



### Agenda



Strategic Review Edward Tilly

Chairman and Chief Executive Officer

Financial Review Brian Schell

Executive Vice President, CFO and Treasurer

Questions and Answers Edward Tilly

**Brian Schell** 

**Chris Concannon** 

President and Chief Operating Officer

**John Deters** 

Chief Strategy Officer and Head of Multi-Asset Solutions

# Cautionary Statements Regarding Forward-Looking Information



This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve a number of risks and uncertainties. You can identify these statements by forward-looking words such as "may," "might," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential" or "continue," and the negative of these terms and other comparable terminology. All statements that reflect our expectations, assumptions or projections about the future other than statements of historical fact are forward-looking statements. These forward-looking statements, which are subject to known and unknown risks, uncertainties and assumptions about us, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from those expressed or implied by the forward-looking statements.

We operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible to predict all risks and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Some factors that could cause actual results to differ include: the loss of our right to exclusively list and trade certain index options and futures products; economic, political and market conditions; compliance with legal and regulatory obligations; price competition and consolidation in our industry; decreases in trading volumes, market data fees or a shift in the mix of products traded on our exchanges; legislative or regulatory changes; increasing competition by foreign and domestic entities; our dependence on and exposure to risk from third parties; our index providers' ability to maintain the quality and integrity of their indexes and to perform under our agreements; our ability to operate our business without violating the intellectual property rights of others and the costs associated with protecting our intellectual property rights; our ability to attract and retain skilled management and other personnel, including those experienced with postacquisition integration; our ability to accommodate trading volume and transaction traffic, including significant increases, without failure or degradation of performance of our systems; our ability to protect our systems and communication networks from security risks, including cyber-attacks and unauthorized disclosure of confidential information; challenges to our use of open source software code; our ability to meet our compliance obligations, including managing potential conflicts between our regulatory responsibilities and our for-profit status; damage to our reputation; the ability of our compliance and risk management methods to effectively monitor and manage our risks; our ability to manage our growth and strategic acquisitions or alliances effectively; unanticipated difficulties or expenditures relating to the acquisition of Bats Global Markets, Inc., including, without limitation, difficulties that result in the failure to realize expected synergies, accretion, efficiencies and cost savings from the acquisition within the expected time period (if at all), whether in connection with integration, migrating trading platforms, broadening distribution of product offerings or otherwise; restrictions imposed by our debt obligations; our ability to maintain an investment arade credit rating; potential difficulties in our migration of trading platforms and our ability to retain employees as a result of the acquisition; and the accuracy of our estimates and expectations. More detailed information about factors that may affect our actual results to differ may be found in our filings with the SEC. including in our Annual Report on Form 10-K for the year ended December 31, 2016 and other filings made from time to time with the SEC.

We do not undertake, and we expressly disclaim, any duty to update any forward-looking statement whether as a result of new information, future events or otherwise, except as required by law. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

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# Strategic Review Edward Tilly Chairman and CEO

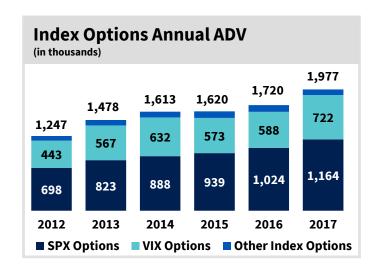


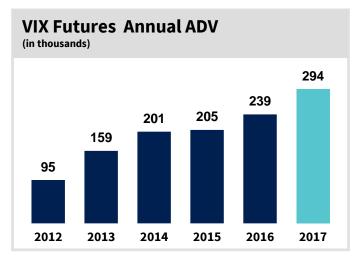
# Growth in Proprietary Index Suite Continued to Drive Revenue and Earnings



#### Strong 4Q17 caps year of tremendous growth

- Total options ADV increased 11% over 2016¹
- Annual record highs for VIX options and futures, each up 23% over 2016
- New all-time high in SPX Weeklys trading drove record year in SPX options
- ETP listings increased by 82% over 2016, bringing total listings to 250 at year end
- Record trading in European LIS block trading platform and Periodic Auctions order book
- Record market share and ADNV for Cboe FX fueled by increased volume in our London matching engine





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# Well Positioned to Leverage our Increased Global Reach and Expanded Product Line in 2018



- Our new mission: "to power your potential to stay ahead of an evolving market," is brought to life through three commitments:
  - Relentless product innovation
  - Leading-edge technology
  - Seamless solutions

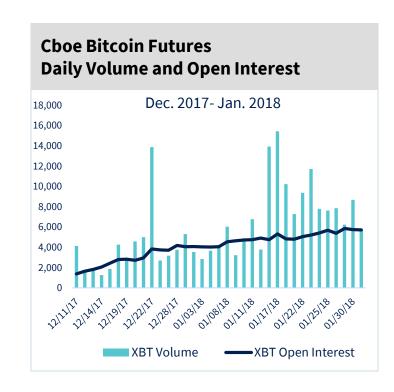


# Product Innovation: Launched XBT Futures on December 10, 2017



# XBT futures, the first of their kind, provide a risk management tool for market participants seeking to hedge their underlying bitcoin holdings

- XBT futures create:
  - An exchange-listed, regulated and surveilled bitcoin product available nearly 24 hours a day, five days per week
  - Efficient price discovery and transparency
  - Access to the bitcoin sector without a digital wallet requirement
- Successful first settlement auction worked as designed
- Anticipate a growing market in 2018 in terms of volume and products traded

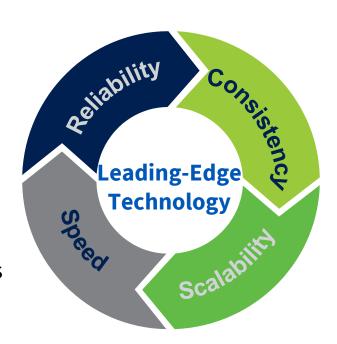


### Leading-Edge, State-of-the-Art Technology



### Migrating trading technology onto Bats' proven platform to gain scale and efficiency; Launched new index platform

- Working closely with customers to achieve seamless technology migrations
- CFE migration on track for February 25, 2018
- C2 Options migration planned for May 14, 2018
- Launched new index platform on January 22, 2018
- ❖ EDGX Options Complex Order Book launched in 3Q17 – expected to underpin each of our exchanges as we migrate to Bats technology



### **Providing Seamless Trading Solutions**



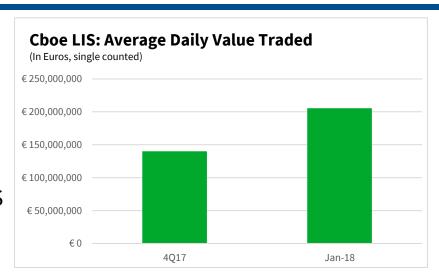
# We are committed to enhancing the customer's trading experience through regulatory advocacy, new technologies and education

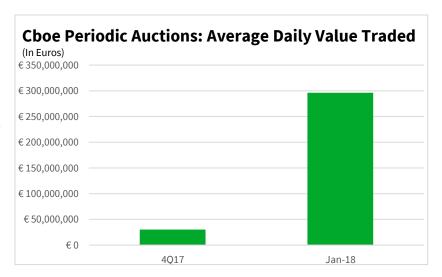
- Cboe Market Close (CMC) auction, a closing match process for non-Cboe securities, was approved by SEC on January 17, 2018
  - Subsequent appeals by competitors will delay the benefits of CMC for investors in U.S. equity markets
  - Plan to continue to work proactively with the SEC on a favorable resolution
- Cboe Global Markets' U.S. Equities recognized in Japan and Hong Kong as approved stock exchange - expected to clear the way for additional ETP transfers to Cboe

