

Second Quarter 2016 Earnings Presentation

July 29, 2016



Agenda

Strategic Review

Edward Tilly

Chief Executive Officer

Financial Review

Alan Dean

*Executive Vice President,
CFO and Treasurer*

Questions and Answers

Edward Tilly

Alan Dean

Edward Provost

President and Chief Operating Officer

John Deters

*Chief Strategy Officer and
Head of Corporate Initiatives*

Forward-Looking Statements

This presentation may contain forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are those statements that reflect our expectations, assumptions or projections about the future and involve a number of risks and uncertainties. These statements are only predictions based on our current expectations and projections about future events. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. There are important factors that could cause actual results, level of activity, performance or achievements to differ materially from that expressed or implied by the forward-looking statements, including: 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, including our obligations under agreements with regulatory agencies; increasing price competition in our industry; decreases in trading volumes 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 third party service providers; our index providers' ability 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 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; the accuracy of our estimates and expectations; our ability to maintain access fee revenues; our ability to meet our compliance obligations, including managing potential conflicts between our regulatory responsibilities and our for-profit status; the ability of our compliance and risk management methods to effectively monitor and manage our risks; our ability to attract and retain skilled management and other personnel; and our ability to manage our growth and strategic acquisitions or alliances effectively.

More detailed information about factors that may affect our performance may be found in our filings with the U.S. Securities and Exchange Commission, including in our Annual Report on Form 10-K for the year ended December 31, 2015 and other filings made from time to time with the SEC.

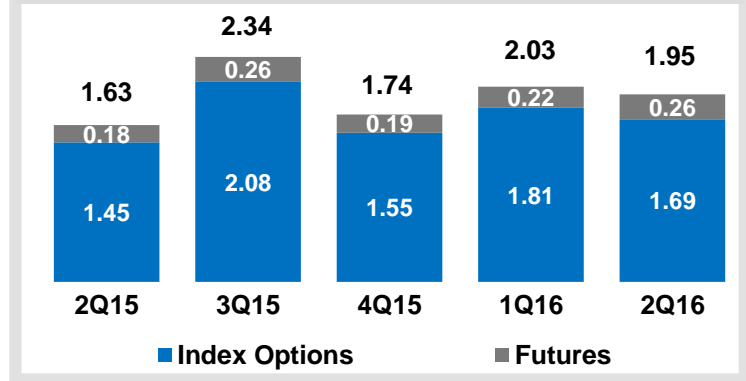
➤ **Strategic Review**
Edward Tilly
CEO

Strong Second-Quarter Results Fueled by Proprietary Index Products

Ongoing growth of trading in our proprietary index product, led by record trading in VIX futures

- Revenue up 10% in 2Q16 vs 2Q15; Adjusted diluted EPS up 11%
- 2Q16 ADV for index complex, up 20% vs 2Q15
- ADV for multiply-listed options traded industrywide increased 2% in 2Q16 vs 2Q15

Total ADV for Index Complex:
Index Options and VIX Futures
(in millions)



Translating our Mission and Strategic Initiatives into Long-Term Shareholder Value

Our mission is to be the leader in providing innovative products that facilitate and enhance trading in a global marketplace

Strategic Initiatives

- Develop unique products
- Form strategic alliances that leverage and complement our core business
- Expand our customer base
- Define and lead the options and volatility space globally

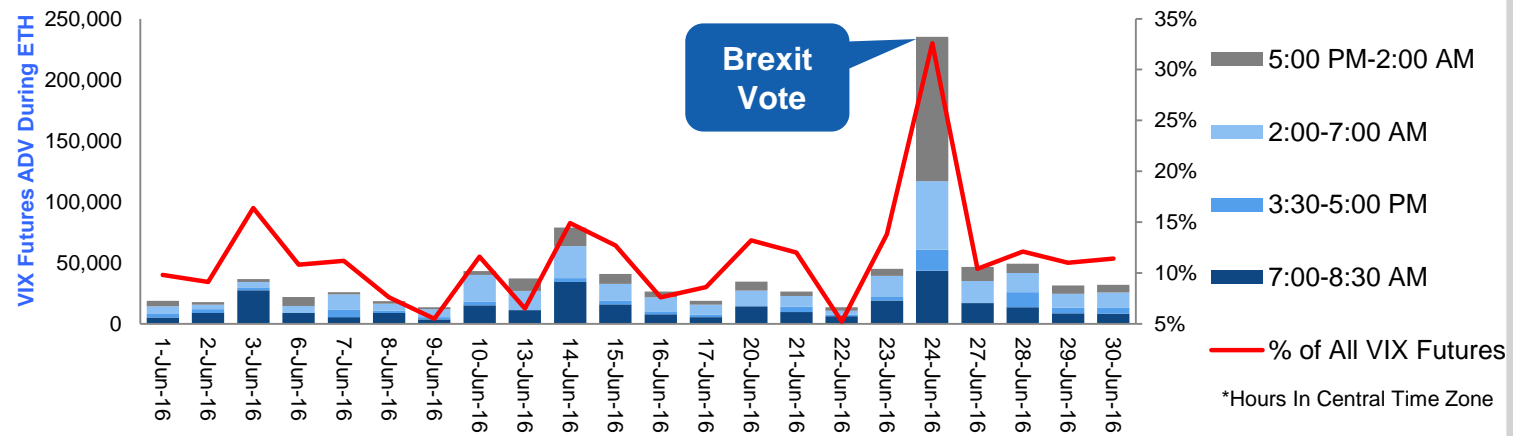
Broadening Access to Proprietary Products

More than 235,00 VIX futures contracts traded during non-U.S. hours on June 24th in reaction to the Brexit referendum

➤ **New single-day record for trading in our overnight session**

- Surpassed previous single-day record by 67%

**VIX Futures ADV During Non-U.S. Trading Hours (ETH) for June 2016
By Time Period***

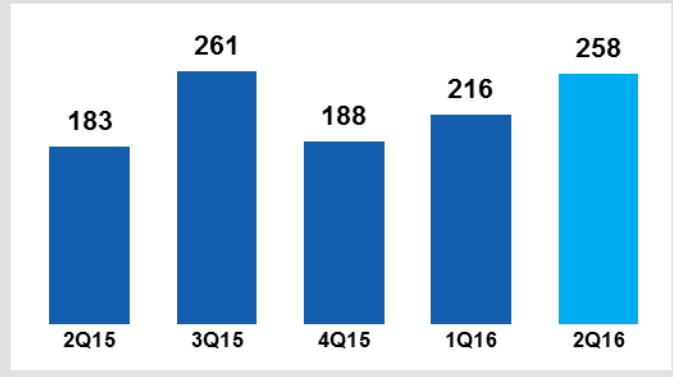


Near Record ADV in VIX Futures for 2Q16

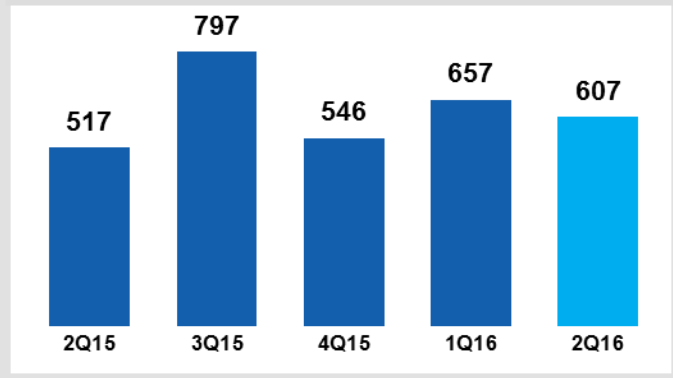
CBOE Volatility Index (VIX Index) is considered the world's barometer of equity market volatility

- **VIX futures ADV up 41% in 2Q16 vs 2Q15; up 19% vs 1Q16**
- **VIX options ADV up 17% in 2Q16 vs 2Q15; down 8% vs 1Q16**
- **Began overnight dissemination of VIX Index on April 15**
 - Offers market participants the ability to view volatility when news breaks overnight

VIX Futures ADV
(in thousands)



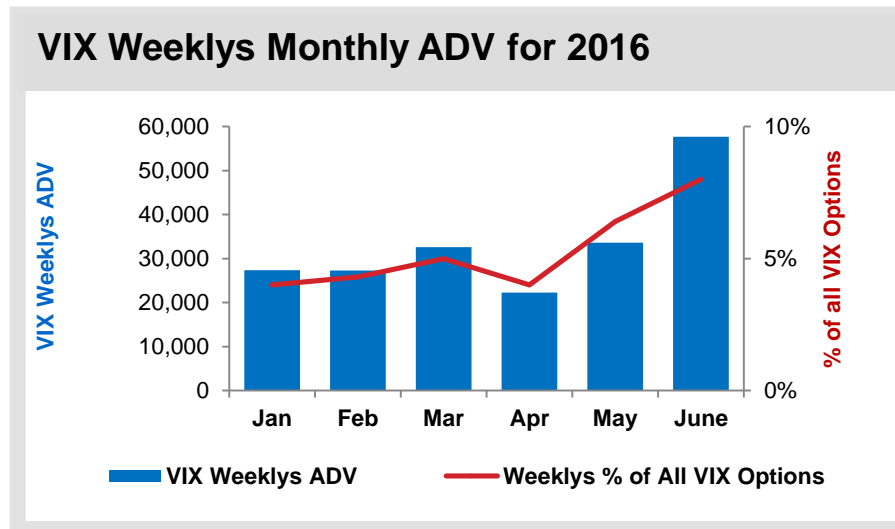
VIX Options ADV
(in thousands)



