rates	29%	29%
Equities	47%	51%
Energy	10%	6%
Ag Commodities	27%	21%
FX	23%	31%
Metals	39%	30%
<b>Total</b>	<b>29%</b>	<b>31%</b>

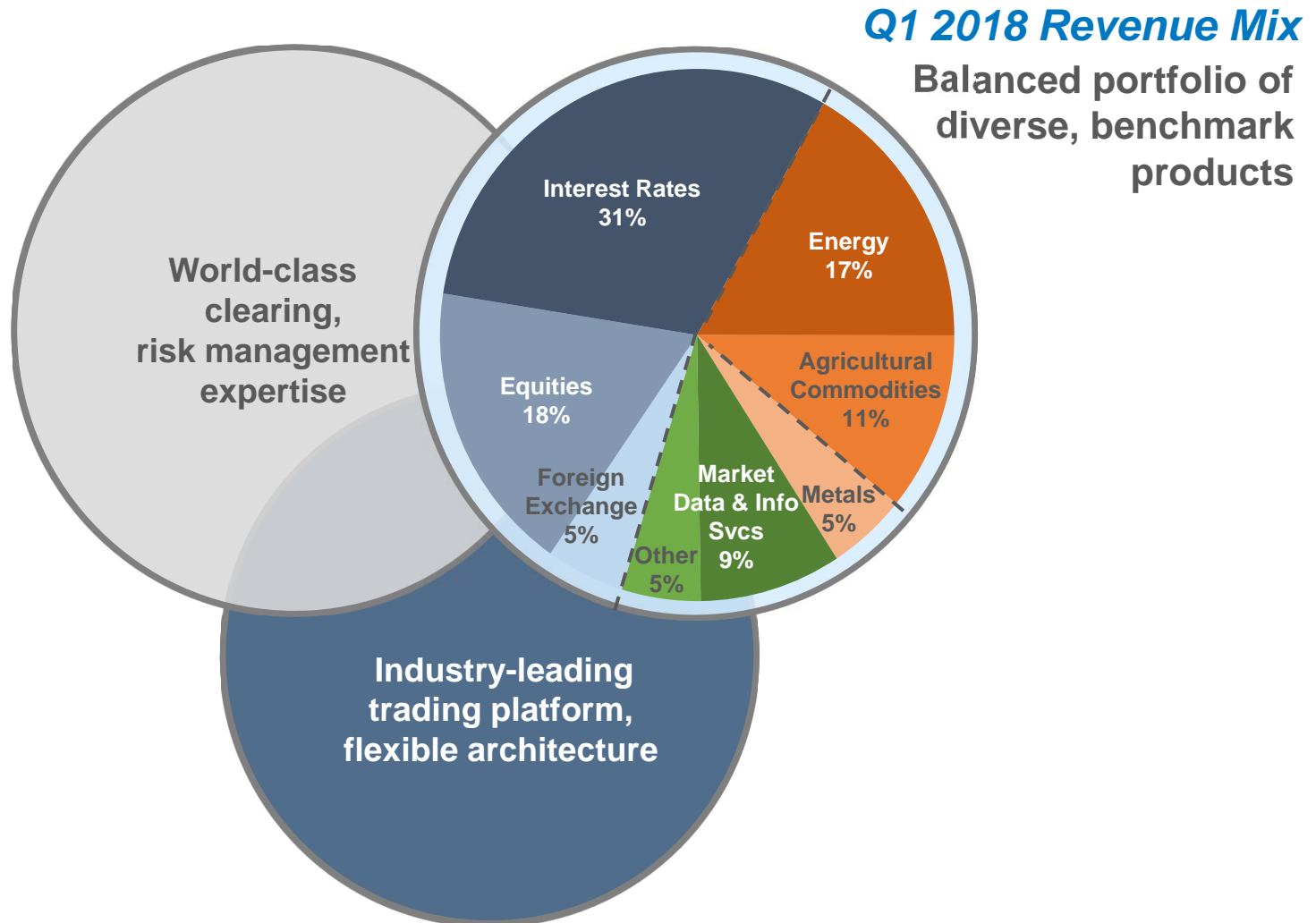
## Open Interest vs. Same Timeframe Last Year

- Total up 10%
- Interest Rates up 24% / Agricultural up 14% / Metals up 10% / Equities up 6% / FX up 1%