# Delivered Seamless Trading Solutions for a Post-MiFID II Landscape



- Providing value-added products and services, helping customers navigate MiFID II
- Choe LIS
  - Record volumes since MiFID II in effect
  - Block trading platform that leverages BIDS technology
  - Average trade size of €1 million
- Periodic Auctions book
  - Record volumes since MiFID II in effect
  - Lit order book operating periodic auctions throughout the day
  - Orders allocated on price/size basis and executed within EBBO
  - Not subject to the double volume caps





# Look Forward to Building on Strong Foundation Established in 2017



### Focused on executing on our growth initiatives

- Growing our proprietary products
- Expanding our global reach across asset classes
- Migrating our technology to Bats
- Achieving our acquisition synergy targets







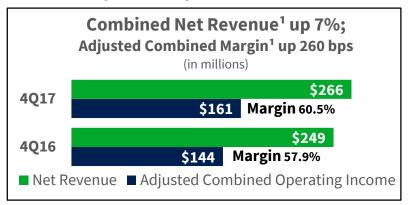
### Financial Overview and Guidance Brian Schell EVP, CFO and Treasurer

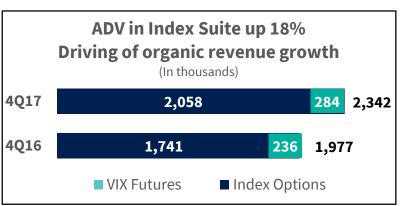


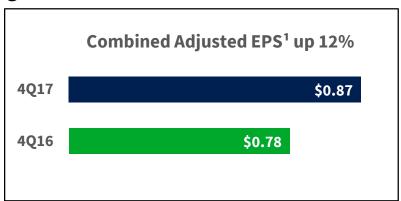
### Business Highlights – Key Growth Drivers

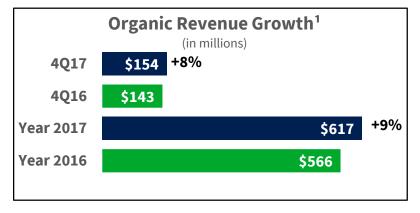


- Continued strength of proprietary index products
- Growth from non-transaction fees
- Expense discipline and overachievement of expense synergies
- Resulting in margin expansion and earnings growth









### 4Q17 Options Combined Net Revenue Up 3%



Revenue increase driven by higher transaction fees, offset somewhat by lower regulatory fees and higher royalty payments

#### 2018 initiatives include:

- Focus on growing proprietary products
- Ongoing education and business development
- Targeted incentive programs

Options Combined Statistics (\$ in millions, except RPC)	4Q17	4Q16	Change	2017	2016	Change
<b>Options Combined Net Revenue</b>	\$130.0	\$126.8 <sup>1</sup>	3%	\$522.3 <sup>1</sup>	\$500.1 <sup>1</sup>	4%
Key Operating Statistics:						
Total market share	40.5%	40.0%	0.5% pts	41.4%	38.7%	2.7% pts
Total ADV (in thousands)	7,029	6,477	9%	6,917	6,241	11%
Index options	2,058	1,741	18%	1,977	1,719	15%
Multiply-listed options	4,971	4,735	5%	4,940	4,522	9%
Total RPC	\$0.239	\$0.234	2%	\$0.238	\$0.244	-2%
Index options	\$0.682	\$0.712	-4%	\$0.687	\$0.710	-3%
Multiply-listed options	\$0.056	\$0.059	-5%	\$0.059	\$0.067	-12%

# 4Q17 Futures Net Revenue Up 31% - 2017 Marked 13th Consecutive Year of Record ADV for VIX Futures



- Revenue increase driven by transaction fees, reflecting higher ADV and RPC
- RPC increase primarily due to fee changes implemented in January 2017

#### 2018 initiatives include:

- Optimistic that CFE technology migration will improve trading experience
- Leverage global business development team to expand customer base
- Adding new products

Futures Statistics	4Q17	4Q16	Change	2017	2016	Change
Futures Net Revenue (in millions)	\$35.6	\$27.1	31%	\$139.5	\$109.4	28%
Key Operating Statistics:						
Total ADV (in thousands)	285	236	21%	295	239	23%
Total RPC	\$1.799	\$1.683	7%	\$1.779	\$1.681	6%

### U.S. Equities Combined Net Revenue Up 1%



- Persistent low volatility environment dampened trading volumes in 2017
- Growth in non-transaction revenue offset decline in net transaction fees
- Increase in market data revenue driven by both pricing changes and expanded usage

#### 2018 initiatives include:

- Continued growth in ETF listings and market share; proprietary market data
- Expect downward pressure on SIP market data revenue due to industry consolidation and off-exchange trading

U.S. Equities Combined Statistics	4Q17	4Q16	Change	2017	2016	Change
U.S. Equities Net Revenue (in millions)	\$69.0	\$68.4	1%	\$286.5	\$284.6	1%
Market data - SIP	25.8	25.8		104.1	106.7	-2%
Market data - Proprietary	7.1	5.1	39%	28.8	19.7	46%
Key Operating Statistics:						
Total market share	18.5%	20.0%	-1.5% pts	19.0%	20.6%	-1.6% pts
Market ADV (shares in billions)	6.4	7.1	-10%	6.5	7.3	-11%
ADV (matched shares in billions)	1.2	1.4	-14%	1.2	1.5	-20%
<b>Net revenue capture</b> (per 100 touched shares)	\$0.022	\$0.021	5%	\$0.023	\$0.021	10%

### European Equities Combined Net Revenue Up 17%



- ❖ Net revenue increase reflects growth in net transaction fees and non-transaction revenue and a benefit from foreign currency translation; Net revenue up 10% on local currency basis
- Ready day one with full suite of products and services to address the new requirements of MiFID II

#### 2018 Initiatives include:

Continue to look for additional revenue opportunities under MiFID II

European Equities Combined Statistics	4Q17	4Q16	Change	2017	2016	Change
European Equities Net Revenue (in millions)	\$18.8	\$16.1	17%	\$73.5	\$68.5	7%
Key Operating Statistics:						
Total market share	20.3%	21.9%	-1.6% pts	21.1%	22.9%	-1.8% pts
Market ADNV (Euros, in billions)	€43.8	€44.6	-2%	€44.7	€46.1	-3%
<b>Net capture</b> (per matched notional value, in basis points)	0.177	0.160	11%	0.168	0.152	11%

### Global FX Combined Net Revenue Up 18%



- Fourth quarter marked a high point for both market share and ADNV traded
- Growth driven by increased volume on our London matching engine and better fill rates

#### 2018 initiative include:

 Growing core FX Spot offering while diversifying revenue by adding new products and expanding market data offerings

Global FX Combined Statistics	4Q17	4Q16	Change	2017	2016	Change
Global FX Net Revenue (in millions)	\$12.0	\$10.2	18%	\$45.0	\$40.0	13%
Key Operating Statistics:						
Market share	14.9%	11.6%	3.3% pts	13.4%	12.0%	1.4% pts
Average Daily Notional Value (\$ in billions)	\$32.5	\$26.7	22%	\$29.4	\$26.9	9%
Net revenue (per one million dollars traded)	\$2.57	\$2.65	-3%	\$2.60	\$2.68	-3%