Extending Access to Our Markets

Broadened Access to VIX and SPX Options Trading and VIX Index Information

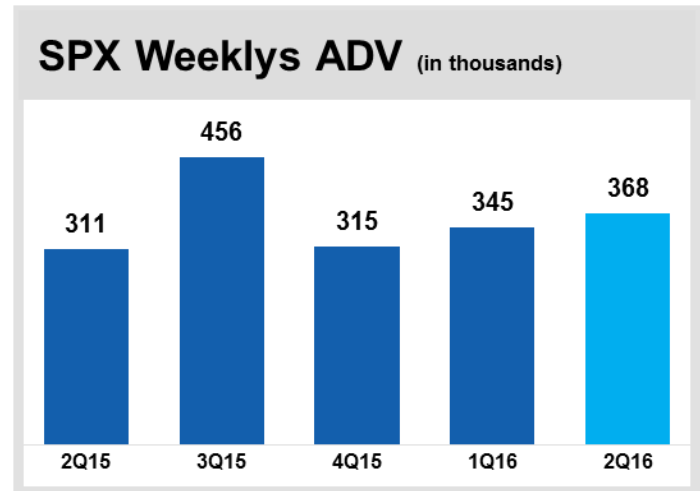
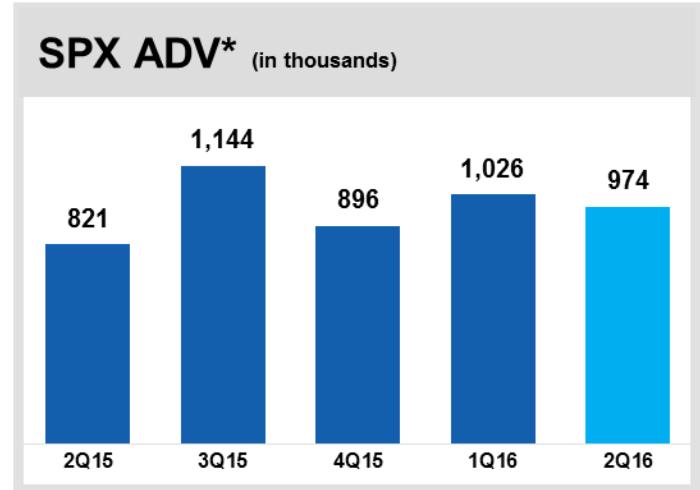
- **Extended trading hours for VIX and SPX options in March 2015**
 - Six-hour session begins at 2:00 a.m. CT; aligns with open of trading in London
- **Began overnight dissemination of VIX Index on April 15**
- **Continue to see increased trading in VIX Weeklys**



Further Developing Current Products to Grow Index Product Line

S&P 500 Index (SPX) options, the most actively traded U.S. index option

- **SPX ADV for 2Q16 up 19% vs 2Q15; down 5% vs 1Q16**
- **SPX Weeklys ADV up 18% vs 2Q15; up 7% vs 1Q16**
- **SPX Weeklys with Wednesday Expirations introduced in February**
 - Wednesday expirations averaged nearly 88,000 contracts per day in 2Q16, up 56% from 1Q16
- **Plan to add Monday-expiring Weeklys in August, pending SEC approval**



*Includes SPX Weeklys

Expanding Our Global Customer Base

Initiatives focused on education, business development and trading technology

- **The fifth annual CBOE Risk Management Conference (RMC) Europe scheduled to take place Sept. 26 through 28 in County Wicklow, Ireland**
 - CBOE RMC now includes RMC U.S., RMC Europe and RMC Asia
- **CBOE opened a London office in July, its first international business development outpost**
- **Broadened global reach of VIX futures trading with connectivity between CFE and Stellar Trading Systems**



Forming Alliances that Leverage our Strengths

CBOE made a minority equity investment in Eris Exchange Holdings, LLC (Eris) in May

- **Eris is a U.S.-based futures exchange group offering swap futures as a capital-efficient alternative to over-the-counter (OTC) swaps**
- **CBOE and Eris partnership will focus on:**
 - Developing new proprietary products and indexes across asset classes
 - Collaborating to enhance distribution of Eris Interest Rate Swap Futures and related market data
- **Positions CBOE to benefit from the continuing convergence of OTC and listed marketplaces by bringing new capital efficiencies and exchange-traded products to the interest rate marketplace**



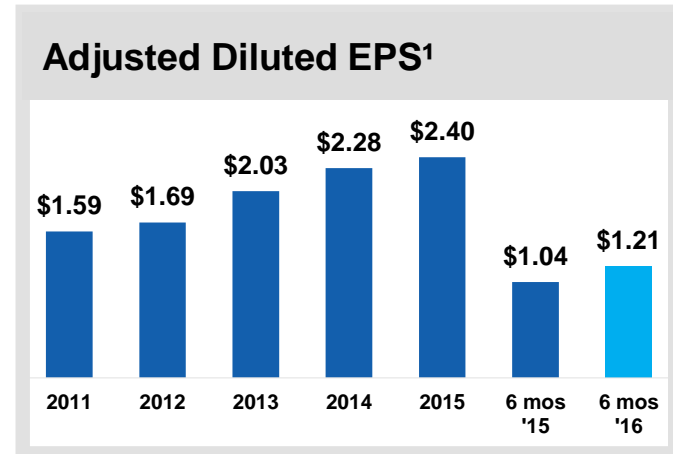
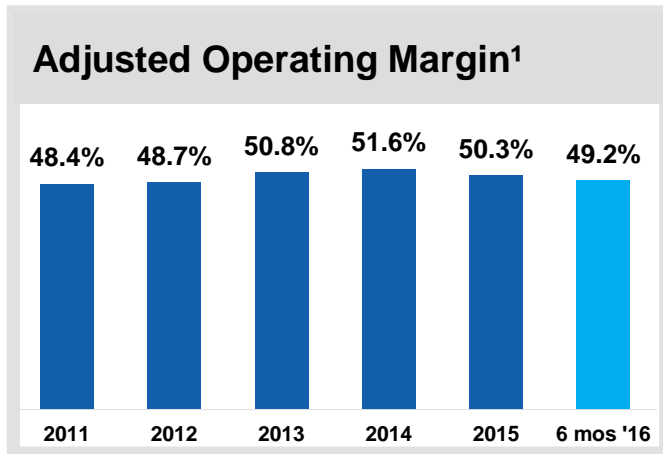
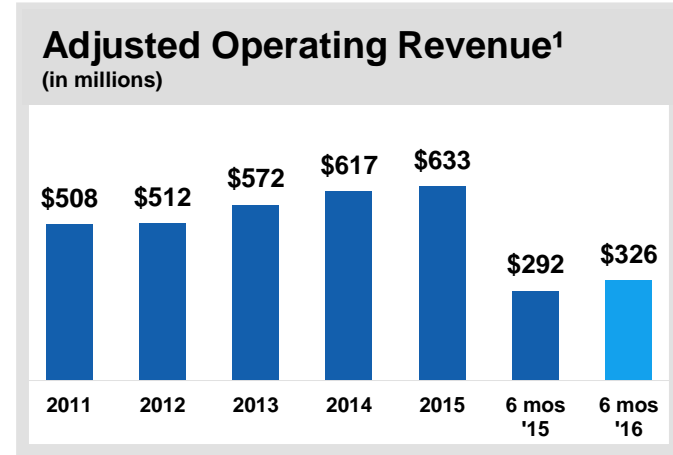
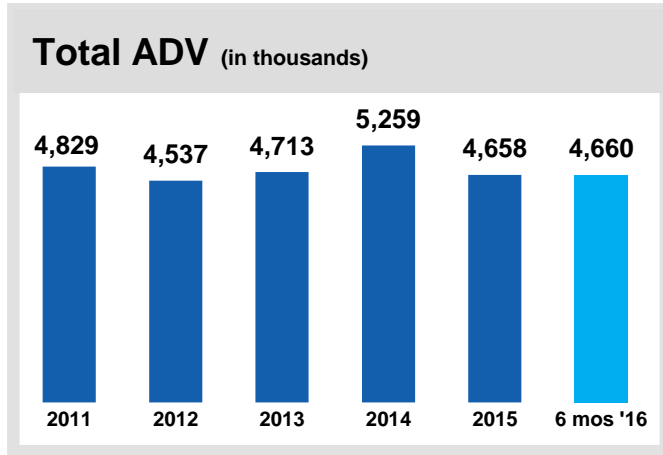
Forming Alliances that Leverage our Strengths

CBOE to Develop Series of Social Media-Based Strategy Benchmark Indexes

- ▶ **CBOE entered into an exclusive licensing agreement with Social Market Analytics (SMA), a leader in providing actionable intelligence from social media sources**
 - CBOE plans to develop a series of sentiment-based strategy benchmark indexes based on SMA's social media metrics
 - These benchmark indexes could be used to build strategies to enhance risk-adjusted returns
- ▶ **Expect to introduce first SMA benchmark this summer**



Solid YTD Results Reflect Companywide Commitment to Executing our Strategic Initiatives



¹Adjusted to reflect the impact of certain items. See appendix for "Non-GAAP Information."