# Open Interest Reaching All-Time Highs

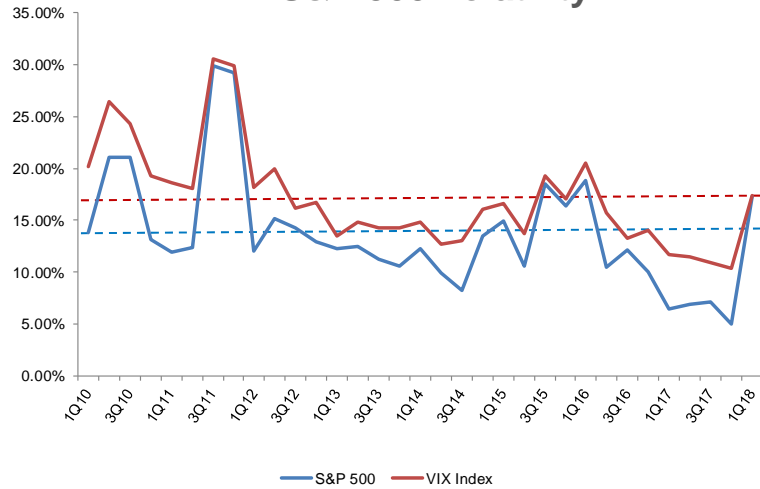


# Unique Assets Provide Competitive Advantages

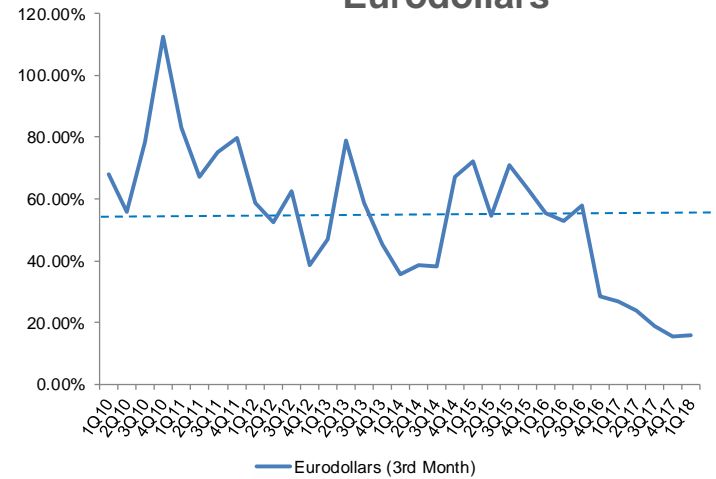


# Volatility Through 1Q 2018

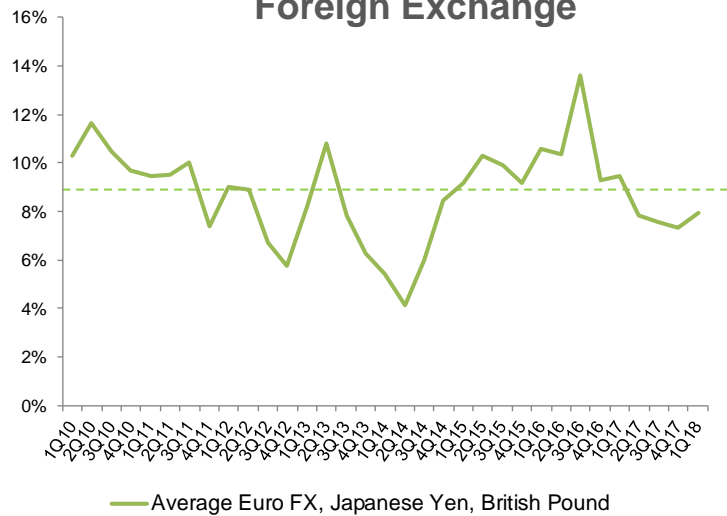
## S&P 500 Volatility



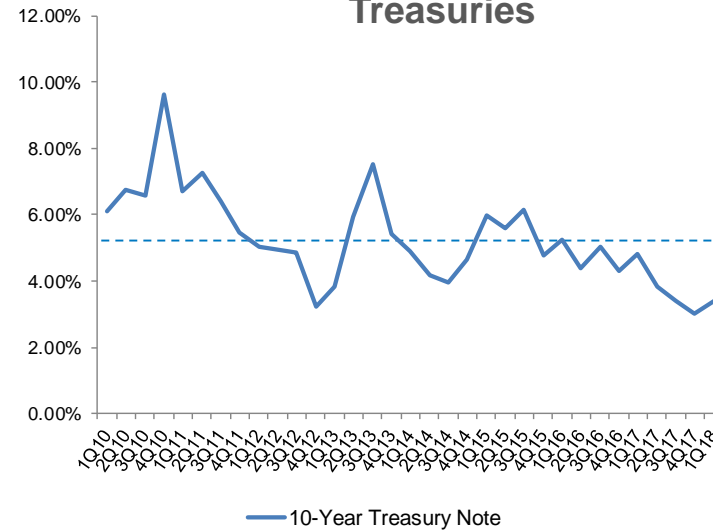
## Eurodollars



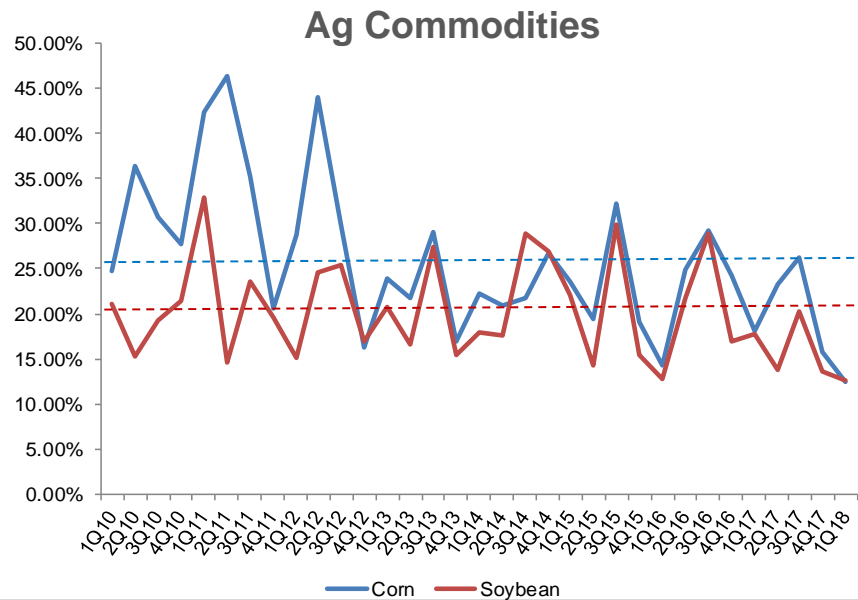
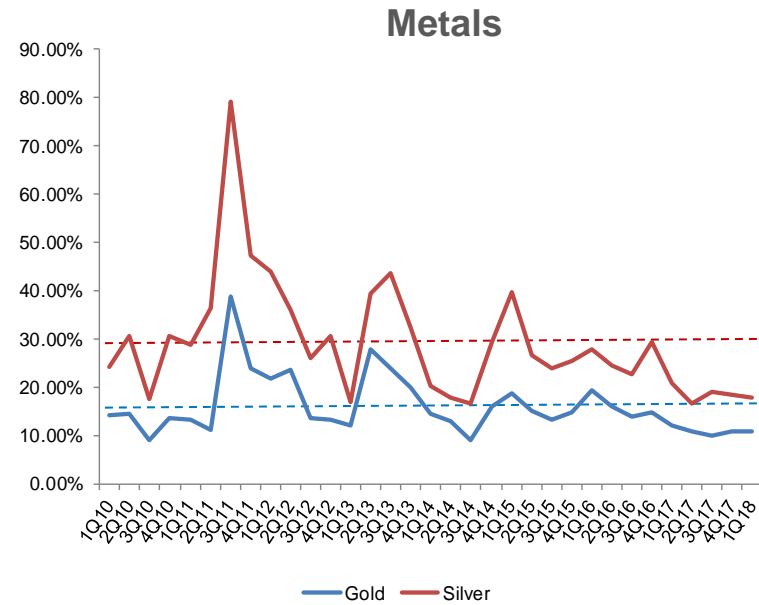
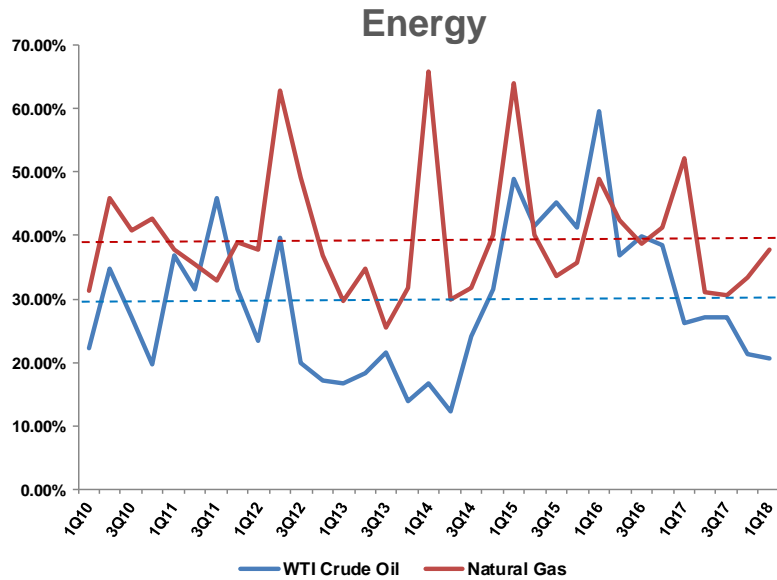
## Foreign Exchange