# Adjusted Combined Operating Expenses Flat for 4Q and Down 1% for Year



#### 4Q17 vs 4Q16:

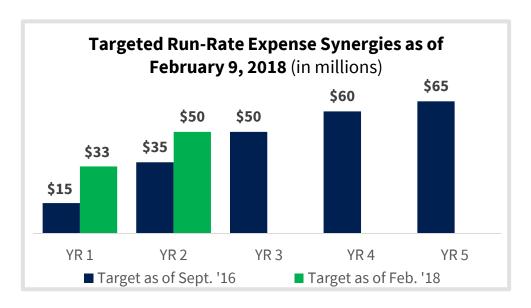
- Compensation and benefits up due to increase in incentive-based compensation
- Travel and promotional up due to increase in costs for travel and marketing and promotional events
- Professional fees declined due to realization of synergies

Adjusted Combined Operating Expenses <sup>1</sup> (in millions)	4Q17	4Q16	% Chg	2017	2016	% Chg
Compensation and benefits	\$53.2	\$52.4	2%	\$208.4	\$203.9	2%
Depreciation and amortization <sup>1</sup>	12.9	13.3	-3%	52.6	57.2	-8%
Technology support services	11.2	11.2		46.1	45.3	2%
Professional fees and outside services	17.1	17.5	-2%	68.4	73.3	7%
Travel and promotional	5.2	4.6	13%	17.8	16.4	9%
Facilities costs	2.6	2.5	4%	10.9	9.9	10%
Other expenses	2.8	3.1	-10%	9.9	11.6	-4%
Total <sup>1</sup>	\$105.0	\$104.6		\$415.3	\$417.6	-1%

### Realization of Year 1 Expense Synergies Running Ahead of Initial Projections



- Finished 2017 with run-rate expense synergies of \$33MM pre-tax
- Incremental year 1 run-rate expense synergies primarily a result of better utilization of technology resources
- Increasing 2018 targeted annualized run-rate expense synergies to \$50MM
- Projected expense synergies heavily weighted to Cboe Options technology migration
- Expense synergies realized of \$7.5MM pre-tax in 4Q17; \$24.6MM for 2017



### 2018 Full-Year Guidance



As of February 9, 2018 (\$ in millions)	2018 Full-Year Guidance	2017 Adjusted Combined Actual <sup>1</sup>
Adjusted combined operating expenses <sup>2</sup>	\$420 to \$428	\$415'
Depreciation and amortization (excluding amortization of acquired intangible assets)	\$53 to \$58	\$53
Capital expenditures	\$50 to \$55	\$43

- acquisition-related expenses of \$84.4 million
- accelerated stock-based compensation of \$9.1 million recognized in 1Q17
- amortization of acquired intangible assets of \$169 million for 2017 and \$157 for 2018

Adjustments included in the non-GAAP reconciliation

<sup>&</sup>lt;sup>1</sup>See "Non-GAAP Information" in the appendix for reconciliation.

<sup>&</sup>lt;sup>2</sup>Adjusted operating expenses for 2017 exclude:

### Tax Rate Guidance and Impact of Tax Reform



- U.S. Corporate Tax Reform Enacted in December:
  - Reduces statutory tax rate from 35% to 21%
  - Repeals a number of deductions relevant to Cboe, such as Section 199
  - Introduces incremental taxes on foreign earnings
  - Results in net reduction to our effective tax rate of 8 to 10 percentage points

For the years ended December 31, (\$ in millions)	2017 Tax Rate	2018 Guidance as of Feb. 9, 2018
Effective tax rate on GAAP earnings	(19.8)%	
Impact on tax rate of:		
<ul> <li>\$192MM re-measurement of deferred tax positions</li> </ul>	57.2%	
<ul> <li>Other non-GAAP adjustments</li> </ul>	(1.1)%	
Effective tax rate on adjusted earnings	36.3% <sup>1</sup>	26.5% to 28.5%

# Focused on Efficient Allocation of Capital to Create Long-Term Shareholder Value



#### Preserving balance sheet flexibility is a priority

- Invest in the growth of our business
- De-lever reduced debt by \$75 million in 4Q17; \$400 million in 2017
- Return capital through dividends
- Continue to evaluate share repurchases

<b>Debt Outstanding</b> (\$ in millions)	Dec. 31, 2017
3.650% Senior Notes (10Y; Due 2027)	\$ 650
1.950% Senior Notes (2Y; Due 2019)	300
Term Loan Facility	300
Total Debt (Gross)	\$ 1,250
Debt to EBITDA TTM <sup>1</sup>	1.8x
Adjusted Cash & Financial Investments <sup>1</sup>	\$120

# Delivering on Sources of Operating Leverage and Key Strategic Initiatives



Growth	of Core
<b>Proprietary</b>	<b>Products</b>

- Focused on growing proprietary products
- Generated strong organic growth

# Diversification and Stabilization of Revenue Stream

Grew base of non-transaction revenue

#### **Scale of Business Model**

- Disciplined expense management
- Provided higher operating margins

### **Synergies Realization**

Continued to realize expense synergies and accelerate run rate

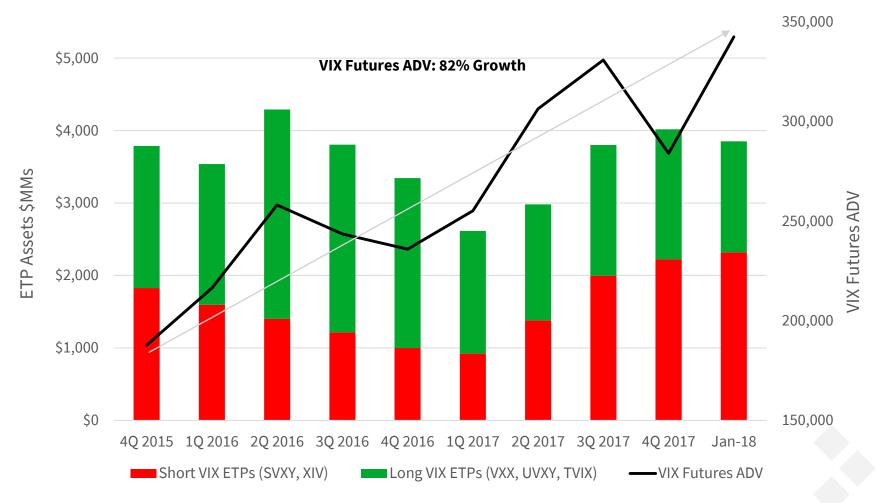
### **Capital Allocation**

- De-levered to enhance balance sheet flexibility
- Leverage ratio of 1.8x
- Returned capital through quarterly dividends