➤ Financial Review
Alan Dean
EVP, CFO and Treasurer

2Q16 Financial Overview

Adjusted Basis¹ (in millions, except EPS and RPC)	2Q16	2Q15	\$ Change	% Change
Operating Revenues	\$163.3	\$148.7	\$14.6	10%
Adjusted Operating Expenses	83.8	75.3	8.5	11%
Adjusted Operating Income	\$79.5	\$73.4	\$6.1	8%
<i>Adjusted Operating Margin %</i>	<i>48.7%</i>	<i>49.3%</i>		<i>-60 bps</i>
Adjusted Net Income Allocated to Common Stockholders	\$48.7	\$44.6	\$4.1	9%
Adjusted Diluted EPS	\$0.60	\$0.54	\$0.06	11%
Total ADV	4.55	4.38		4%
Revenue per Contract (RPC)	\$0.405	\$0.368	\$0.037	10%

¹Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

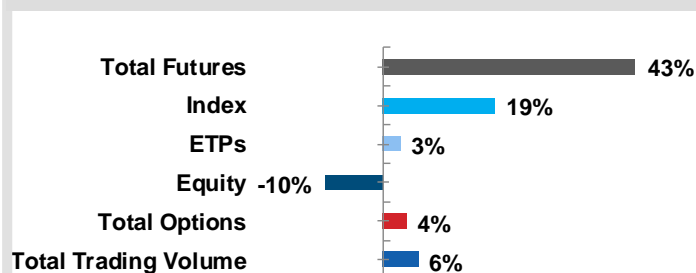
Operating Revenue Up 10%

Transaction fees main driver of revenue growth

➤ Transaction fees up \$16.3MM

- 10% increase in RPC
 - Shift in product mix
- 6% increase in trading volume

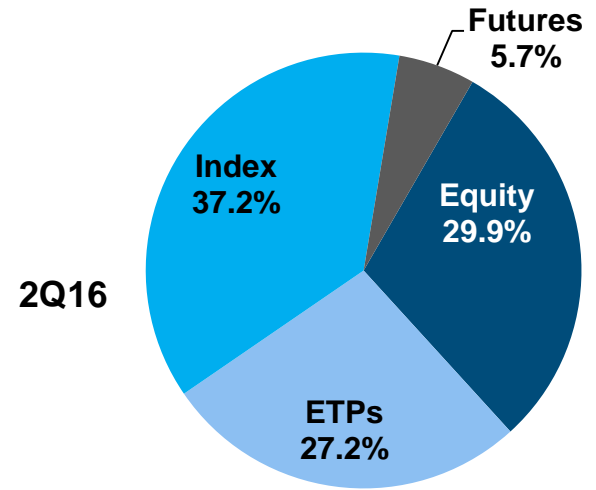
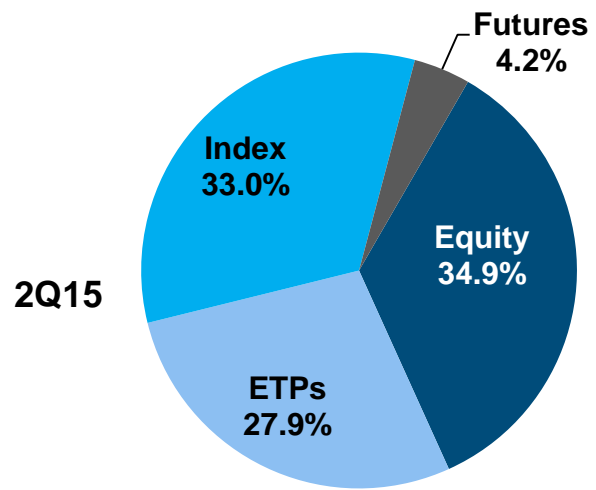
Trading Volume Change for 2Q16 vs 2Q15



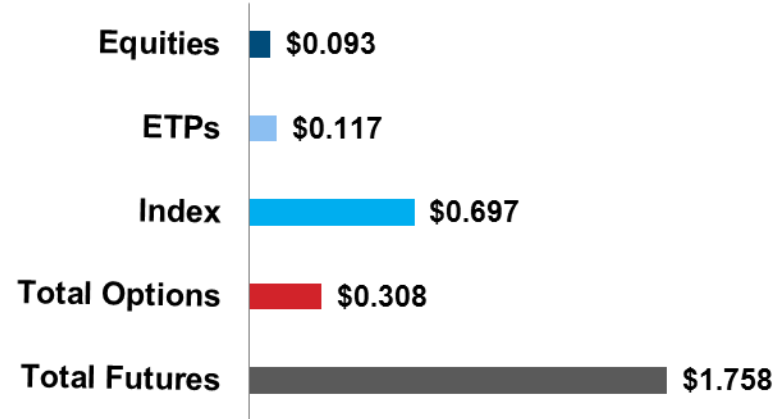
Operating Revenue (in millions)	2Q16	2Q15	% Chg
Transaction fees	\$117.9	\$101.6	16%
Access fees	13.2	13.4	-1%
Exchange services and other fees	11.3	9.7	17%
Market data fees	8.2	7.6	8%
Regulatory fees	9.2	8.7	5%
Other revenue	3.5	7.7	-55%
Total Operating Revenues	\$163.3	\$148.7	10%

Change in RPC Reflects Mix Shift and Higher Volume-Based Incentives

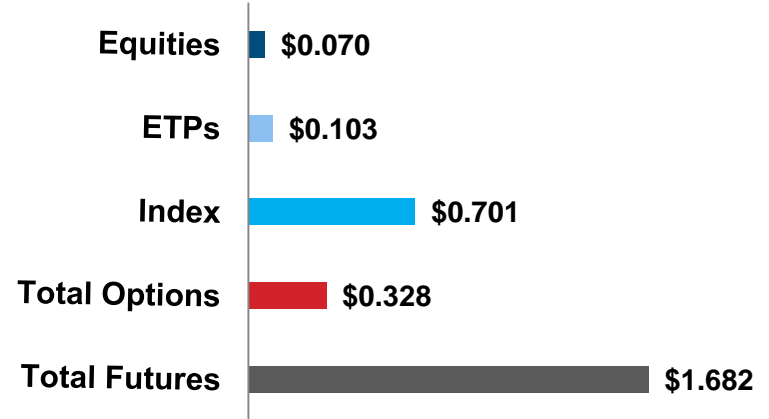
Trading volume mix and RPC 2Q15 versus 2Q16