## Treasuries



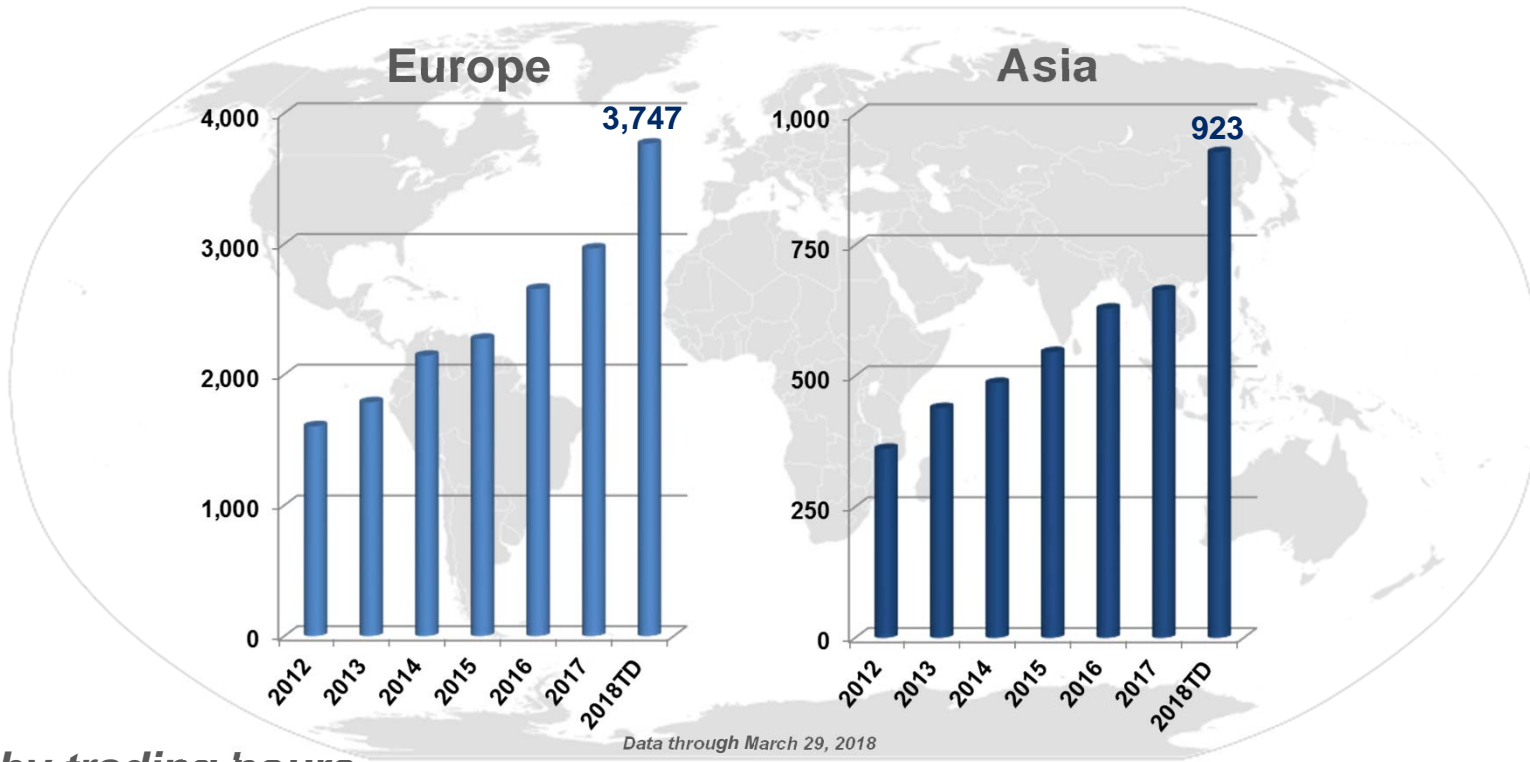
# Volatility Through 1Q 2018





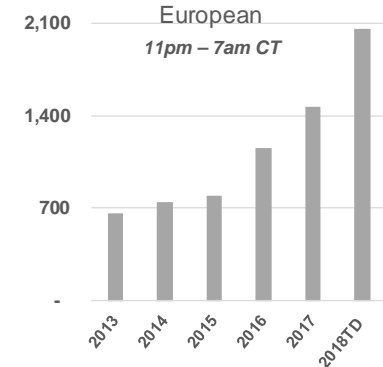
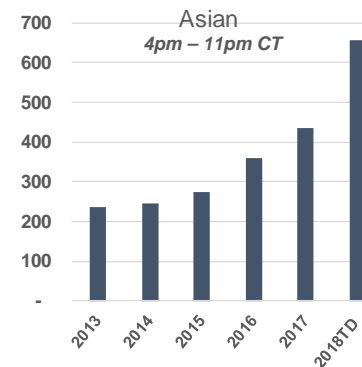
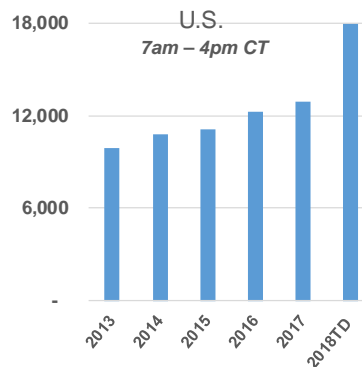
# Investments in Globalization Are Paying Off

Electronic ADV based on origin of trade, in 000s



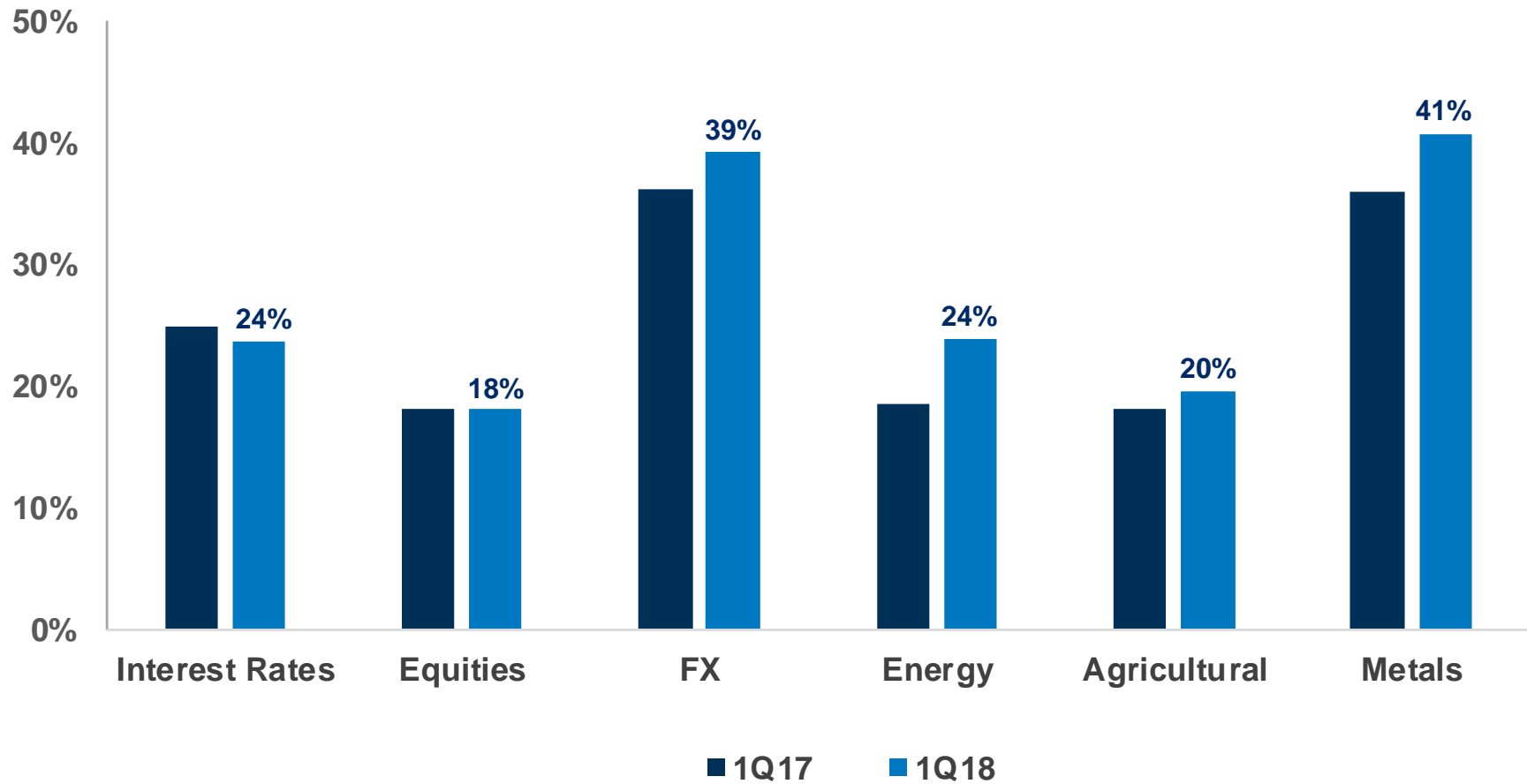
## ADV by trading hours, in 000s

- During 1Q18, 84% growth during European trading hours and 77% growth during Asian trading hours