### VIX Futures Growth vs VIX ETP Assets



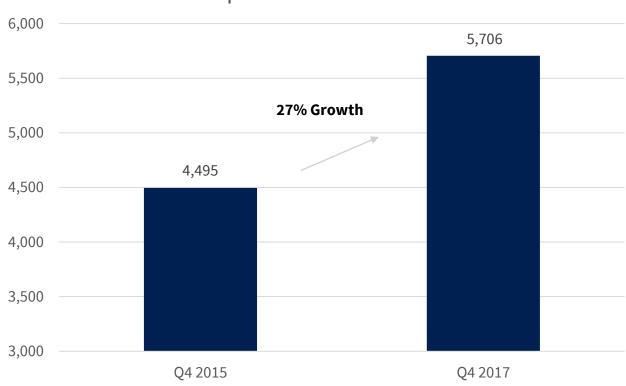
#### VIX Futures ADV vs. VIX ETP Assets



### Growth in CFE User Accounts



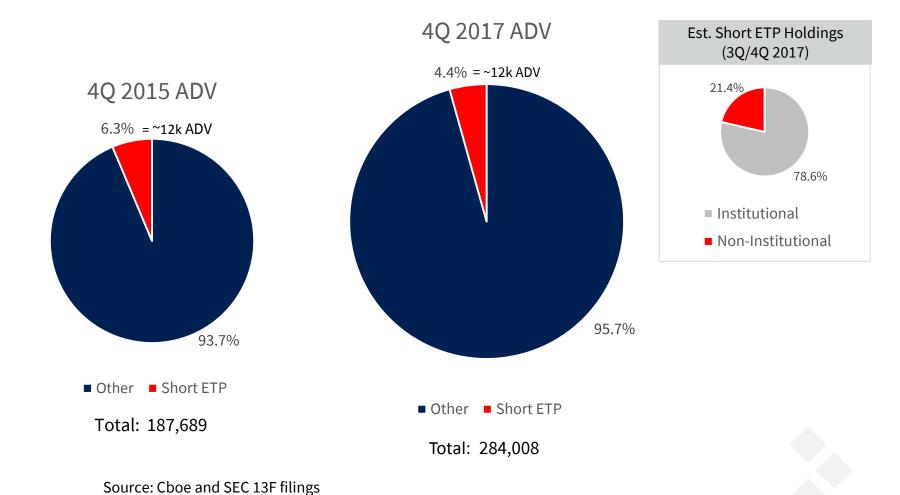




Source: Cboe

### Short ETPs Account for < 5% of VIX Futures ADV











# **Appendix Materials**



### 4Q17 and 2017 Financial Overview



Adjusted Combined Financial Results <sup>1</sup> (\$ in millions, except per share)	4Q17	4Q16	% Chg	2017	2016	% Chg
Net Revenue <sup>1,2</sup>	\$265.6	\$248.6	10%	\$1,067.5	\$1,002.8	6%
Adjusted Operating Expenses <sup>1</sup>	105.0	104.6	-2%	415.3	417.6	-1%
Adjusted Operating Income <sup>1</sup>	\$160.6	\$144.0	19%	\$652.2	\$585.2	11%
Adjusted Operating Margin <sup>1</sup>	60.5%	57.9%	440 bps	61.1%	58.4%	270 bps
Adjusted Net Income Allocated to Common Stockholders <sup>1</sup>	\$97.7	\$ 86.5	25%	\$397.7	\$337.6	18%
Adjusted Diluted EPS <sup>1</sup>	\$ 0.87	\$ 0.78	24%	\$3.57	\$3.00	19%
Adjusted EBITDA <sup>1</sup>	\$176.8	\$163.4	16%	\$708.5	\$650.2	9%
Adjusted EBITDA Margin <sup>1</sup>	66.6%	65.7%	350 bps	66.4%	64.8%	160 bps

<sup>&</sup>lt;sup>1</sup>Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

# Net Revenue Growth Supported by Both Transaction and Non-Transaction Revenue



#### 4Q17 net transaction fees up 11%; non-transaction revenue up 2%

Adjusted Combined Net Revenue <sup>1</sup> (in millions)	<b>4Q17</b>	4Q16	% Chg	2017	2016	% Chg
Net transaction fees	\$178.0	\$160.5	11%	\$705.4	\$653.7	8%
Access fees	29.2	29.6	-1%	118.7	119.3	-1%
Exchange services and other fees	19.5	17.9	10%	79.8	69.6	15%
Market data fees	47.2	44.2	7%	190.2	179.0	6%
Regulatory fees	6.9	9.7	-29%	32.0	38.8	-18%
Royalty fees	(22.3)	(20.2)	11%	(86.2)	(78.0)	11%
Other revenue	7.1	6.9	4%	27.6	20.4	35%
Total <sup>1</sup>	\$265.6	\$248.6	7%	\$1,067.5	\$1,002.8	6%

<sup>&</sup>lt;sup>1</sup>Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

### **Supplemental Segment Information**



<b>4Q17 Supplemental Net Revenue by Segment</b> (in millions)	Options	U.S. Equities	Futures	European Equities	Global FX	Total <sup>1</sup>
Net transaction fees <sup>2</sup>	\$105.9	\$17.4	\$32.4	\$11.6	\$10.7	\$178.0
Access fees	\$14.1	\$11.9	\$0.5	\$2.0	\$0.7	\$29.2
Exchange services and other fees	\$9.6	\$5.6	\$2.5	\$1.3	\$0.5	\$19.5
Market data fees	\$10.2	\$32.9	\$0.9	\$3.1	\$0.1	\$47.2

4Q16 Supplemental Combined Net Revenue by Segment (in millions)	Options	U.S. Equities	Futures	European Equities	Global FX	Total <sup>1,2</sup>
Net transaction fees <sup>2</sup>	\$95.7	\$19.7	\$25.0	\$10.9	\$9.2	\$160.5
Access fees	\$15.2	\$12.3	\$0.2	\$1.3	\$0.6	\$29.6
Exchange services and other fees	\$10.0	\$4.2	\$2.0	\$1.2	\$0.4	\$17.9
Market data fees	\$10.4	\$30.9	\$0.8	\$2.2		\$44.3

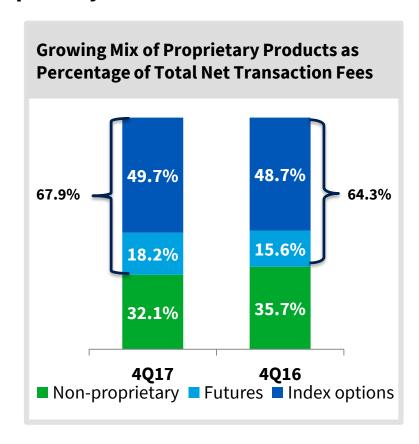
<sup>&</sup>lt;sup>1</sup>Totals may not foot due to rounding

<sup>&</sup>lt;sup>2</sup>A full reconciliation of our non-GAAP and combined results to our GAAP results is included in the following tables. See "Non-GAAP Information" in the accompanying financial tables.

### Revenue Growth



#### **Proprietary Products Drove Revenue Growth in 4Q17**

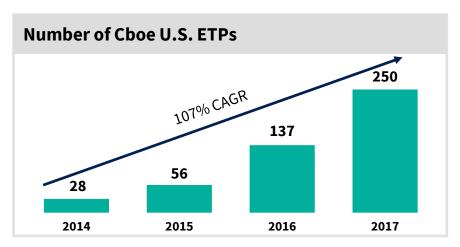


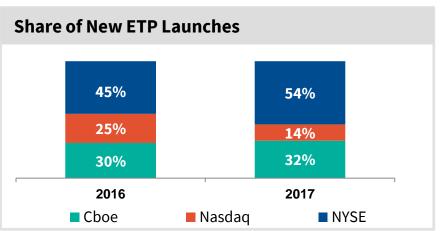
# U.S. Equities: Growing ETF Market Listings



# Growing ETF listings market share enhances benefits for issuing firms and provides deeper liquidity to market participants

- 2017 Highlights:
  - Increased ETP listings by 82%
  - Captured 32% of new listings and 62% of transfers
  - Executed 22% of trades
  - Grew market share to 12% of all U.S.
     FTPs from 7% in 2016
- Received approval of designated listing exchange in Japan and Hong Kong
- Optimistic about growth prospects







# Non-GAAP Information



### Non-GAAP Information

In addition to disclosing results determined in accordance with GAAP, Cboe Global Markets has disclosed certain non-GAAP measures of operating performance. These measures are not in accordance with, or a substitute for, GAAP, and may be different from or inconsistent with non-GAAP financial measures used by other companies. The non-GAAP measures provided in this press release include net transaction fees, adjusted operating expenses, adjusted operating income, organic net revenue, adjusted operating margin, adjusted net income allocated to common stockholders and adjusted diluted earnings per share, adjusted tax rate, EBITDA, EBITDA margin, adjusted EBITDA and adjusted EBITDA margin. The non-GAAP measures provided in this press release also include combined company financial measures that are discussed in further detail below under the sub-section "Combined Reconciliations."