2Q15 RPC \$0.368

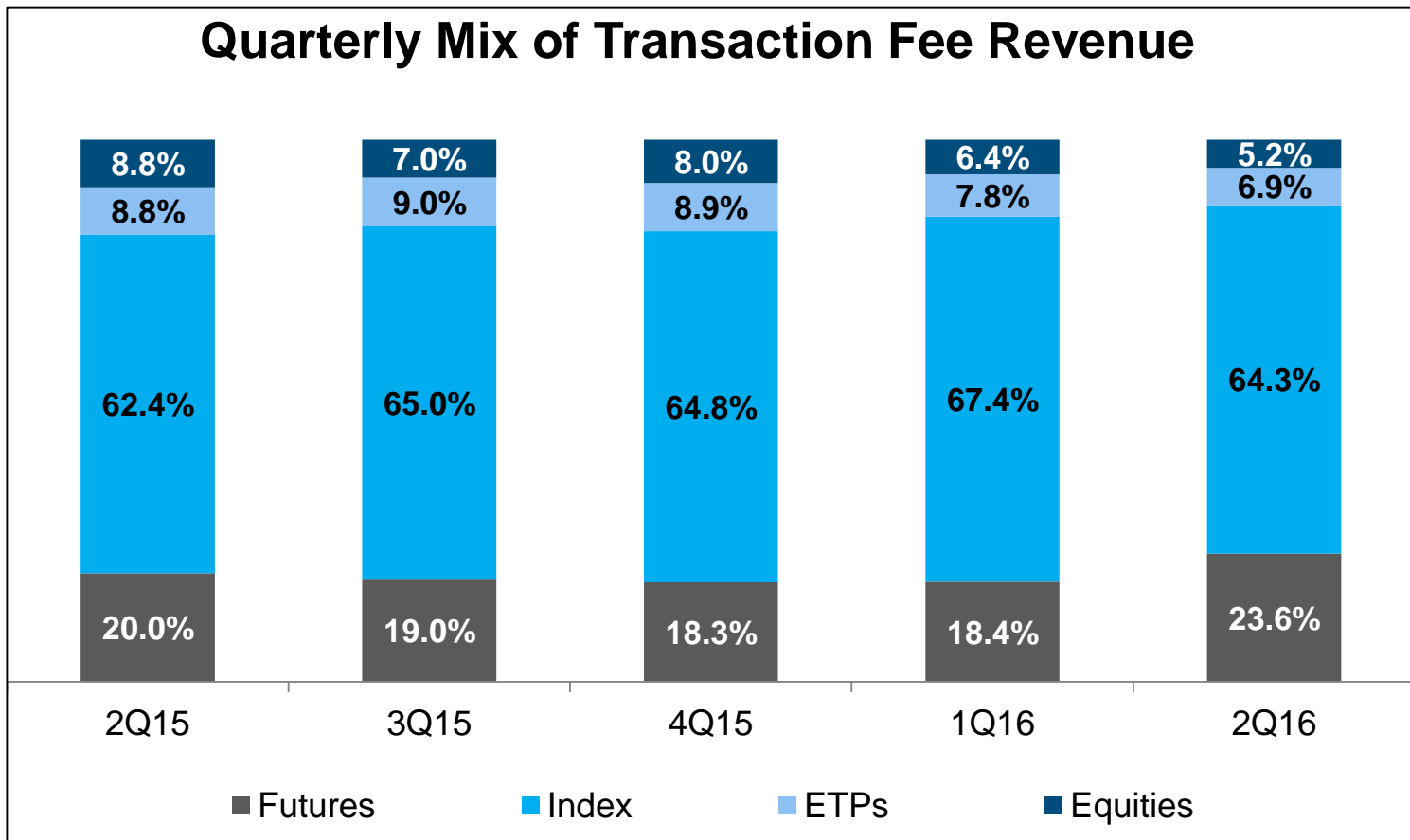


2Q16 RPC \$0.405



Proprietary Products Account for Growing Percentage of Transaction Fee Revenue

Index options and futures contracts accounted for 87.9% of transaction fees in 2Q16 versus 82.4% in 2Q15



Other Factors Influencing Operating Revenue

➤ Exchange services and other fees up \$1.6MM

- Primarily reflects the addition of CBOE Livevol

➤ Other revenue down \$4.2MM

- Mainly due to lower revenue from fines

Operating Revenues (in millions)	2Q16	2Q15	% Chg
Transaction fees	\$117.9	\$101.6	16%
Access fees	13.2	13.4	-1%
Exchange services and other fees	11.3	9.7	17%
Market data fees	8.2	7.6	8%
Regulatory fees	9.2	8.7	5%
Other revenue	3.5	7.7	-55%
Total Operating Revenues	\$163.3	\$148.7	10%

Ongoing Focus on Prudent Expense Management

Largest expense variances aligned with performance and volume:

- **Compensation and benefits up \$3.5MM**
- **Royalty fees up \$2.5MM**
- **Professional fees and outside services up \$1.8MM**
- **Depreciation and amortization up \$0.7MM**

Adjusted Operating Expenses ¹ (in millions)	2Q16	2Q15	% Chg
Compensation and benefits	\$27.6	\$24.1	15%
Depreciation and amortization	12.0	11.3	6%
Technology support services	5.7	4.8	18%
Professional fees and outside services	14.4	12.6	14%
Royalty fees	19.3	16.8	15%
Order Routing	-0.1	0.6	-113%
Travel and promotional	2.5	2.5	--
Facilities costs	1.4	1.3	10%
Other expenses	1.0	1.3	-23%
Total Operating Expenses	\$83.8	\$75.3	11%

¹Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

Core Operating Expenses

Key drivers:

- **Compensation and benefits up \$3.5MM**
 - Primarily due to higher salaries and incentive-based compensation
- **Professional fees and outside services up \$1.8MM**
 - Primarily due to increases in legal fees and regulatory-related contract services

Core Operating Expenses ¹ (in millions)	2Q16	2Q15	% Chg
Compensation and benefits	\$27.6	\$24.1	15%
Technology support Services	5.7	4.8	18%
Professional fees and outside services	14.4	12.6	14%
Travel and promotional	2.5	2.5	--
Facilities costs	1.4	1.3	10%
Other expenses	1.0	1.3	-23%
Total	\$52.7	\$46.7	13%

¹Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

May not foot due to rounding.

2016 Full-Year Guidance

As of July 29, 2016 (\$ in millions)	2016 Full-Year Guidance
Core operating expenses	\$211 to \$215
Continuing stock-based compensation ¹	\$13.5
Accelerated stock-based compensation ²	\$1.0
Depreciation and amortization	\$46 to \$48
Capital expenditures	\$47 to \$49
Effective tax rate	38.5% to 39.5%

¹Stock-based compensation expense is included in compensation and benefits and excludes accelerated stock-based compensation.

²This expense is expected to be reported in compensation and benefits and included in the company's non-GAAP reconciliation as an adjusted financial measure.

Volume-based Expenses

➤ Royalty fees up \$2.5MM

- Higher trading volume in licensed products in 2Q16 versus 2Q15
 - Index complex volume up 22%
 - Index options volume up 19%
 - VIX futures volume up 43%

➤ Order routing down \$0.7MM

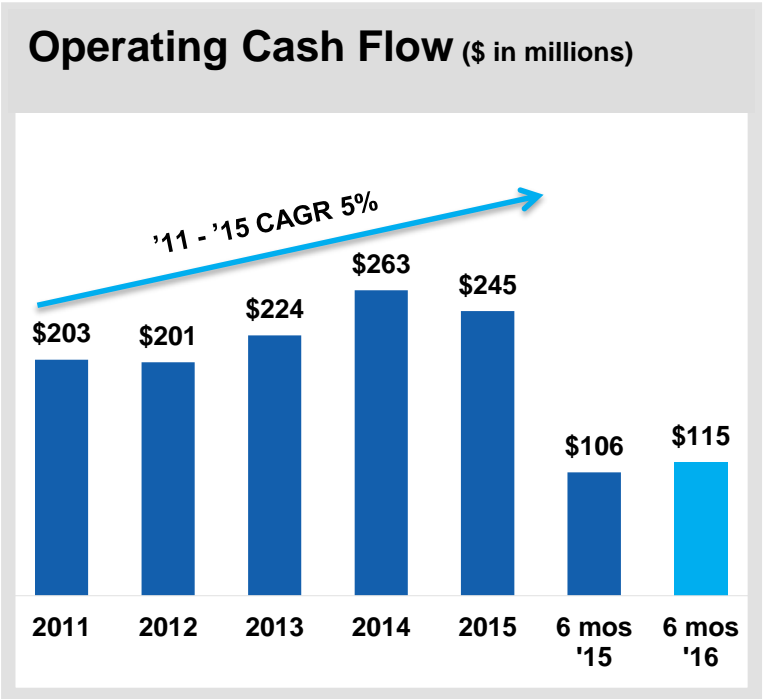
- Primarily due to favorable clearing fee rebate and lower trading volume in multiply-listed options

Volume-based Expenses (in millions)	2Q16	2Q15	% Chg
Royalty fees	\$19.3	\$16.8	15%
Order routing	-0.1	0.6	-113%
Total	\$19.2	\$17.4	10%

Enhancing Shareholder Value

Strong cash flow generation and disciplined approach to managing cash

- **Cash of \$52 million at June 30, 2016**
- **Generated \$115 million in operating cash flow through June 30, 2016**
- **Capital outlays YTD:**
 - \$38 million to pay dividends
 - \$65 million to repurchase shares¹
 - \$25 million in capital expenditures
- **\$97 million available under share repurchase program at June 30, 2016**

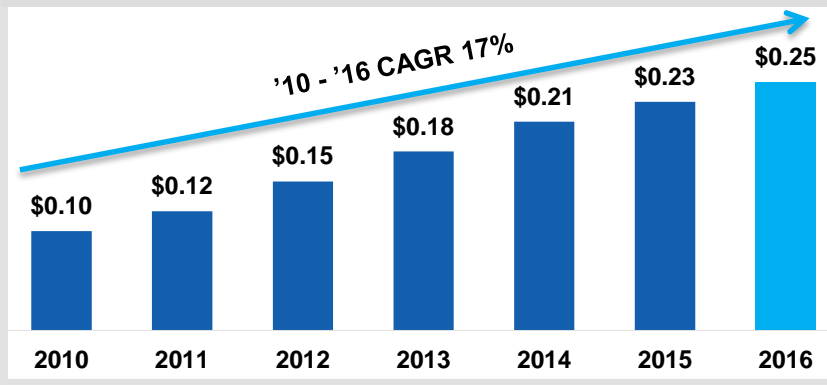


¹Includes stock purchased under repurchase plan and from employees

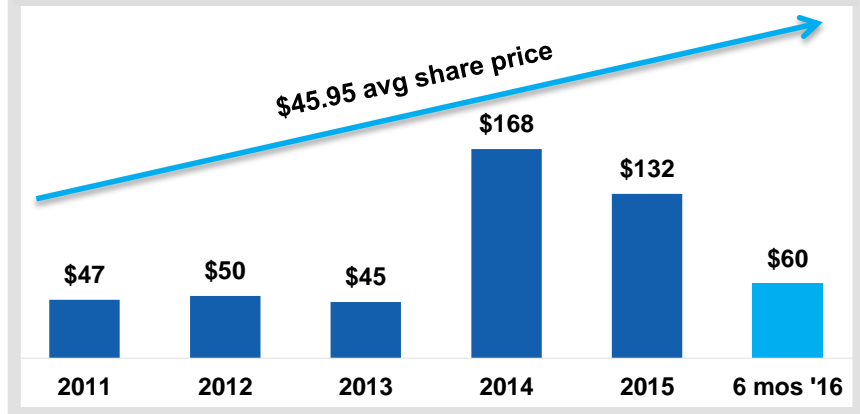
Committed to Returning Capital to Shareholders