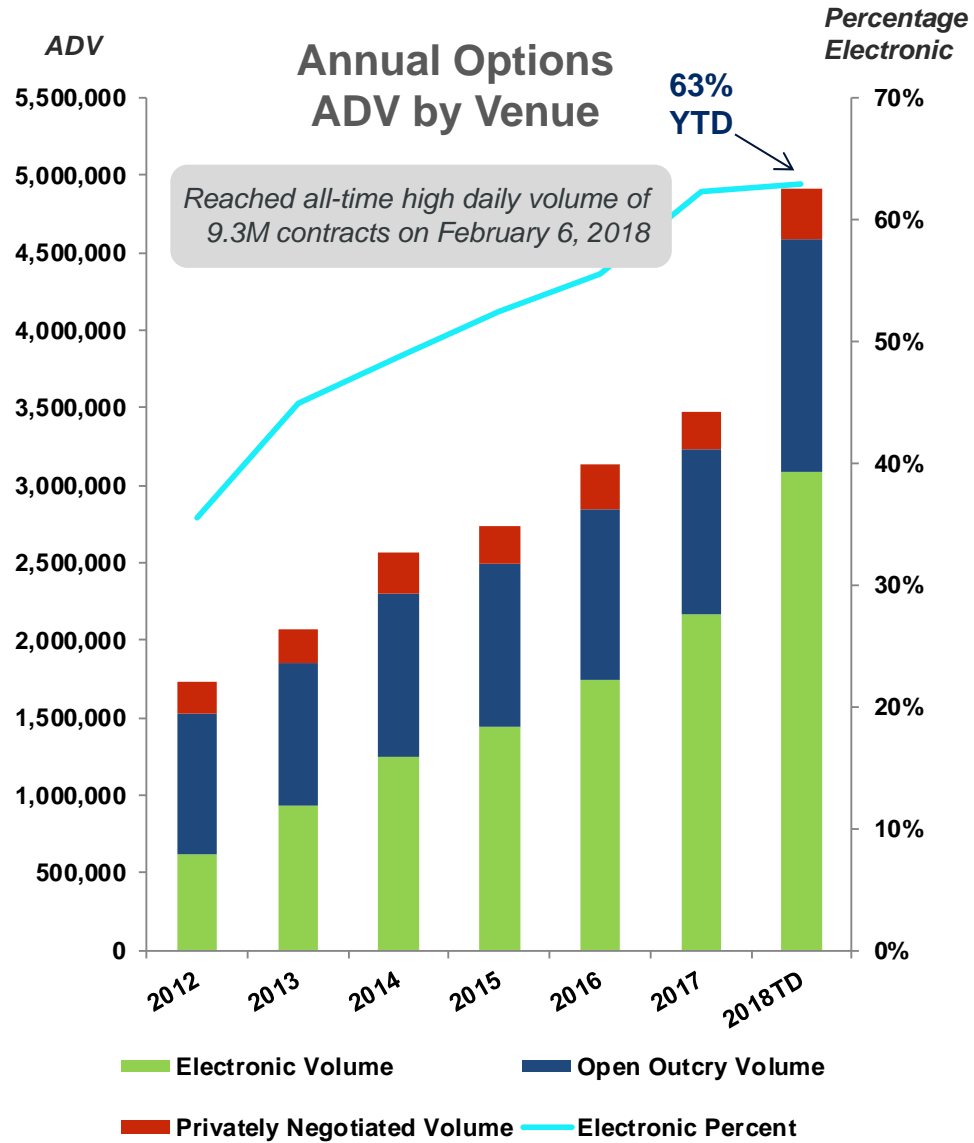


# Investments in Globalization Are Paying Off

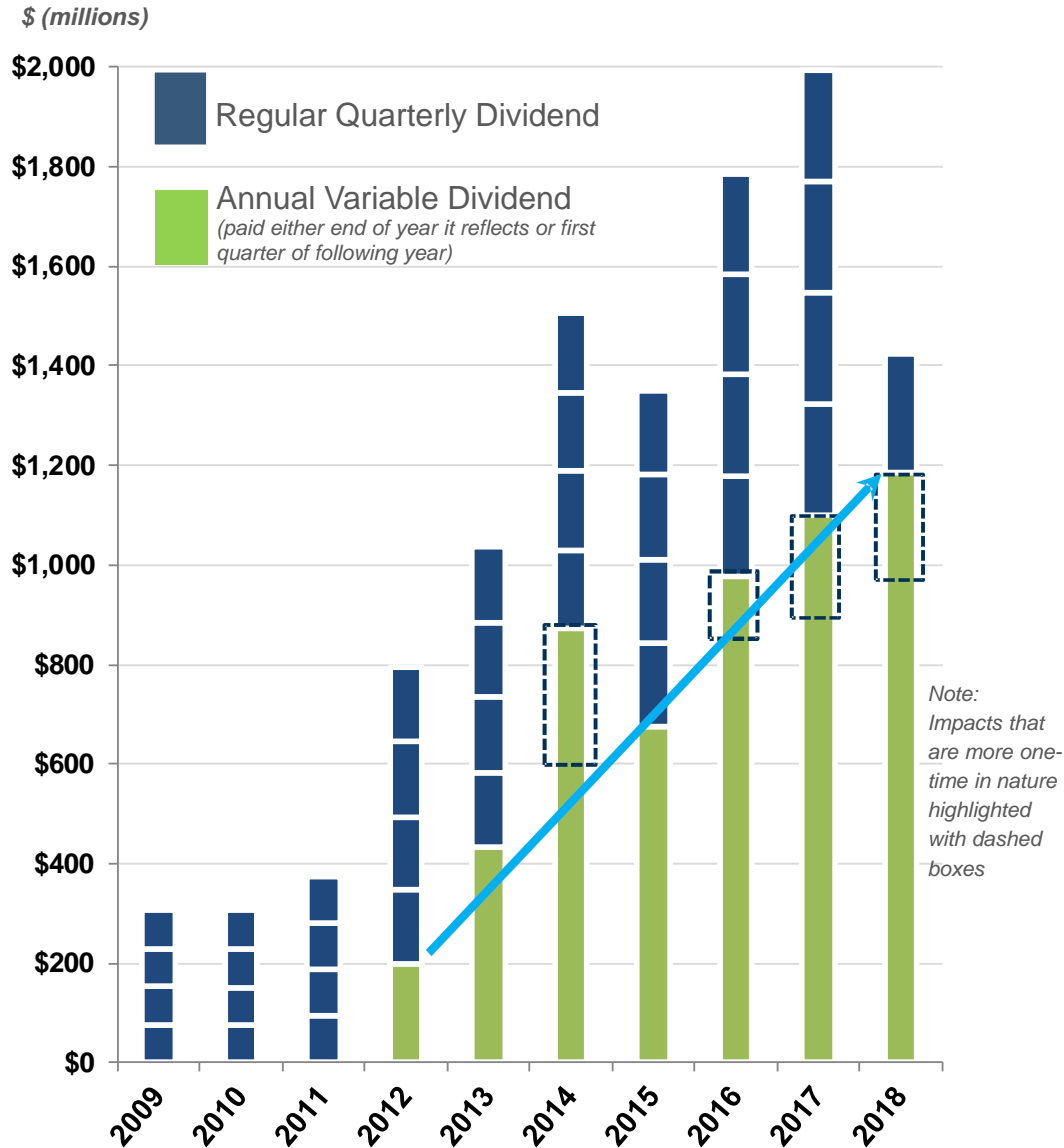
*Non-U.S. Electronic ADV Proportion of Total Electronic ADV*



# Options Business – Continued Momentum



# Committed to Returning Cash to Shareholders



Note – 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.

- Regular quarterly dividend for 1Q18 was declared at \$0.70 per share, which was an increase of 6 percent from the regular quarterly dividends paid in 2017
- CME Group to keep \$700M minimum cash
- Creates opportunity to sweep excess cash to shareholders annually
- Unique annual, variable structure
- Have returned more than \$9.8 billion to shareholders in dividends since beginning of variable dividend policy in early 2012
- Dividend yield over the last 6 years of more than 5 percent

# CME Group 1Q 2018 Adjusted Financial Results<sup>1</sup>

- Revenue of \$1,109M, up 19%
- Operating Expense of \$323M, up 7%
- Operating Expense, excluding Licensing Fees, of \$273M, up 2%
- Operating Income of \$786M, up 25%
- Operating Margin of 70.9 percent
- Net Income of \$634M, up 52%
- Diluted EPS of \$1.86, up 52%

## CME Group Average Rate Per Contract (RPC)

<u>Product Line</u>	<u>1Q 2017</u>	<u>2Q 2017</u>	<u>3Q 2017</u>	<u>4Q 2017</u>	<u>1Q 2018</u>
Interest Rates	\$ 0.492	\$ 0.491	\$ 0.485	\$ 0.467	\$ 0.464
Equities	0.718	0.731	0.738	0.768	0.781
Foreign Exchange	0.823	0.807	0.796	0.785	0.762
Energy	1.130	1.096	1.072	1.133	1.140
Ag Commodities	1.334	1.300	1.251	1.251	1.246
Metals	1.496	1.449	1.376	1.315	1.367
<b>Average RPC</b>	<b>\$ 0.731</b>	<b>\$ 0.749</b>	<b>\$ 0.749</b>	<b>\$ 0.736</b>	<b>\$ 0.706</b>

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.