Management believes that the non-GAAP financial measures presented in this press release, including adjusted net revenue, organic net revenue and adjusted operating expenses, provide additional and comparative information to assess trends in our core operations and a means to evaluate period-to-period comparisons. Non-GAAP financial measures disclosed by management are provided as additional information to investors in order to provide them with an alternative method for assessing our financial condition and operating results.

Organic net revenue: Is a non-GAAP financial measure that excludes or has otherwise been adjusted for the impact of our acquisition of Bats. Management believes the organic net revenue growth measure provides users with supplemental information regarding the company's ongoing revenue performance and trends by presenting revenue growth excluding the impact of the Bats acquisition.

Amortization expense of acquired intangible assets: We amortize intangible assets acquired in connection with various acquisitions. Amortization of intangible assets is inconsistent in amount and frequency and is significantly affected by the timing and size of our acquisitions. As such, if intangible asset amortization is included in performance measures, it is more difficult to assess the day-to-day operating performance of the businesses, the relative operating performance of the businesses between periods and the earnings power of the company. Therefore, we believe performance measures excluding intangible asset amortization expense provide investors with an additional basis for comparison across accounting periods.

Acquisition-related expenses: From time to time, we have pursued small bolt-on acquisitions and in 2017 completed a larger transformative acquisition, which have resulted in expenses which would not otherwise have been incurred in the normal course of the company's business operations. These expenses include integration costs, as well as legal, due diligence and other third party transaction costs. The frequency and the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. Accordingly, we exclude these costs for purposes of calculating non-GAAP measures which provide an additional analysis of Cboe's ongoing operating performance or comparisons in Cboe's performance between periods.

Other significant items: We have excluded certain other charges that are the result of other non-comparable events to measure operating performance. For 2017, other significant items primarily included interest and other borrowing costs incurred prior to the close of the Bats transaction and accelerated stock-based compensation that was incurred due to a change in the vesting schedule for equity award grants. In addition to disclosing results determined in accordance with GAAP, Cboe Holdings has disclosed certain non-GAAP measures of operating performance.

Organic Net Reven	ue Reconcilia	<u>tion</u>				
		ded	 Twelve Mor Decemb	 		
millions)		-	2016	2017	2016	
Reconciliation of Revenue Less Cost of Revenue to Organic Net Revenue						
Reconciliation of Revenue Less Cost of Revenue to Organic Net Revenue Revenue less cost of revenue (net revenue)	\$	265.6	\$	143.0	\$ 995.6	\$ 566.4
	\$	265.6	\$	143.0	\$ 995.6	\$ 566.4
Revenue less cost of revenue (net revenue)	\$	265.6 (111.5)	\$	143.0	\$ 995.6 (378.2)	\$ 566.4 —

### <u>Transaction Net Revenue - Three Months Ended December 31, 2017 and 2016</u>

		Three Months Ended December 31,							
	20	017	20	016					
Transaction fees	\$	431.3	\$	441.7					
Liquidity payments		(243.6)		(271.3)					
Routing and clearing		(9.7)		(9.9)					
Net transaction fees	\$	178.0	\$	160.5					

### Options Net Revenue - Three Months Ended December 31, 2016

(in millions)	Cb	oe Historical	Bats Historical	Combined (Per Table 2)
Total net revenue	\$	115.9	\$ 10.9	\$ 126.8

Note: There are no reconciliations applicable for the other segments.

Table 1								
Fourth Quarter Results					4Q17	4	Q16 Adjusted	
(\$ in millions except per share)	4Q17	4Q16	Change	1	Adjusted <sup>1</sup>		Combined <sup>1</sup>	Change
Total Revenue Less Cost of Revenue	\$ 265.6	\$ 143.0	86%	\$	265.6	\$	248.6	7%
Total Operating Expenses	\$ 156.9	\$ 68.1	130%	\$	105.0	\$	104.6	-1%
Operating Income	\$ 108.7	\$ 74.9	45%	\$	160.6	\$	144.0	12%
Operating Margin %	40.9 %	52.4 %	-1,150 bps		60.5 %	)	57.9 %	260 bps
Net Income Allocated to Common Stockholders	\$ 254.6	\$ 44.7	470%	\$	97.7	\$	86.5	13%
Diluted EPS	\$ 2.26	\$ 0.55	311%	\$	0.87	\$	0.78	12%
EBITDA	\$ 167.9	\$ 90.0	87%	\$	176.8	\$	163.4	8%
EBITDA Margin %	63.2 %	62.9 %	30 bps		66.6 %	)	65.7 %	90 bps

Table 2								
Year-to-date Results					2017	2	2016 Adjusted	
(\$ in millions except per share)	2017		2016 <sup>1</sup>	Change	Adjusted 1		Combined 1	Change
Total Net Revenue Less Cost of Revenue	\$ 995.6	\$	566.4	76%	\$ 1,067.5	\$	1,002.8	6%
Total Operating Expenses	\$ 623.7	\$	268.2	133%	\$ 415.3	\$	417.6	-1%
Operating Income	\$ 371.9	\$	298.2	25%	\$ 652.2	\$	585.2	11%
Operating Margin %	37.4 %	6	52.6 %	-1,520 bps	61.1	6	58.4 %	270 bps
Net Income Allocated to Common Stockholders	\$ 396.7	\$	184.9	115%	\$ 271.1	\$	337.6	-20%
Diluted EPS	\$ 3.75	\$	2.27	65%	\$ 3.47	\$	3.00	16%
EBITDA	\$ 564.0	\$	355.9	58%	\$ 708.5	\$	658.3	8%
EBITDA Margin %	56.6 %	6	62.8 %	-620 bps	66.4	6	65.6 %	80 bps

<sup>&</sup>lt;sup>1</sup>A full reconciliation of our non-GAAP and combined results to our GAAP results are available in this section.