- Reinvest in our business to fund growth
- Sustainable dividends and steady growth
 - Board declared increased third quarter dividend of \$0.25 per share, up 9%
 - Sixth consecutive annual increase

Change in Quarterly Dividend Rate Per Share



Cash Used Under Share Repurchase Plan (\$ in millions)



➤ Questions & Answers

➤ Appendix Materials

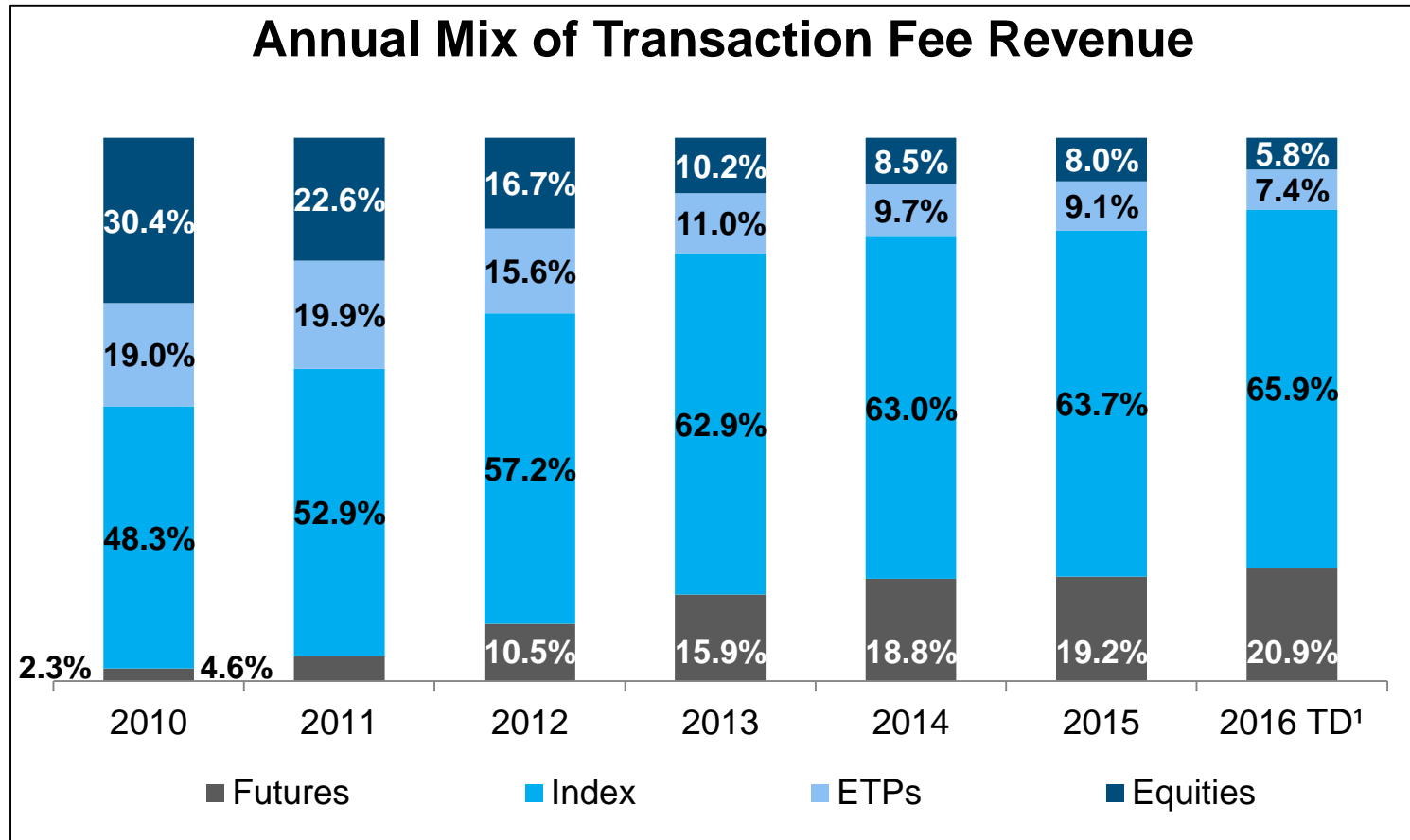
2016 YTD Financial Overview

Adjusted Basis¹ (in millions, except EPS and RPC)	6 mos. End 06/2016	6 mos. End 06/2015	\$ Change	% Change
Operating Revenues	\$325.7	\$291.5	\$34.2	12%
Adjusted Operating Expenses	165.6	148.6	17.0	11%
Adjusted Operating Income	\$160.1	\$142.9	\$17.2	12%
<i>Adjusted Operating Margin %</i>	<i>49.2%</i>	<i>49.0%</i>		20 bps
Adjusted Net Income Allocated to Common Stockholders	\$98.6	\$86.9	\$11.7	13%
Adjusted Diluted EPS	\$1.21	\$1.04	\$0.17	16%
Total ADV	4.66	4.57		2%
Revenue per Contract	\$0.405	\$0.354	\$0.051	14%

¹Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

Proprietary Products Account for Growing Percentage of Transaction Fee Revenue

Index options and futures contracts account for 86.8% of transaction fees through June '16, up from 50.6% in 2010

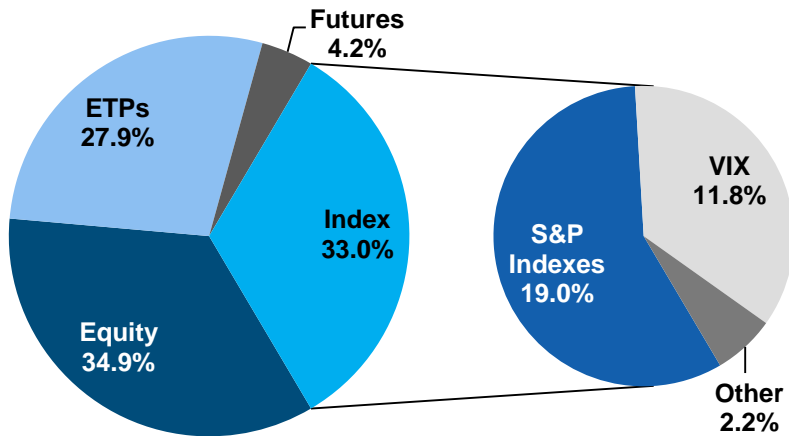


¹Through June 30, 2016

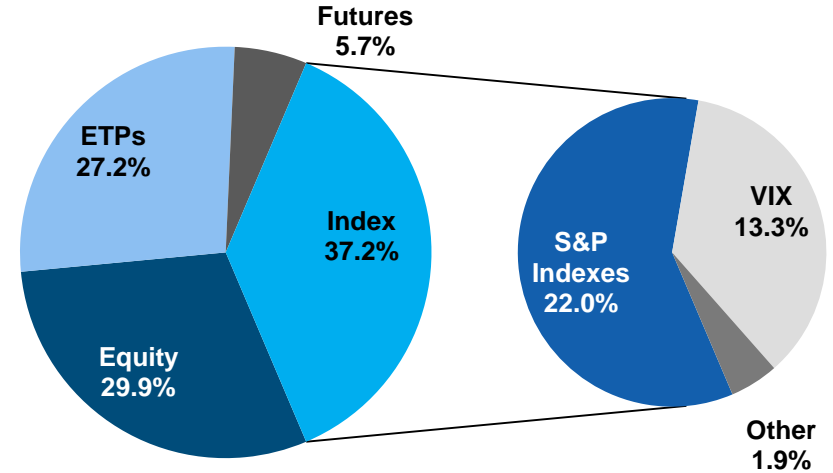
RPC Increase Primarily Due to Shift in Product Mix