# Notes / Guidance

- **Maintaining original 2018 guidance**

- Adjusted operating expense excluding license fees of between \$1.100 billion and \$1.105 billion
- Capital expenditures, net of leasehold improvement allowances, expected to be between \$90 million and \$100 million
- Adjusted effective tax rate expected to be approximately 24.5%

- **Additional notes**

- 2018 adjusted operating expense excluding license fees guidance implies a 2.5% to 3% annual growth rate. 1Q18 adjusted operating expense excluding license fees increased 2.2% versus 1Q17
- 2Q18 adjusted effective tax rate expected to be approximately 25%

# 1Q18 Reconciliation of GAAP to non-GAAP Measures

**CME Group Inc. and Subsidiaries**  
**Reconciliation of GAAP to non-GAAP Measures**  
(dollars in millions, except per share amounts; shares in thousands)

	Quarter Ended March 31,	
	2018	2017
<b>Net Income</b>	\$ 598.8	\$ 399.8
Restructuring and severance	1.4	1.8
Amortization of purchased intangibles	23.7	24.0
Litigation matters	8.9	—
Acquisition-related costs <sup>(1)</sup>	9.5	—
Foreign exchange transaction (gains) losses <sup>(2)</sup>	1.6	(2.5)
Gains on CME Ventures investments	(1.1)	—
Gains on sale of BM&FBOVESPA shares	—	(86.5)
Income tax effect related to above	(9.3)	(8.9)
Other income tax item	—	87.8
<b>Adjusted Net Income</b>	<b>\$ 633.5</b>	<b>\$ 415.5</b>
<b>GAAP Earnings per Common Share:</b>		
Basic	\$ 1.76	\$ 1.18
Diluted	1.76	1.18
<b>Adjusted Earnings per Common Share:</b>		
Basic	\$ 1.87	\$ 1.23
Diluted	1.86	1.22
<b>Weighted Average Number of Common Shares:</b>		
Basic	339,305	338,339
Diluted	340,747	339,946

1. Acquisition-related costs include professional fees related to the proposed acquisition with NEX Group plc.

2. Results include foreign exchange transaction net gains and losses principally related to cash held in British pounds within entities whose functional currency is the U.S. dollar.

# GAAP Income Statement Trend Excluding Deferred Compensation, FX, Amortization of Intangibles and Other Historically Noted Adjustments<sup>1</sup>

## CME Group Inc. and Subsidiaries

GAAP Income Statement Trend Excl Def Comp, FX, Amortization of intangibles and other historically noted adjustments<sup>1</sup>  
(in millions, except per share amounts)

	Q116	Q216	Q316	Q416	Q117	Q217	Q317	Q417	Q118
<b>Revenues</b>									
Clearing and transaction fees	\$ 796.1	\$ 767.6	\$ 704.2	\$ 768.5	\$ 792.0	\$ 792.0	\$ 756.2	\$ 758.4	\$ 973.6
Market data and information services	102.4	102.9	101.1	100.1	96.8	96.1	96.9	102.0	94.9
Access and communication fees	21.6	22.3	23.8	23.7	24.3	24.9	25.7	25.9	26.0
Other	14.1	13.6	12.6	20.6	16.2	11.6	12.0	13.7	14.5
<b>Total Revenues</b>	<b>934.2</b>	<b>906.4</b>	<b>841.7</b>	<b>912.9</b>	<b>929.3</b>	<b>924.6</b>	<b>890.8</b>	<b>900.0</b>	<b>1,109.0</b>
<b>Expenses</b>									
Compensation and benefits	132.5	131.5	128.3	133.7	137.1	134.8	139.2	134.7	151.0
Communications	6.7	6.3	6.9	6.9	6.3	6.0	6.1	5.9	5.9
Technology support services	17.4	17.7	17.3	18.4	18.7	18.2	19.3	21.1	19.6
Professional fees and outside services	30.6	39.0	33.5	40.2	28.6	28.6	25.8	34.1	24.4
Amortization of purchased intangibles									
Depreciation and amortization	32.6	30.4	31.2	31.1	29.4	28.2	26.9	27.9	28.1
Occupancy and building operations	21.1	20.4	19.6	20.0	20.1	19.2	19.8	21.1	20.0
Licensing and other fee agreements	39.0	32.8	31.5	32.5	33.8	32.9	41.5	38.1	49.5
Other	23.4	25.2	20.8	40.7	27.4	26.6	21.2	42.4	24.4
<b>Total Expenses</b>	<b>303.3</b>	<b>303.3</b>	<b>289.1</b>	<b>323.5</b>	<b>301.4</b>	<b>294.5</b>	<b>299.8</b>	<b>325.3</b>	<b>322.9</b>
<b>Total Expenses less Licensing and other fee agreements</b>	<b>264.3</b>	<b>270.5</b>	<b>257.6</b>	<b>291.0</b>	<b>267.6</b>	<b>261.6</b>	<b>258.3</b>	<b>287.2</b>	<b>273.4</b>
<b>Operating Income</b>	<b>630.9</b>	<b>603.1</b>	<b>552.6</b>	<b>589.4</b>	<b>627.9</b>	<b>630.1</b>	<b>591.0</b>	<b>574.7</b>	<b>786.1</b>
<b>Non-Operating Income (Expense)</b>									
Investment income	17.8	20.3	22.0	27.7	48.7	109.6	135.4	138.5	155.0
Gain (losses) on derivative investments	-	-	-	-	-	-	-	-	-
Interest and other borrowing costs	(29.8)	(31.0)	(31.1)	(31.6)	(29.8)	(29.0)	(29.1)	(29.1)	(29.9)
Equity in net gains (losses) of unconsolidated subsidiaries	26.8	27.0	28.6	27.8	30.8	31.8	33.9	32.7	40.1
Other non-operating income (expense)	(9.4)	(9.9)	(9.9)	(12.1)	(33.8)	(83.1)	(105.0)	(106.4)	(118.6)
<b>Total Non-Operating</b>	<b>5.4</b>	<b>6.4</b>	<b>9.6</b>	<b>11.8</b>	<b>15.9</b>	<b>29.3</b>	<b>35.2</b>	<b>35.7</b>	<b>46.6</b>
<b>Income Before Income Taxes</b>	<b>636.3</b>	<b>609.5</b>	<b>562.2</b>	<b>601.2</b>	<b>643.8</b>	<b>659.4</b>	<b>626.2</b>	<b>610.4</b>	<b>832.7</b>
Income tax provision	231.2	222.2	205.6	213.9	228.3	240.5	220.0	227.4	199.2
<b>Net Income</b>	<b>\$ 405.1</b>	<b>\$ 387.3</b>	<b>\$ 356.6</b>	<b>\$ 387.3</b>	<b>\$ 415.5</b>	<b>\$ 418.9</b>	<b>\$ 406.2</b>	<b>\$ 383.0</b>	<b>\$ 633.5</b>
Earnings per Diluted Common Share Attributable to CME Group	\$1.20	\$1.14	\$1.05	\$1.14	\$1.22	\$1.23	\$1.19	\$1.12	\$1.86
Weighted Avg. Number of Diluted Common Shares	338.55	338.71	339.14	339.34	339.95	340.02	340.33	340.49	340.75
<b>Adjustments highlighted in above view:</b>									
Deferred compensation gain (loss)	(0.2)	0.7	2.9	0.8	3.7	2.8	2.5	2.2	0.3
Currency fluctuation gain (loss)	(3.9)	(11.6)	(1.0)	(8.0)	2.5	4.6	2.9	(0.6)	(1.6)