Table 3						
Revenue Less Cost of Revenue by Business Segment (in millions)	4Q17	4Q16	Change	Co	mbined	Change
Options	\$ 130.0	\$ 115.9	12%	\$	126.8	3%
U.S. Equities	69.0	-	*		68.4	1%
Futures	35.6	27.1	31%		27.1	31%
European Equities	18.8	-	*		16.1	17%
Global FX	12.0	-	*		10.2	18%
Corporate	0.2	-	*		-	*
Total	\$ 265.6	\$ 143.0	86%	\$	248.6	7%

Table 4					
Revenue Less Cost of Revenue by Business Segment (in millions)	2017	2016	2017 Adjusted Combined	2016 Adjusted Combined	Change
Options	\$ 516.3	\$ 457.0 \$		\$ 500.3	4%
U.S. Equities	239.1	-	286.5	284.6	1%
Futures	139.5	109.4	139.5	109.4	28%
European Equities	61.8	-	73.5	68.5	7%
Global FX	38.2	-	45.0	40.0	13%
Corporate	0.7	-	0.7	-	*
Total	\$ 995.6	\$ 566.4 \$	1,067.5	\$ 1,002.8	6%

Table 5		Three Month Decemb	Twelve Months Ende December 31				
n millions)		2017	2016		2017		2016
Reconciliation of Revenue Less Cost of Revenue to Organ Revenue less cost of revenue (net revenue)	nic Net Revenue	265.6 \$	143.0	\$	995.6	\$	566.4
Recent acquisitions:		·					
Bats revenue less cost of revenue		(111.5)	-		(378.2)		-
Organic net revenue	\$	154.1 \$	143.0	\$	617.4	\$	566.4

# Non-GAAP Information (See slide 43 for footnotes)

		Three Mon	ths En	Twelve Months Ended				
Table 6		Deceml	oer 31,			Deceml	oer 31,	
(in millions, except per share amounts)		2017		2016		2017		2016
Reconciliation of Net Income Allocated to Common Stockholders to Non-GAAP (As shown on Table 1)								
Net income allocated to common stockholders	\$	254.6	\$	44.7	\$	396.7	\$	184.9
Non-GAAP adjustments								
Compensation and benefits (1)		_		0.2		9.1		1.5
Acquisition-related expenses (2)		9.0		4.2		84.4		13.5
Amortization of acquired intangible assets (3)		43.0		0.3		142.6		1.2
Assessment of computer-based lease taxes for prior period use				_		_		0.3
Change in contingent consideration		(0.1)		_		1.0		_
Debt issuance costs		_		_		5.2		_
Provision for uncollectable convertible notes receivable		_		_		3.8		_
Change in redemption value of noncontrolling interests		0.3		0.5		1.1		1.1
Interest and other borrowing costs (4)		_		5.5		_		5.7
Less: Legal settlement (5)		_		_		_		(5.5)
Less: Gain on settlement of contingent consideration								(1.4)
Total Non-GAAP adjustments		52.2		10.7		247.2		16.4
Income tax expense related to the items above		(19.2)		(3.9)		(92.3)		(5.7)
Re-measurement of deferred tax assets and liabilities as a result of corporate rate increase in Illinois		_		_		7.4		_
Effect of tax reform law		(191.5)		_		(191.5)		_
Uncertain tax position related to research and development credits		_		_		_		1.7
Net income allocated to participating securities - effect on reconciling items		1.6				0.5		
Adjusted net income allocated to common stockholders	\$	97.7	\$	51.5	\$	368.0	\$	197.3
Describing of Diluted FDC to Non-CAAD								
Reconciliation of Diluted EPS to Non-GAAP		2.20		0.55		2.00		2.27
Diluted earnings per common share	\$	2.26	\$	0.55	\$	3.69	\$	2.27
Per share impact of non-GAAP adjustments noted above	-	(1.39)	-	0.08	<u> </u>	(0.27)	<u> </u>	0.15
Adjusted diluted earnings per common share	\$	0.87	\$	0.63	\$	3.42	\$	2.42
Reconciliation of Operating Margin to Non-GAAP								
Revenue less cost of revenue	\$	265.6	\$	143.0	\$	995.6	\$	566.4
Non-GAAP adjustments noted above	,	_		_	•	_	•	_
Adjusted revenue less cost of revenue	Ś	265.6	\$	143.0	\$	995.6	\$	566.4
Operating expenses	\$	156.9	\$	68.1	\$	623.7	\$	268.2
Non-GAAP adjustments noted above	,	51.9	*	4.7	•	237.1	•	16.5
Adjusted operating expenses	\$	105.0	\$	63.4	\$	386.6	\$	251.7
Operating income	\$	108.7	\$	74.9	\$	371.9	\$	298.2
Non-GAAP adjustments noted above	Ý	51.9	Ų	4.7	J	237.1	J	16.5
Adjusted operating income	\$	160.6	Ś	79.6	Ś	609.0	Ś	314.7
Adjusted operating margin (6)	<del>y</del>	60.5 %	4	55.7 %	<del>y</del>	61.2 %	4	55.6 %
Adjusted operating margin (o)		00.5 70		33.1 70		01.2 70		33.0 70
Reconciliation of Income Tax Rate to Non-GAAP								
Income before income taxes		104.1		74.9		334.4		306.6
Non-GAAP adjustments noted above		52.2		10.7		247.2		16.4
Adjusted income before income taxes	\$	156.3	\$	85.6	\$	581.6	\$	323.0
	<u> </u>	(450.0)		20.0		(65.5)		120.0
Income tax (benefit) expense		(153.0)		29.8		(66.2)		120.9
Non-GAAP adjustments noted above		210.7		3.9		276.4		4.0
Adjusted income tax (benefit) expense	\$	57.7	\$	33.7	\$	210.2	\$	124.9
Adjusted income tax rate		37.0 %		39.4 %		36.3 %		38.7 %

### **EBITDA Reconciliations**

EBITDA (earnings before interest, income taxes, depreciation and amortization) is a widely used non-GAAP financial measure of operating performance. EBITDA margin represents EBITDA divided by revenues less cost of revenues (net revenue). It is presented as supplemental information that the company believes is useful to investors to evaluate its results because it excludes certain items that are not directly related to the company's core operating performance. EBITDA is calculated by adding back to net income interest expense, income tax expense, depreciation and amortization. EBITDA should not be considered as substitutes either for net income, as an indicator of the company's operating performance, or for cash flow, as a measure of the company's liquidity. In addition, because EBITDA may not be calculated identically by all companies, the presentation here may not be comparable to other similarly titled measures of other companies.

EBITDA margin represents EBITDA divided by net revenue.

Table 7		Dec	months ende cember 31,				welve m Dece		
(in millions)		2017		2	2016		2017		2016
Reconciliation of Net Income Allocated to Common Stockholders to EBITDA and Adjusted EBITDA (Per									
Table 1)									
Net income allocated to common stockholders	\$	254.6	3	\$	44.7		\$ 396.7	\$	184.9
Interest		10.4	ļ		5.5		41.3		5.7
Income tax provision		(153.0	))		29.8		(66.2)		120.9
Depreciation and amortization		55.9	)		10.0		192.2		44.4
EBITDA	\$	167.9	)	\$	90.0		\$ 564.0	\$	355.9
EBITDA Margin¹		63.2	2 %		62.9	%	56.6	%	62.8 %
Non-GAAP adjustments not included in above line items									
Compensation and benefits (accelerated stock-based compensation)		-			0.2		9.1		1.5
Acquisition-related expenses		9.0	)		4.2		84.4		13.5
Impairment of convertible notes receivable		-			-		3.8		-
Less: Legal settlement		-			-		-		(5.5)
Gain on settlement of contingent consideration		-			-		-		(1.4)
Other		(0.1	,		-		1.0		0.3
Adjusted EBITDA	\$	176.8		\$	94.4		\$ 662.3	\$	364.3
Adjusted EBITDA Margin¹		66.6	8 %		66.0	%	66.5	%	64.3 %
(in millions)									
Reconciliation of Combined Net Income Allocated to Common Stockholders to EBITDA and Adjusted		2017 <sup>2</sup>		-	0046		2017		2016
EBITDA (Per Table 1)	4	2017			2016		2017		2016
Combined revenues less cost of revenues				\$	248.6		\$ 1,067.5	\$	1,002.8
Combined net income allocated to common stockholders					60.3		267.2		230.8
Interest					12.1		45.4		44.1
Income tax provision					35.3		159.2		147.3
Depreciation and amortization					55.7		222.4		226.8
Combined EBITDA				\$	163.4		\$ 694.2	\$	649.0
Combined EBITDA Margin¹					65.7	%	65.0	%	64.7 %
Compensation and benefits (accelerated stock-based compensation)					0.2		9.1		0.9
Impairment of convertible notes receivable					-		3.8		=
Less Legal settlement					-		-		(5.5)
Gain on settlement of contingent consideration					-		-		(1.4)
Other					(0.2)	)	1.4		7.2
Adjusted Combined EBITDA				\$	163.4		\$ 708.5	\$	650.2
Adjusted Combined EBITDA Margin¹					65.7	%	66.4	%	64.8 %