Trading Volume Mix & RPC 2Q16 vs 2Q15

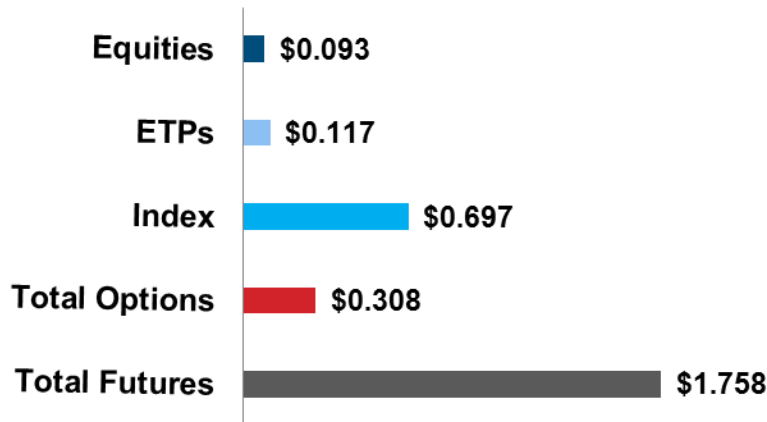
2Q15 Trading Volume Mix



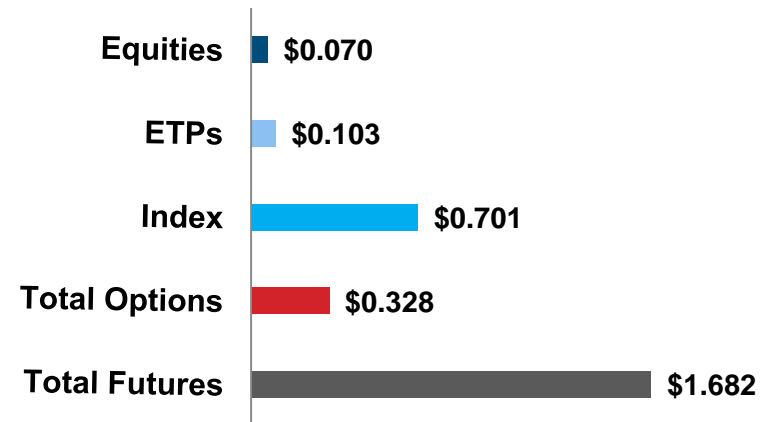
2Q16 Trading Volume Mix



2Q15 RPC \$0.368

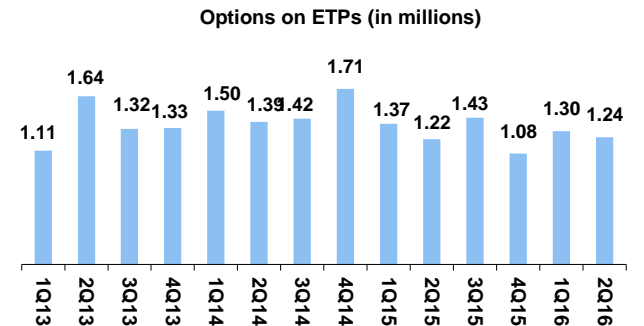
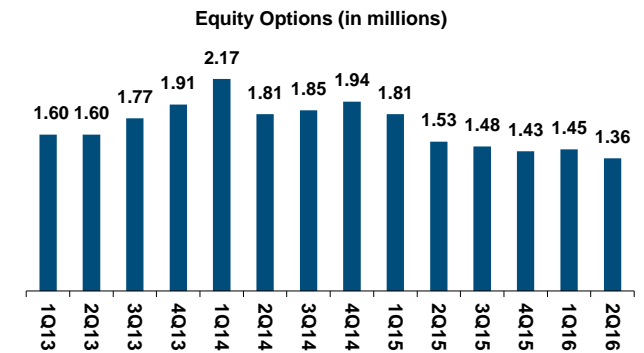
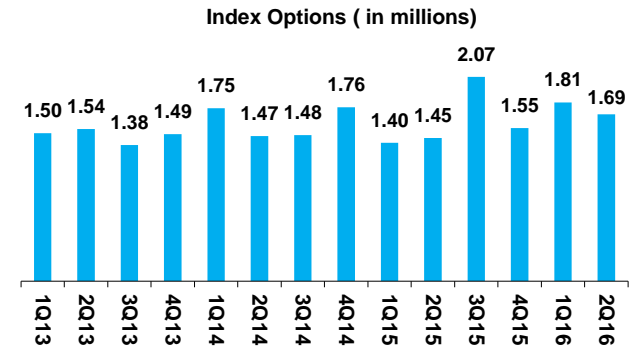
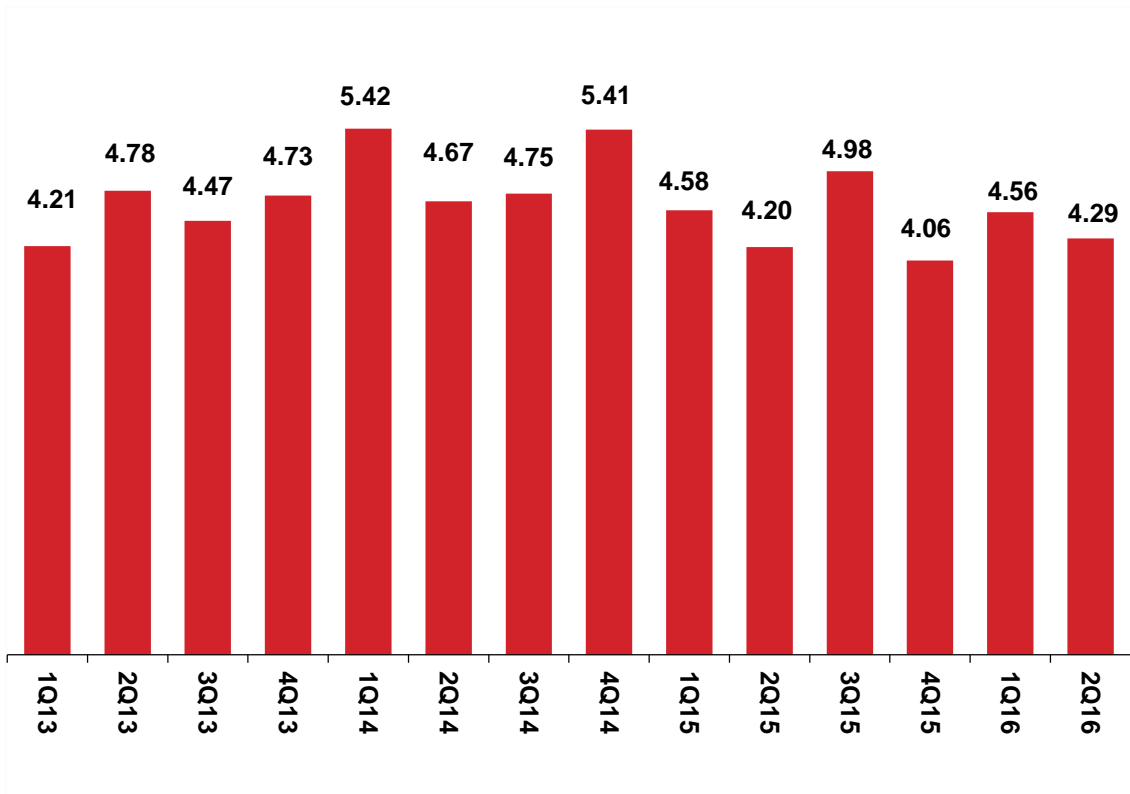


2Q16 RPC \$0.405



Quarterly Options ADV

CBOE and C2 Quarterly Options ADV (in millions)



CBOE Holdings Rolling 3-Month RPC

2016	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Equities	\$0.095	\$0.092	\$0.085	\$0.081	\$0.075	\$0.070						
Exchange-traded products	0.138	0.131	0.117	0.111	0.104	0.103						
Indexes	0.738	0.733	0.720	0.706	0.698	0.701						
Total options RPC	0.351	0.351	0.346	0.335	0.326	0.328						
Futures	1.636	1.623	1.643	1.697	1.721	1.682						
Total RPC	\$0.412	\$0.413	\$0.405	\$0.397	\$0.394	\$0.405						

2015	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Equities	\$0.069	\$0.070	\$0.077	\$0.077	\$0.087	\$0.093	\$0.098	\$0.104	\$0.106	\$0.105	\$0.098	\$0.097
Exchange-traded products	0.111	0.115	0.118	0.115	0.114	0.117	0.123	0.133	0.143	0.146	0.144	0.143
Indexes	0.702	0.704	0.712	0.707	0.701	0.697	0.702	0.703	0.709	0.706	0.718	0.726
Total options RPC	0.279	0.283	0.284	0.280	0.290	0.308	0.328	0.352	0.368	0.370	0.357	0.349
Futures	1.647	1.649	1.705	1.762	1.775	1.758	1.712	1.661	1.647	1.662	1.686	1.686
Total RPC	\$0.333	\$0.340	\$0.340	\$0.336	\$0.348	\$0.368	\$0.391	\$0.416	\$0.431	\$0.432	\$0.417	\$0.408

2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Equities	\$0.079	\$0.079	\$0.081	\$0.082	\$0.081	\$0.079	\$0.074	\$0.076	\$0.077	\$0.078	\$0.074	\$0.068
Exchange-traded products	0.124	0.119	0.117	0.113	0.113	0.111	0.112	0.114	0.115	0.112	0.107	0.105
Indexes	0.664	0.667	0.669	0.674	0.674	0.670	0.671	0.677	0.680	0.690	0.692	0.696
Total options RPC	0.273	0.281	0.281	0.277	0.275	0.275	0.275	0.281	0.275	0.288	0.279	0.284
Futures	1.602	1.614	1.617	1.610	1.616	1.639	1.651	1.631	1.625	1.598	1.628	1.616
Total RPC	\$0.317	\$0.329	\$0.329	\$0.325	\$0.321	\$0.322	\$0.324	\$0.336	\$0.329	\$0.344	\$0.331	\$0.340

2013	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Equities	\$0.149	\$0.153	\$0.140	\$0.114	\$0.094	\$0.090	\$0.082	\$0.081	\$0.077	\$0.076	\$0.076	\$0.075
Exchange-traded products	0.194	0.181	0.155	0.127	0.119	0.119	0.121	0.122	0.123	0.124	0.126	0.125
Indexes	0.665	0.670	0.671	0.679	0.674	0.675	0.670	0.671	0.669	0.666	0.666	0.666
Total options RPC	0.340	0.341	0.333	0.308	0.295	0.289	0.282	0.278	0.273	0.278	0.275	0.275
Futures	1.484	1.560	1.618	1.598	1.594	1.544	1.544	1.533	1.559	1.548	1.556	1.565
Total RPC	\$0.376	\$0.382	\$0.378	\$0.357	\$0.341	\$0.334	\$0.324	\$0.321	\$0.315	\$0.320	\$0.315	\$0.316