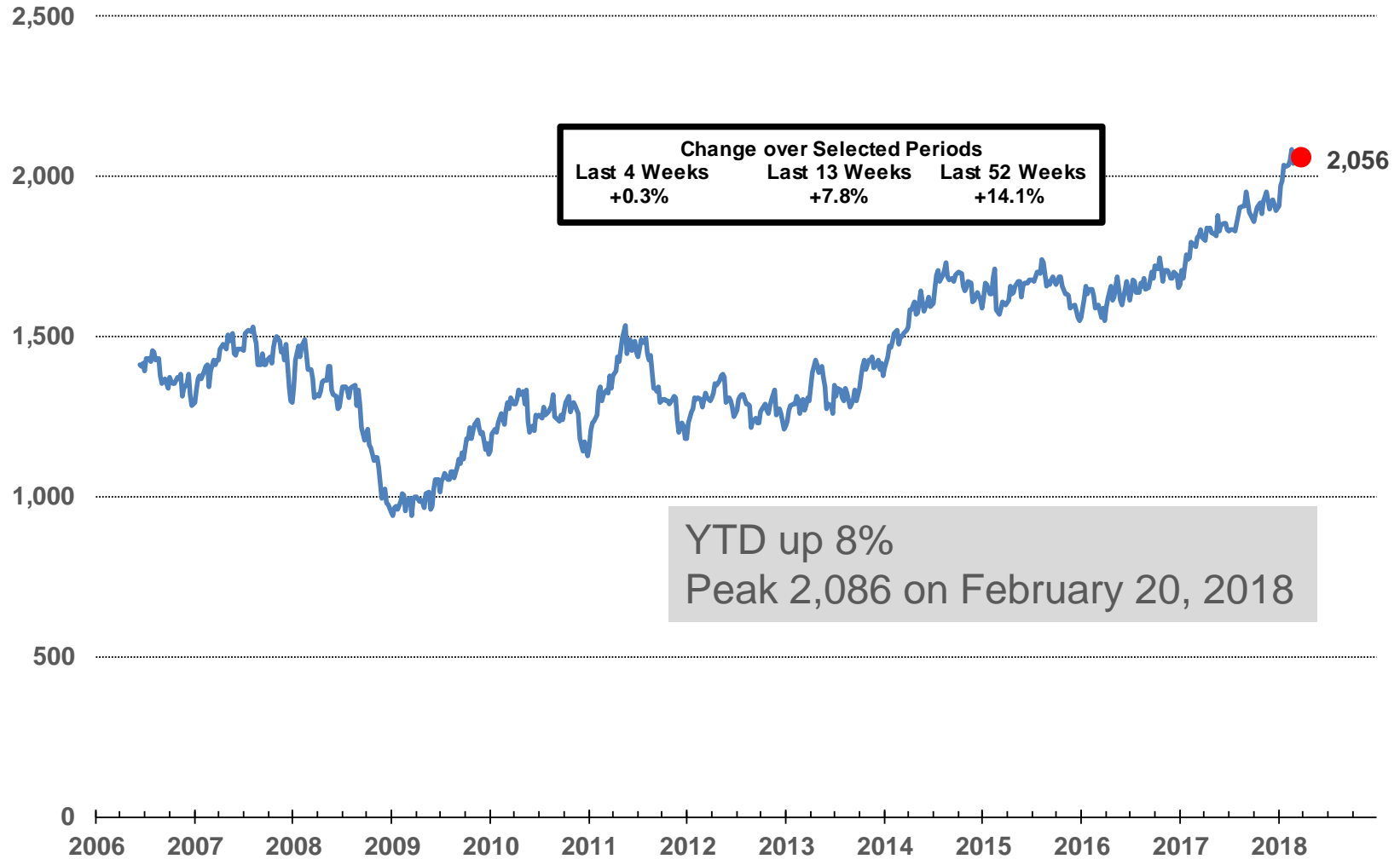
<sup>1</sup>) Please refer to each individual quarter's Reconciliation of GAAP to Non-GAAP Measures for the specific adjustments made during that period.



# Interest Rate Futures – Large Open Interest Holders

CME Group Interest Rate Futures  
Aggregate Number of Large Open Interest Holders\*

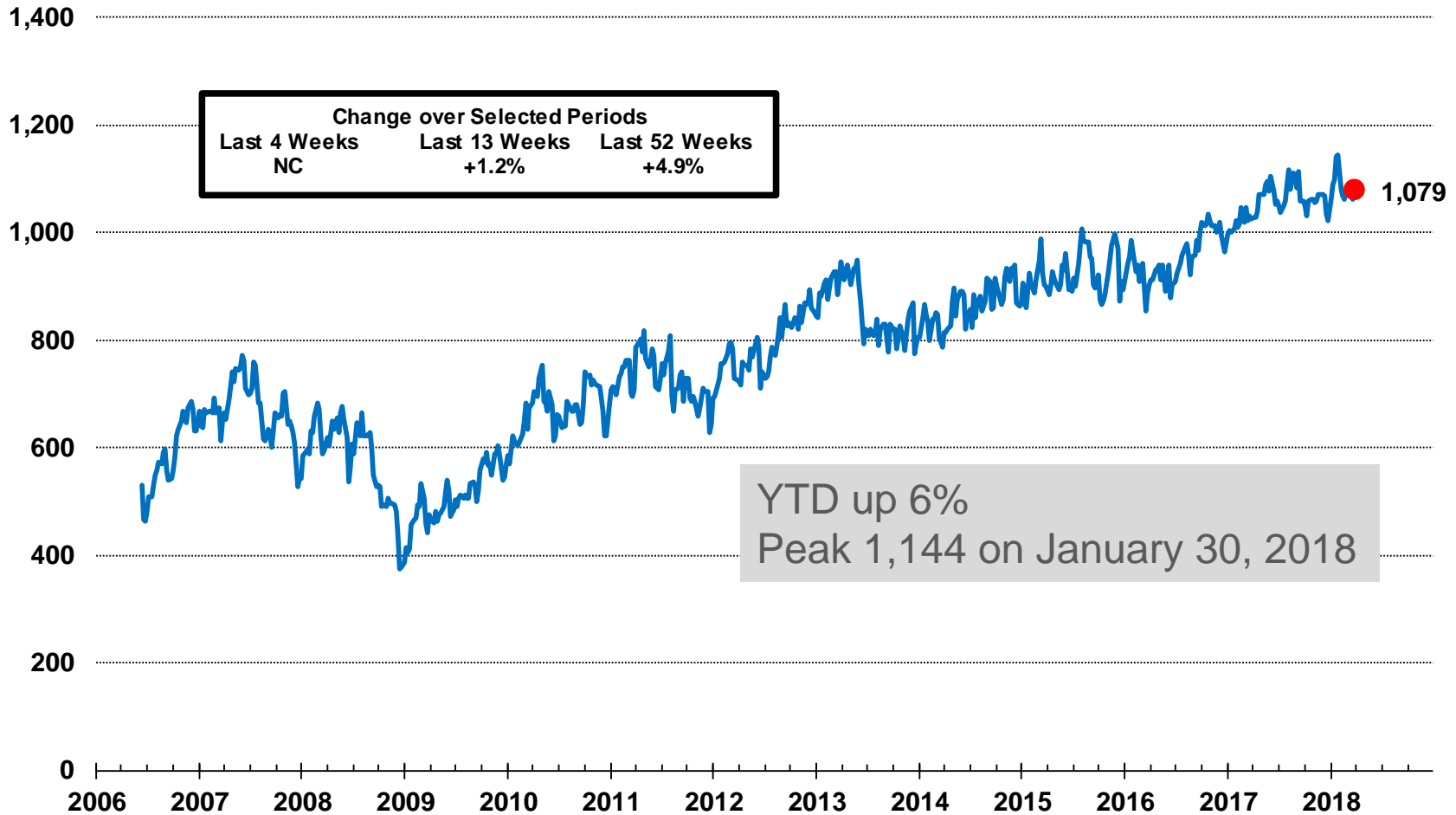
Source: CFTC



# FX Futures – Large Open Interest Holders

CME Group Foreign Exchange Futures  
Aggregate Number of Large Open Interest Holders\*