<sup>&</sup>lt;sup>1</sup>EBITDA margin represents the respective EBITDA divided by the respective net revenue as shown in the non-GAAP reconciliations provided. <sup>2</sup>Combined results for the three months ended December 31, 2017 are the same as the financial results reported as the company was operating as a combined entity for the entire quarter.

#### **Table 6 Footnotes:**

- (1) For the fourth quarter of 2016, this amount includes \$0.2 million for accelerated stock-based compensation expenses. For the year ended December 31, 2017, this amount includes \$9.1 million for accelerated stock-based compensation expense. For the year ended December 31, 2016, this amount includes \$0.9 million for accelerated stock-based compensation expenses and \$0.6 million in additional bonus accrual resulting from legal settlement income.
- (2) This amount includes professional fees and outside services, severance, and other costs related to the company's acquisition of Bats.
- (3) This amount represents the amortization of acquired intangible assets for Bats.
- (4) This amount represents interest and other borrowing costs incurred prior to the close of the Bats acquisition.
- (5) Settlement received for attorney fees and expenses relating to a litigation matter, reported in investment and other income.
- (6) Adjusted operating margin represents adjusted operating income divided by adjusted revenue less cost of revenue.

#### **Table 8 Footnotes:**

<sup>1</sup>Bats historical activity for 2016 reflects activity for the period beginning October 1, 2016 through December 31, 2016.

- (1) Reflects adjustments to reduce Bats historical amortization of acquired intangibles by \$6.7 million and increase amortization of acquired intangibles by \$42.0 million.
- (2) Reflects adjustments to remove acquisition costs as if the acquisition had occurred on January 1, 2016.
- (3) Reflects net other income of \$1.2 million resulting from interest expense on Cboe debt less Bats historical interest expense.
- (4) Reflects adjustment of amortization of purchased intangibles totaling \$42.4 million.
- (5) Operating margin represents operating income divided by revenue less cost of revenue.
- (6) Total non-transaction revenue represents the sum of access fees, exchange services and other fees, market data fees, regulatory fees (net of Section 31 fees) and other revenue
- (7) The percentage of non-transaction revenue represents total non-transaction revenue divided by revenue less cost of revenue

#### **Table 9 Footnotes:**

<sup>1</sup>Bats historical activity for 2016 reflects activity for the period beginning January 1, 2016 through December 31, 2016.

- (1) Reflects adjustments to reduce Bats historical amortization of acquired intangibles by \$24.7 million and increase amortization of acquired intangibles by \$168.2 million.
- (2) Reflects adjustments to remove acquisition costs as if the acquisition had occurred on January 1, 2016.
- (3) Reflects net other income of \$16.5 million resulting from interest expense on Cboe debt less Bats historical interest expense.
- (4) Reflects adjustment of amortization of purchased intangibles totaling \$169.6 million.
- (5) Operating margin represents operating income divided by revenue less cost of revenue.
- (6) Total non-transaction revenue represents the sum of access fees, exchange services and other fees, market data fees, regulatory fees (net of Section 31 fees) and other revenue
- (7) The percentage of non-transaction revenue represents total non-transaction revenue divided by revenue less cost of revenue.

#### Table 10 Footnotes:

<sup>1</sup>Bats historical activity for 2017 reflects activity for the period beginning January 1, 2017 through February 28, 2017.

- (1) Reflects adjustments to reduce Bats historical amortization of acquired intangibles by \$4.5 million and increase amortization of acquired intangibles by \$28.0 million.
- (2) Reflects adjustments to remove acquisition costs as if the acquisition had occurred on January 1, 2016.
- (3) Reflects net other income of \$13.6 million resulting from Bats historical interest expense and loss of extinguishment of debt.
- (4) Reflects adjustment of amortization of purchased intangibles totaling \$169.8 million.
- (5) Operating margin represents operating income divided by revenue less cost of revenue.
- (6) Total non-transaction revenue represents the sum of access fees, exchange services and other fees, market data fees, regulatory fees (net of Section 31 fees) and other revenue
- (7) The percentage of non-transaction revenue represents total non-transaction revenue divided by revenue less cost of revenue.

# Non-GAAP Information (see slide 43 for footnotes)

	c	boe	ı	3ats	Co	mbined			No	n-GAAP	Adj	usted
(in millions, except per share amounts)	His	torical	His	torical <sup>1</sup>	Adju	stments	Cor	nbined	Adju	ıstments	Con	nbined
Revenues	\$	190.8	\$	450.3			\$	641.1			\$	641.1
Cost of revenues		47.8		344.7				392.5				392.5
Net revenue:												
Net transaction fees		115.2		45.3				160.5				160.5
Access fees		13.0		16.6				29.6				29.6
Exchange services and other fees		12.1		5.8				17.9				17.9
Market data fees		8.7		35.5				44.2				44.2
Regulatory fees		9.1		0.6				9.7				9.7
Royalty fees		(20.2)		-				(20.2)				(20.2)
Other		5.1		1.8				6.9				6.9
Revenues less cost of revenues	\$	143.0	\$	105.6			\$	248.6			\$	248.6
Operating expenses:												
Compensation and benefits		29.3		23.3				52.6		(0.2)		52.4
Depreciation and amortization		10.0		10.4		35.3		55.7		(42.4)		13.3
Technology support services		5.5		5.7				11.2				11.2
Professional fees and outside services		12.9		7.1		(2.1)		17.9		(0.4)		17.5
Travel and promotional expenses		3.4		1.2				4.6				4.6
Facilities costs		1.5		1.0				2.5				2.5
Acquisition related costs		4.2		-		(4.2)		-				-
Change in contingent consideration		-		0.8				0.8		(8.0)		-
Other expenses		1.3		1.8				3.1				3.1
Total operating expenses	\$	68.1	\$	51.3	\$	29.0	\$	148.4	\$	(43.8)	\$	104.6
Operating income		74.9		54.3		(29.0)		100.2		43.8		144.0
Operating margin		52.4	%	51.4 %	6			40.3 %				57.9
Non-operating (expense)/income		0.6		(5.6)		1.2		(3.8)		(1.4)		(5.2)
ncome (loss) before income tax provision		75.5		48.7		(27.8)		96.4		42.4		138.8
ncome tax provision		29.8		16.4		(10.9)		35.3		16.7		52.0
Net income allocated to common stockholders	\$	44.9	\$	32.3	\$	(16.9)	\$	60.3	\$	26.2	\$	86.5
Diluted EPS	\$	0.55	\$	0.34			\$	0.49	\$	-	\$	0.78
Fotal non-transaction revenue	\$	48.0	\$	60.3	\$	-	\$	108.3	\$	-	\$	108.3
Total non-transaction revenue as a percent of evenues less cost of revenues		33.6	%	57.1 %	6			43.6 %				43.6