Quarterly Core Operating Expenses¹

(\$ in thousands)

	2Q 2016	% rev	1Q 2016	% rev	4Q 2015	% rev	3Q 2015	% rev	2Q 2015	% rev
Total Operating Expenses	\$85,361	53%	\$82,849	51%	\$80,052	52%	\$85,925	43%	\$75,355	51%
Less:										
Depreciation and amortization	12,259	8%	11,851	7%	12,202	8%	12,394	7%	11,275	8%
Acquisition related costs	300	-	368	-	-	-	-	-	-	-
Compensation and benefits ²	892	-	200	-	-	-	-	-	-	-
Assessment of computer-based lease taxes for prior years			298	-	-	-	-	-	-	-
Volume-based expenses:										
Royalty fees	19,336	12%	19,114	12%	17,830	12%	21,840	10%	16,755	11%
Order routing	(83)	-	104	-	299	-	581	-	627	0%
Core Operating Expenses (non-GAAP)¹:	\$52,657	32%	\$50,914	31%	\$49,721	32%	\$51,110	27%	\$46,698	31%
Less: Continuing stock-based compensation	3,472	2%	3,163	2%	3,194	2%	3,185	2%	3,147	2%
Core Operating Expenses excluding continuing stock-based compensation (non-GAAP)¹:	\$49,185	30%	\$47,751	29%	\$46,527	30%	\$47,925	25%	\$43,551	29%
Core Operating Expense Detail:										
Compensation and benefits	\$27,638	17%	\$26,906	17%	\$26,768	17%	\$29,583	14%	\$24,136	16%
Technology support services	5,658	3%	5,380	3%	5,182	3%	5,342	3%	4,813	3%
Profession fees and outside services	14,445	9%	13,263	8%	12,897	8%	12,619	7%	12,594	8%
Travel and promotional expenses	2,492	2%	2,515	2%	2,548	2%	1,407	1%	2,526	2%
Facilities costs	1,418	1%	1,528	1%	1,446	1%	874	-	1,293	1%
Other expenses	1,006	1%	1,322	1%	880	1%	1,285	0%	1,336	1%
Total	\$52,657	32%	\$50,914	31%	\$49,721	32%	\$51,110	27%	\$46,698	31%
Number of full-time employees at quarter end		569	561		564		553		532	

¹Please see our disclaimer regarding non-GAAP financial measures.

²This amount includes \$270 for accelerated stock-based compensation expense and \$622 in additional bonus accrual resulting from legal settlement income.

May not foot due to rounding

Annual Core Operating Expenses¹

(\$ in thousands)

	2015	% rev	2014	% rev	2013	% rev	2012	% rev	2011	% rev
Total Operating Expenses	\$314,617	50%	\$303,424	51%	\$286,236	50%	\$268,241	52%	\$266,512	52%
Less:										
Depreciation and amortization	46,274	7%	39,913	7%	34,488	6%	31,485	6%	34,094	7%
Accelerated stock-based compensation	-	-	2,530	-	3,996	1%	343	-	453	-
Severance	-	-	1,863	-	-	-	-	-	3,709	1%
Estimated liability/expense related to SEC investigation	-	-	-	-	1,000	-	5,000	1%	-	-
Volume-based expenses:										
Royalty fees	70,574	11%	66,110	11%	56,576	10%	46,135	9%	47,822	9%
Order routing	2,293	0%	4,080	0%	4,355	1%	6,275	1%	14,239	3%
Core Operating Expenses (non-GAAP)¹:	\$195,476	31%	\$188,928	32%	\$185,821	32%	\$179,003	35%	\$166,195	33%
Less: Continuing stock-based compensation	12,181	2%	13,047	2%	16,828	3%	12,005	2%	12,166	2%
Core Operating Expenses excluding continuing stock-based compensation (non-GAAP)¹:	\$183,295	29%	\$175,881	30%	\$168,993	30%	\$166,998	33%	\$154,029	30%
Core Operating Expense Detail:										
Compensation and benefits	\$105,925	17%	\$117,341	17%	\$114,087	20%	\$103,853	20%	\$100,292	20%
Technology support services	20,662	3%	19,189	3%	17,898	3%	19,603	4%	17,933	4%
Professional fees and outside services	50,060	8%	31,976	8%	34,473	6%	36,300	7%	27,310	5%
Travel and promotion expenses	8,982	1%	9,046	1%	9,806	2%	10,006	2%	9,812	2%
Facilities costs	4,998	1%	5,721	1%	5,053	1%	5,066	1%	5,400	1%
Other expenses	4,849	1%	5,655	1%	4,504	1%	4,175	1%	5,448	1%
Total	\$195,476	31%	\$188,928	32%	\$185,821	32%	\$179,003	35%	\$166,195	33%
Number of Full Time Employees at year end	564		520		650		605		596	

¹Please see our disclaimer regarding non-GAAP financial measures.

May not foot due to rounding

GAAP to Non-GAAP Reconciliation

For 2010 and 2011

GAAP to Non-GAAP Reconciliation
(in thousands, except per share amounts)

	3Q10	4Q10	1Q11	2Q11	3Q11	4Q11	FY2010	FY2011
Reconciliation of GAAP Net Income Allocated to Common Stockholder to Non-GAAP								
GAAP net income allocated to common stockholders	\$ 20,020	\$ 30,687	\$ 32,089	\$ 32,609	\$ 40,597	\$ 31,287	\$ 98,166	\$ 136,582
Less: Recognition of prior-period revenue		(4,406)					(4,406)	
Add: Accelerated stock-based compensation	10,965	2,004	340	113			12,968	453
Add: Severance expense pursuant to an executive employment agreement						3,709		3,709
Add: Impairment change		1,620	460				1,620	460
Income tax benefit/(expense) related to the items above	(4,461)	291	(337)	(46)		(1,478)	(4,034)	(1,861)
Add: Income tax provision adjustment					4,223	(322)		3,901
Net income allocated to participating securities - effect on reconciling items	(144)	11	(11)	(2)	(75)	(32)	(76)	(109)
Adjusted net income allocated to common stockholders	\$ 26,380	\$ 30,207	\$ 32,540	\$ 32,674	\$ 44,745	\$ 33,164	\$ 104,238	\$ 143,134

Reconciliation of GAAP Diluted EPS to Non-GAAP

GAAP diluted earnings per common share	\$ 0.20	\$ 0.31	\$ 0.36	\$ 0.36	\$ 0.45	\$ 0.35	\$ 1.03	\$ 1.52
Per share impact of items above	0.06				0.05	0.02	0.06	0.07
Non-GAAP diluted earnings per common share	\$ 0.26	\$ 0.31	\$ 0.36	\$ 0.36	\$ 0.50	\$ 0.37	\$ 1.09	\$ 1.59

Reconciliation of GAAP Operating Margin to Non-GAAP

GAAP operating revenue	\$ 106,015	\$ 117,391	\$ 124,042	\$ 120,290	\$ 143,604	\$ 120,208	\$ 437,104	\$ 508,144
Non-GAAP adjustments noted above		(4,406)					(4,406)	
Adjusted operating revenue	\$ 106,015	\$ 112,985	\$ 124,042	\$ 120,290	\$ 143,604	\$ 120,208	\$ 432,698	\$ 508,144
GAAP operating income	\$ 34,933	\$ 51,854	\$ 57,535	\$ 56,452	\$ 74,966	\$ 52,679	\$ 167,341	\$ 241,632
Non-GAAP adjustments noted above	10,965	(2,402)	340	113	-	3,709	8,562	4,162
Adjusted operating income	\$ 45,898	\$ 49,452	\$ 57,875	\$ 56,565	\$ 74,966	\$ 56,388	\$ 175,903	\$ 245,794
Adjusted operating margin	43.3%	43.8%	46.7%	47.0%	52.2%	46.9%	40.7%	48.4%

For further information go to cboe.com/Investor Relations

May not foot due to rounding and/or change in shares outstanding

GAAP to Non-GAAP Reconciliation For 2012 and 2013

GAAP to Non-GAAP Reconciliation
(in thousands, except per share amounts)