Source: CFTC

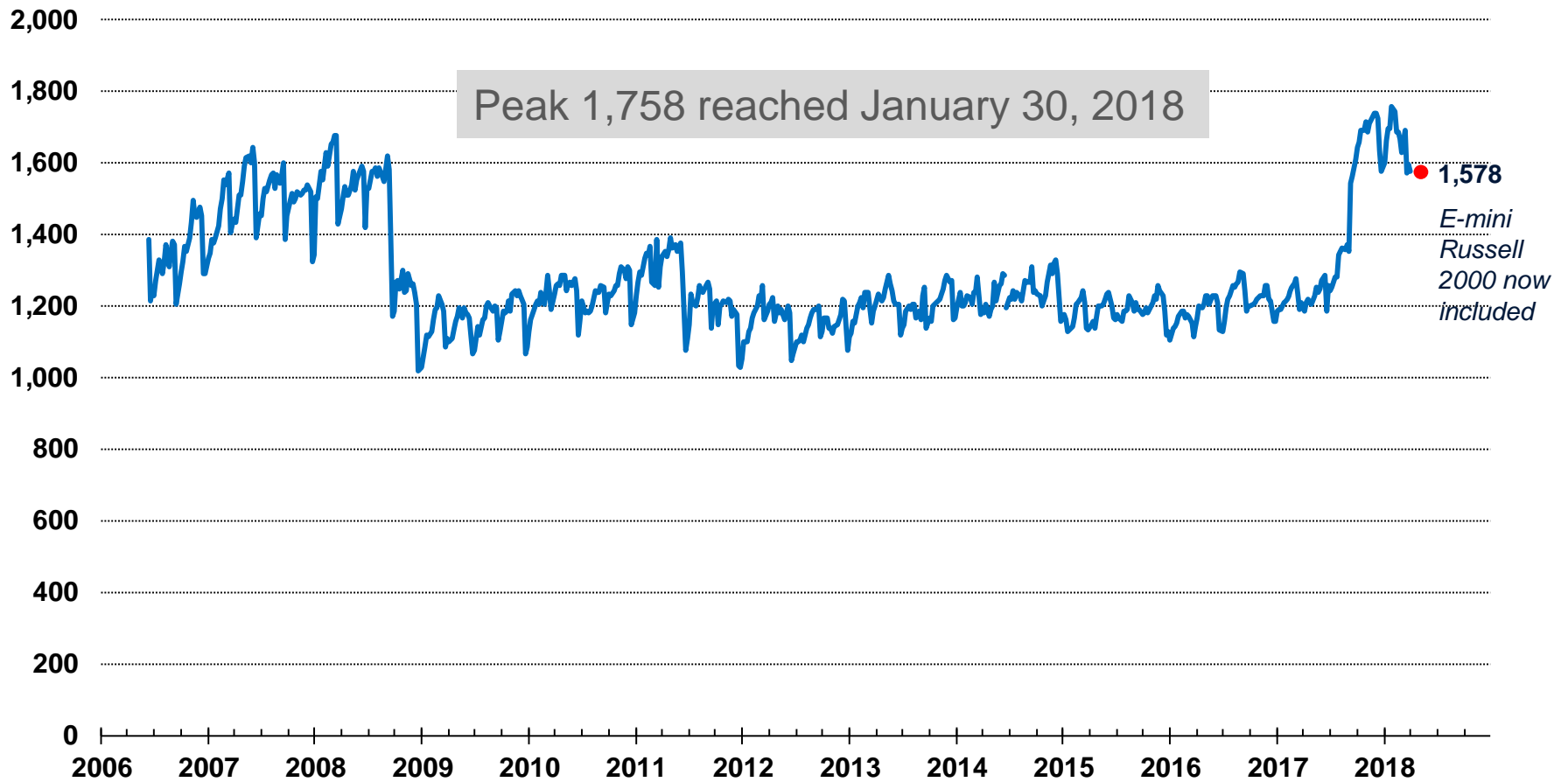


\*The CFTC defines large open interest holders as having at least **400** open contracts in Major Foreign Currency futures and at least **100** open contracts in Other Foreign Currency futures.

# Equity Futures – Large Open Interest Holders

CME Group Equity Index Futures  
Aggregate Number of Large Open Interest Holders\*