# Non-GAAP Information (see footnotes on slide 43)

(in millions, except per share amounts)		Cboe ported	His	Bats storical <sup>1</sup>		ombined justments	mbined r Table 2		n-GAAP	-	sted Pro Combined
Revenues	\$	703.1		1,868.9	\$	-	 2,572.0	\$	-	\$	2,572.0
Cost of revenues	Ť	136.7		1,432.5		-	 1,569.2		_		1,569.2
Net revenue:				1, 10210			.,				.,
Net transaction fees		462.4		191.3		_	653.7		-		653.7
Access fees		52.4		66.9		-	119.3		-		119.3
Exchange services and other fees		46.3		23.3		-	69.6		-		69.6
Market data fees		33.2		145.8		-	179.0		-		179.0
Regulatory fees		36.5		2.3		-	38.8		-		38.8
Royalty fees		(78.0)		-		-	(78.0)		-		(78.0)
Other		13.6		6.8		-	20.4		-		20.4
Revenue less cost of revenue	\$	566.4	\$	436.4	\$	-	\$ 1,002.8	\$	-	\$	1,002.8
Operating expenses:											
Compensation and benefits	\$	113.2	\$	92.0	\$	-	\$ 205.2	\$	(1.3)	\$	203.9
Depreciation and amortization		44.4		41.6		140.8	226.8		(169.6)		57.2
Technology support services		22.5		23.1		-	45.6		,		45.3
Professional fees and outside services		53.9		30.5		(5.5)	78.9		(5.6)		73.3
Travel and promotional expenses		11.0		5.4		-	16.4				16.4
Facilities costs		5.7		4.2		-	9.9				9.9
Acquisition related costs		12.8		-		(12.8)	-				-
Change in contingent consideration		-		3.0		` -	3.0		(3.0)		-
Other expenses		4.7		6.0		-	10.7				11.6
Total operating expenses		268.2		205.8		122.5	596.5		328.3		417.6
Operating income	\$	298.2	\$	230.6	\$	(122.5)	\$ 406.3	\$	(328.3)	\$	585.2
Operating margin		52.6	%	52.8	%	-	40.5	%			58.4
Non-operating (expense)/income		9.0		(52.9)		16.5	(27.4)				(35.5)
Income (loss) before income tax provision		307.2		177.7		(106.0)	378.9		(328.3)		549.7
Income tax provision		120.9		69.7		(43.3)	147.3		65.4		212.7
Net income allocated to common stockholders	\$	184.9	\$	108.0	\$	(62.7)	\$ 230.8	\$	106.8	\$	337.6
Diluted EPS							\$ 2.06			\$	3.00
Total non-transaction revenue	\$	182.0	\$	245.1						\$	427.1
Total non-transaction revenue as a percent of revenue less cost of revenue		32.1	%	56.2	%						42.6

# Non-GAAP Information (see slide 43 for footnotes)

	Cboe			Bats		Combined			Non-GAAP		A	djusted
(in millions, except per share amounts)	His	storical	His	torical¹	Adju	stments	Com	bined	Adju	ıstments	Co	mbined
Revenues	\$ 2	2,229.1	\$	272.9			\$ 2	2,502.0			\$	2,502.0
Cost of revenues		1,233.5		201.0			1	,434.5				1,434.5
Net revenue:												
Net transaction fees		677.6		27.8				705.4				705.4
Access fees		106.8		11.9				118.7				118.7
Exchange services and other fees		74.8		5.0				79.8				79.8
Market data fees		164.5		25.7				190.2				190.2
Regulatory fees		31.5		0.5				32.0				32.0
Royalty fees		(86.2)		-				(86.2)				(86.2)
Other		26.6		1.0				27.6				27.6
Revenues less cost of revenues	\$	995.6	\$	71.9			\$ 1	,067.5			\$	1,067.5
Operating expenses:												
Compensation and benefits		201.4		16.1				217.5		(9.1)		208.4
Depreciation and amortization		192.2		6.7		23.5		222.4		(169.8)		52.6
Technology support services		42.1		4.0				46.1				46.1
Professional fees and outside services		66.0		27.2		(23.4)		69.8				69.8
Travel and promotional expenses		17.2		0.6				17.8				17.8
Facilities costs		10.3		0.6				10.9				10.9
Acquisition related costs		84.4		-		(84.4)		-				-
Change in contingent consideration		1.0		0.2				1.2		(1.2)		-
Other expenses		9.1		0.8				9.9		(0.2)		9.7
Total operating expenses	\$	623.7	\$	56.2	\$	(84.3)	\$	595.6	\$	(180.3)	\$	415.3
Operating income		371.9		15.7		84.3		471.9		180.3		652.2
Operating margin		37.4	%	21.8	<b>%</b>			44.2 %	6	-		61.1
Non-operating (expense)/income		(37.5)		(17.7)		(2.0) (2	2]	(41.6)		3.8		(37.8)
ncome (loss) before income tax provision		334.4		(2.0)		-		430.3		184.1		614.4
Income tax provision		(66.2)		(1.8)		-		159.2		53.6		212.8
Net income allocated to common stockholders	\$	396.7	\$	(0.2)			\$	267.2	\$	130.5	\$	397.7
Diluted EPS	\$	3.52					\$	2.37			\$	3.57
Total non-transaction revenue	\$	404.2	\$	44.1			\$	448.3			\$	448.3
Total non-transaction revenue as a percent of revenues less cost of revenues		40.6	%	61.3	%			42.0 %	%			42.0

Adjusted Combined Debt to EBITDA - Trailing Twelve Months (TTM) - Table 11 <sup>1</sup>							
(\$ in millions)		1Q17	2Q17	3Q17	4Q17	LTM Ended 12/31/17	
Combined net income allocated to common stockholders	\$	73.0 \$	67.3 \$	59.7 \$	254.6 \$	454.6	
Interest		12.0	12.5	10.5	10.4	45.4	
Income tax provision		22.0	38.1	45.6	(153.0)	(47.3)	
Depreciation and amortization		55.3	55.8	55.4	55.9	222.4	
Combined EBITDA	\$	162.3 \$	173.7 \$	171.2 \$	167.9 \$	675.1	
Non-GAAP adjustments not included in above line items:							
Acquisition-related expenses		-	4.7	5.5	9.0	19.2	
Other		9.7	0.5	4.2	(0.1)	14.3	
Adjusted combined EBITDA	\$	172.0 \$	178.9 \$	180.9 \$	176.8 \$	708.6	
Debt at end of period					\$	1,250.0	
Debt to EBITDA						1.8x	

<sup>&</sup>lt;sup>1</sup>A full reconciliation of our non-GAAP and combined results to our GAAP results are available in this section.

Adjusted cash is a non-GAAP measure and represents cash and cash equivalents plus financial investments minus cash collected for Section 31 fees, which will need to be remitted in the near term. We have presented adjusted cash because we consider it an important supplemental measure of our liquidity and believe that it is frequently used by analysts, investors and other interested parties in the evaluation of companies.

Adjusted Cash as of December 31, 2017 - Table 12 (in millions)	
Cash and cash equivalents	\$ 143.5
Financial investments	47.3
Cash collected for Section 31 fees	(70.6)
Adjusted cash	\$ 120.2



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