	1Q12	2Q12	3Q12	4Q12	FY2012	1Q13	2Q13	3Q13	4Q13	FY2013
Reconciliation of GAAP Net Income Allocated to Common Stockholder to Non-GAAP										
GAAP net income allocated to common stockholders	\$ 32,863	\$ 37,903	\$ 45,243	\$ 39,246	\$ 155,254	\$ 41,789	\$ 45,477	\$ 40,955	\$ 45,649	\$ 173,863
Add: Accelerated stock-based compensation	194			149	343	3,180	816			3,996
Add: Estimated liability related to SEC investigation				5,000	5,000		1,000			1,000
Add: Impairment charge						245				245
Income tax benefit/(expense) related to the items above	(80)			(63)	(139)	(1,311)	(313)			(1,611)
Add: Income tax provision adjustment			(7,654)	(5,415)	(13,054)					
Net income allocated to participating securities - effect on reconciling items	(2)		86	4	106	(29)	(22)			(46)
Adjusted net income allocated to common stockholders	\$ 32,975	\$ 37,903	\$ 37,675	\$ 38,921	\$ 147,510	\$ 43,874	\$ 46,958	\$ 40,955	\$ 45,649	\$ 177,447
Reconciliation of GAAP Diluted EPS to Non-GAAP										
GAAP diluted earnings per common share	\$ 0.37	\$ 0.44	\$ 0.52	\$ 0.45	\$ 1.78	\$ 0.48	\$ 0.52	\$ 0.47	\$ 0.52	\$ 1.99
Per share impact of items above			(0.09)		(0.09)	0.02	0.02			0.04
Non-GAAP diluted earnings per common share	\$ 0.37	\$ 0.44	\$ 0.43	\$ 0.45	\$ 1.69	\$ 0.50	\$ 0.54	\$ 0.47	\$ 0.52	\$ 2.03
Reconciliation of GAAP Operating Margin to Non-GAAP										
GAAP operating revenue	\$ 121,392	\$ 132,549	\$ 128,319	\$ 130,077	\$ 512,338	\$ 142,705	\$ 150,772	\$ 136,743	\$ 141,830	\$ 572,050
Non-GAAP adjustments noted above										
Adjusted operating revenue	\$ 121,392	\$ 132,549	\$ 128,319	\$ 130,077	\$ 512,338	\$ 142,705	\$ 150,772	\$ 136,743	\$ 141,830	\$ 572,050
GAAP operating income	\$ 57,415	\$ 66,069	\$ 60,861	\$ 59,752	\$ 244,097	\$ 69,430	\$ 75,358	\$ 68,427	\$ 72,599	\$ 285,814
Non-GAAP adjustments noted above	194			5,149	5,343	3,180	1,816			4,996
Adjusted operating income	\$ 57,609	\$ 66,069	\$ 60,861	\$ 64,901	\$ 249,440	\$ 72,610	\$ 77,174	\$ 68,427	\$ 72,599	\$ 290,810
Adjusted operating margin	47.5%	49.8%	47.4%	49.9%	48.7%	50.9%	51.2%	50.0%	51.2%	50.8%

For further information go to cboe.com/Investor Relations

May not foot due to rounding and/or change in shares outstanding

GAAP to Non-GAAP Reconciliation For 2014 and 2015

GAAP to Non-GAAP Reconciliation

(in thousands, except per share amounts)

	1Q14	2Q14	3Q14	4Q14	FY2014	1Q15	2Q15	3Q15	4Q15	FY2015
Reconciliation of GAAP Net Income Allocated to Common Stockholder to Non-GAAP										
GAAP net income allocated to common stockholders	\$ 48,528	\$ 42,598	\$ 48,146	\$ 49,119	\$ 188,392	\$ 42,079	\$ 44,646	\$ 67,219	\$ 50,180	204,125
Less: Revenue recognized from prior years									\$ (1,995)	(1,995)
Add: Accelerated stock-based compensation	2,530				2,530					-
Add: Sevice expense related to outsourcing certain regulatory services				1,863	1,863					-
Add: Impairment charge				3,000	3,000	364				364
Add: Tax adjustment related to prior year				1,600	1,600			(4,286)		(4,286)
Income tax benefit/(expense) related to the items above	(1,009)			(2,005)	(2,861)	(142)			732	620
Net income allocated to participating securities - effect on reconciling items	(15)			(20)	(43)	(3)		19	6	26
Adjusted net income allocated to common stockholders	\$ 50,034	\$ 42,598	\$ 48,146	\$ 53,557	\$ 194,481	\$ 42,299	\$ 44,646	\$ 62,952	\$ 48,923	\$ 198,854
Reconciliation of GAAP Diluted EPS to Non-GAAP										
GAAP diluted earnings per common share	\$ 0.56	\$ 0.50	\$ 0.57	\$ 0.58	\$ 2.21	\$ 0.50	\$ 0.54	\$ 0.81	\$ 0.61	\$ 2.46
Per share impact of items above	0.02			0.06	0.07			(0.05)	(0.02)	(0.06)
Non-GAAP diluted earnings per common share	\$ 0.58	\$ 0.50	\$ 0.57	\$ 0.64	\$ 2.28	\$ 0.50	\$ 0.54	\$ 0.76	\$ 0.59	\$ 2.40
Reconciliation of GAAP Operating Margin to Non-GAAP										
GAAP operating revenue	\$ 157,885	\$ 143,942	\$ 148,910	\$ 166,487	\$ 617,225	\$ 142,839	\$ 148,725	\$ 187,035	\$ 155,946	\$ 634,545
Non-GAAP adjustments noted above									(1,995)	(1,995)
Adjusted operating revenue	\$ 157,885	\$ 143,942	\$ 148,910	\$ 166,487	\$ 617,225	\$ 142,839	\$ 148,725	\$ 187,035	\$ 153,951	\$ 632,550
GAAP operating income	\$ 82,038	\$ 69,716	\$ 75,084	\$ 86,962	\$ 313,801	\$ 69,553	\$ 73,370	\$ 101,110	\$ 75,894	\$ 319,928
Non-GAAP adjustments noted above	2,530			1,863	4,393				(1,995)	(1,995)
Adjusted operating income	\$ 84,568	\$ 69,716	\$ 75,084	\$ 88,825	\$ 318,194	\$ 69,553	\$ 73,370	\$ 101,110	\$ 73,899	\$ 317,933
Adjusted operating margin	53.6%	48.4%	50.4%	53.4%	51.6%	48.7%	49.3%	54.1%	48.0%	50.3%
Free Cash Flow Reconciliation										
Net cash flows provided by operating activities										\$ 245,278
Capital expenditures										(39,340)
Free Cash Flow										\$ 205,938

For further information go to cboe.com/Investor Relations

May not foot due to rounding and/or change in shares outstanding

GAAP to Non-GAAP Reconciliation For 2016

GAAP to Non-GAAP Reconciliation

(in thousands, except per share amounts)

	1Q16	2Q16	3Q16	4Q16	FY2016
Reconciliation of GAAP Net Income Allocated to Common Stockholder to Non-GAAP					
GAAP net income allocated to common stockholders	\$ 49,198	\$ 50,719			\$ 99,693
Add: Compensation and benefits (1)	200	892			1,092
Add: Acquisition related expenses	368	300			668
Add: Amortization of intangible assets	261	340			601
Add: Change in redemption value of noncontrolling interest		299			523
Add: Assessment of computer-based lease taxes for prior period use	296	-			296
Less: Revenue recognized from legal settlement	-	(5,500)			(5,500)
Income tax expense related to the items above	(378)	1,614			1,233
Net income allocated to participating securities - effect on reconciling items	(3)	10			6
Adjusted net income allocated to common stockholders	\$ 49,942	\$ 48,674			\$ 98,612
Reconciliation of GAAP Diluted EPS to Non-GAAP					
GAAP diluted earnings per common share	\$ 0.60	\$ 0.62			\$ 1.22
Per share impact of non-GAAP adjustments noted above	0.01	(0.02)			(0.01)
Non-GAAP diluted earnings per common share	\$ 0.61	\$ 0.60			\$ 1.21
Reconciliation of GAAP Operating Margin to Non-GAAP					
GAAP operating revenue	\$ 162,330	\$ 163,329			\$ 325,659
Non-GAAP adjustments noted above	-	-			-
Adjusted operating revenue	\$ 162,330	\$ 163,329			\$ 325,659
GAAP operating expenses	\$ 82,849	\$85,362			\$ 168,210
Non-GAAP adjustments noted above	(1,125)	(1,532)			(2,657)
Adjusted operating expenses	\$ 81,724	\$ 83,830			\$ 165,553
GAAP operating income	\$ 79,481	\$ 77,967			\$ 157,449
Non-GAAP adjustments noted above	1,125	1,532			2,657
Adjusted operating income	\$ 80,606	\$ 79,499			\$ 160,106
Adjusted operating margin	49.7%	48.7%			49.2%

¹For the second quarter, this amount includes \$270 for accelerated stock-based compensation expense and \$622 in additional bonus accrual resulting from the legal settlement revenue. For the year-to-date results, includes \$470 for accelerated stock-based compensation and \$622 in additional bonus accrual resulting from the legal settlement income.

For further information go to cboe.com/Investor Relations

Non-GAAP Information

- In addition to disclosing results determined in accordance with GAAP, CBOE Holdings 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 presentation include core operating expenses, adjusted operating revenue, adjusted operating expenses, adjusted operating income, adjusted operating margin, adjusted net income allocated to common stockholders, adjusted diluted earnings per share and free cash flow.
- Management believes that the non-GAAP financial measures in this presentation, including adjusted net income allocated to common stockholders and core operating expenses, provide useful 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, including adjusted diluted EPS, are provided as additional information to investors in order to provide them with an alternative method for assessing our financial condition and operating results.
- Core operating expenses is the company's operating expenses after excluding (i) volume-based expenses, (ii) depreciation and amortization expense, (iii) accelerated stock-based compensation expense and (iv) other unusual or one-time expenses.

 CBOE
400 South LaSalle Street
Chicago, Illinois 60605
www.cboe.com