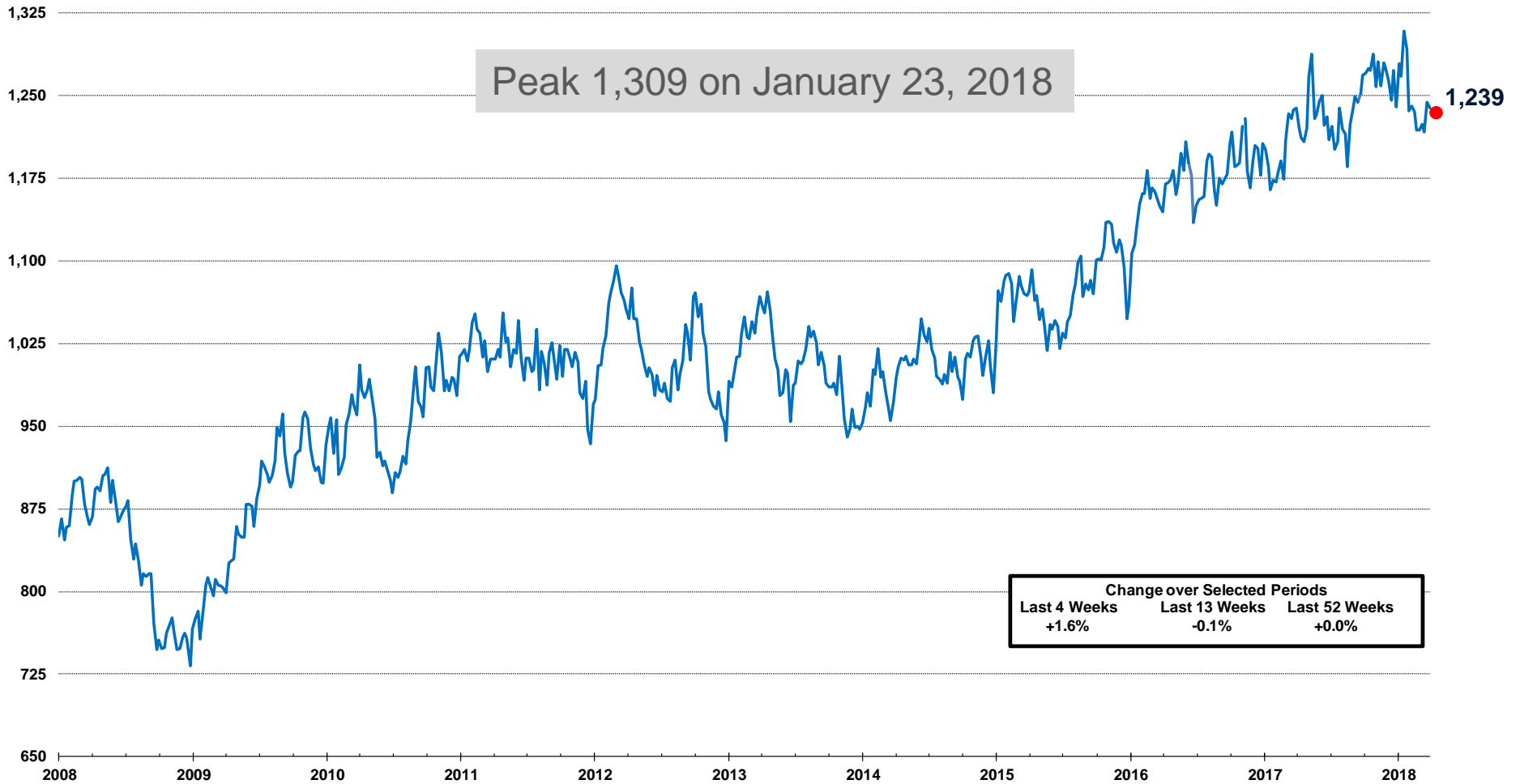
Source: CFTC



# Energy Futures – Large Open Interest Holders

CME Group Energy Futures  
Aggregate Number of Large Open Interest Holders\*

Source: CFTC



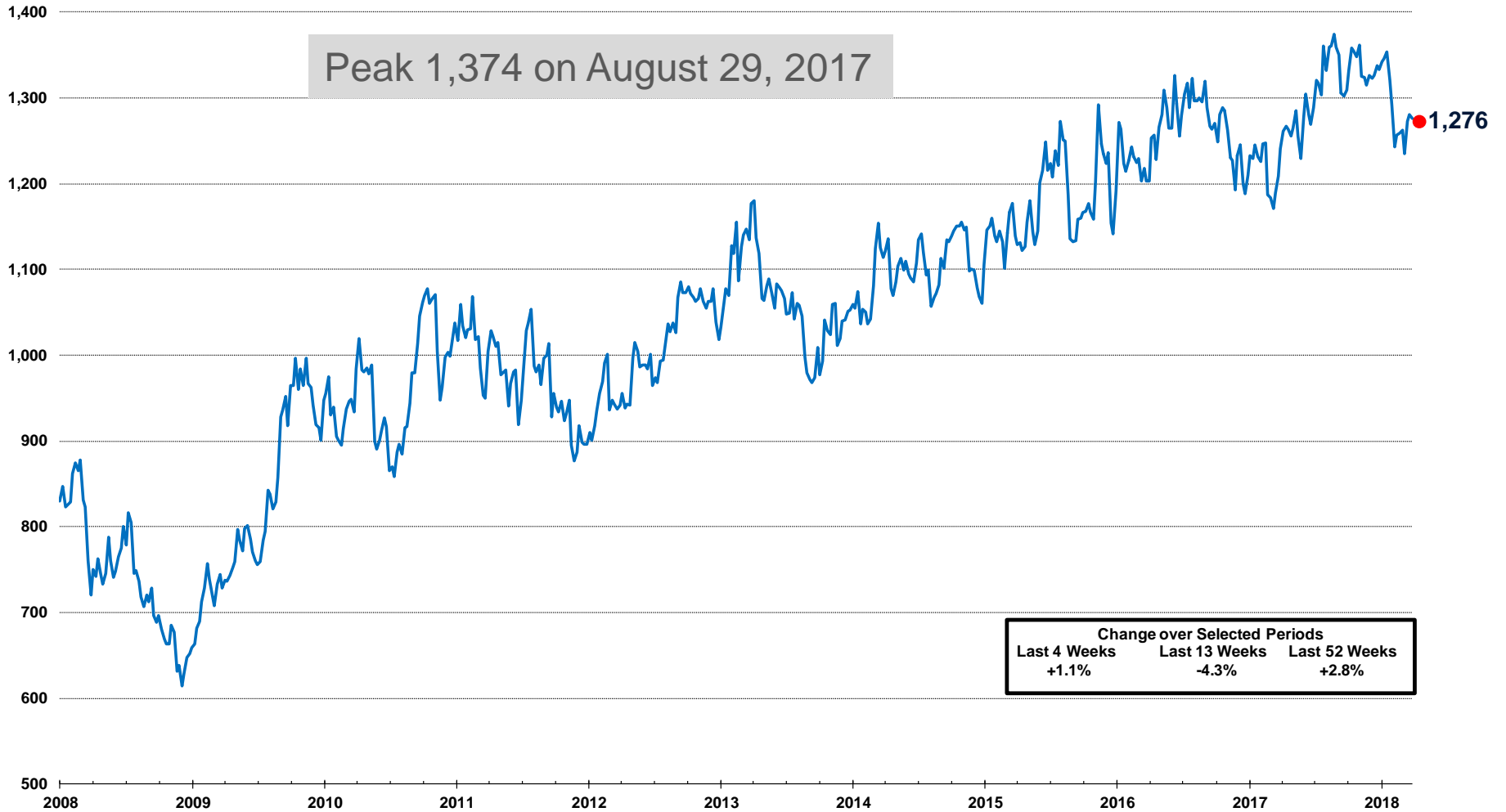
\*The Aggregate number of Large Open Interest Holders is the sum of the LOIH traders for the following products: WTI (Crude Oil, Light Sweet), NG (Natural Gas), RBOB (Gasoline Blendstock), and HO (#2 Heating Oil)

\*The Energy Product Line LOIH above is a sum of each product's LOIH and does not imply a unique number of Traders\*

# Metals Futures – Large Open Interest Holders

CME Group Metals Futures  
Aggregate Number of Large Open Interest Holders\*

Source: CFTC



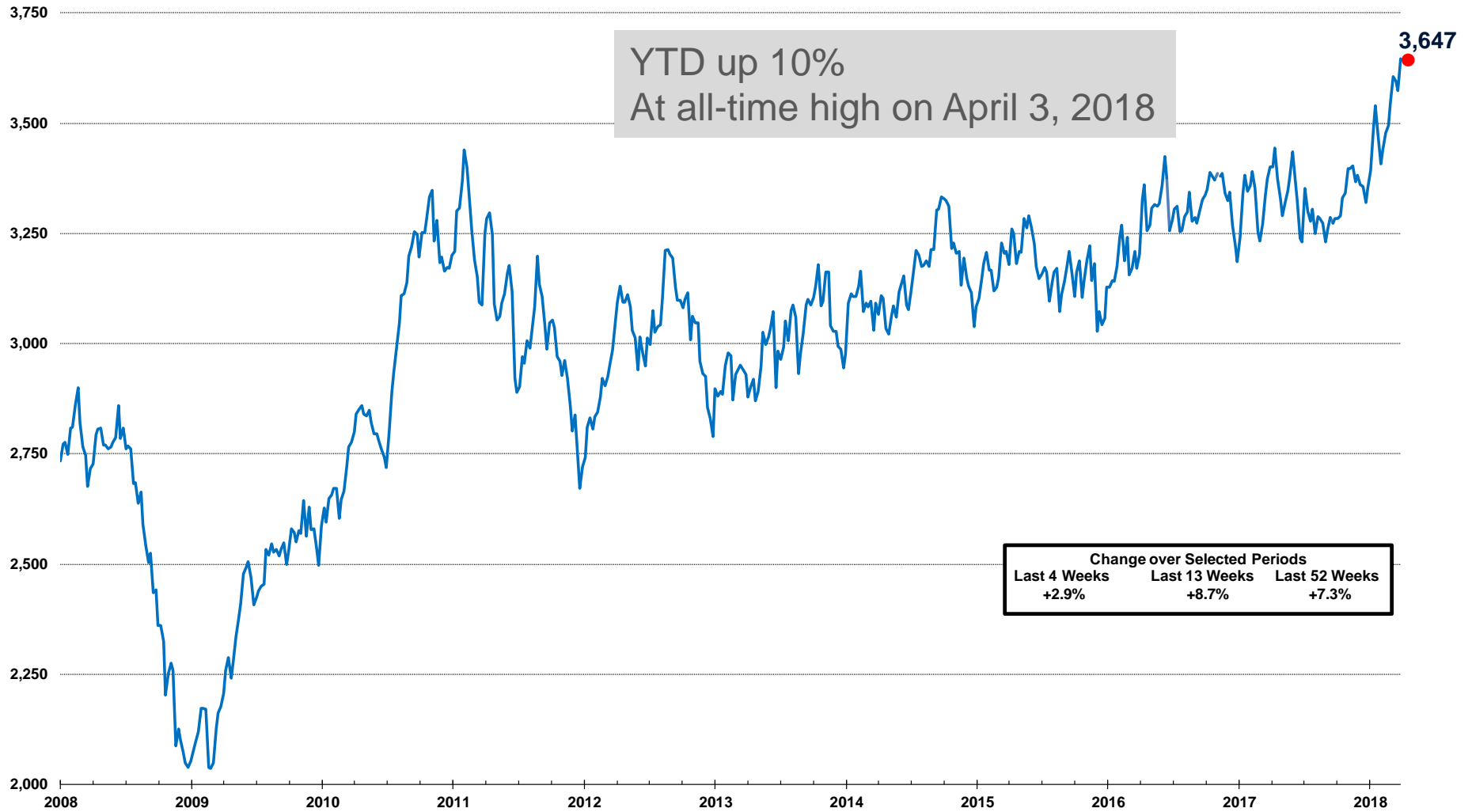
\*The Aggregate number of Large Open Interest Holders is the sum of the LOIH traders for the following products: Gold, Silver, Copper, Platinum, and Palladium.

\*The Metals Product Line LOIH above is a sum of each product's LOIH and does not imply a unique number of Traders\*

# Agricultural Futures – Large Open Interest Holders

CME Group Agricultural Futures  
Aggregate Number of Large Open Interest Holders\*

Source: CFTC



\*The Aggregate number of Large Open Interest Holders is the sum of the LOIH traders for the following products: Corn, Wheat (HRW and SRW), Soybeans, Soybeans Meal, Soybeans Oil, Live Cattle, and Lean Hogs.  
\*The Agricultural Product Line LOIH above is a sum of each product's LOIH and does not imply a unique number of Traders\*

# CME Group – Compelling Investment

## Only Pure Play Derivatives Exchange

- Unmatched product diversity and 24 hour liquidity
- Leader in innovation
- Capital efficiency provides customer value
- Network effect similar to large technology companies
- Confidence in our markets, especially in times of stress
- Important partnership with S&P Financial, with “active to passive” trend underway

## Positioned for Growth

- Focused on customer challenges / working collaboratively
- Oriented to attract order flow from adjacent markets
- Products have global appeal - have invested in global sales efforts
- Largest options on futures offering amongst exchanges
- Recurring customer relationships
- Valuable proprietary data

## Several Potential Tailwinds

- Fed Balance Sheet reduction
- FASB Hedge Accounting Rules
- Uncleared Margin Rule (especially within FX)
- Increasing global relevance of U.S. Energy products (WTI Crude Oil and Henry Hub Nat Gas benchmarks – increase in exporting)
- Russell 2000 transition
- Regulatory environment improving (more certainty in U.S. vs. Europe)

- Improved internal focus on execution and efficiency
- Do not take on trading risk like other financials

- Significant operating leverage / incremental margin over 90 percent
- Strong free cash flow generation / unique dividend structure