CBOE HOLDINGS℠

EXECUTE SUCCESS℠

# Fourth Quarter 2015 Earnings Presentation

February 3, 2016

# Agenda

| | |
|---|---|
| **Strategic Review** | **Edward Tilly**<br>*Chief Executive Officer* |
| **Financial Review** | **Alan Dean**<br>*Executive Vice President,*<br>*CFO and Treasurer* |
| **Questions and Answers** | **Edward Tilly**<br>**Alan Dean**<br>**Edward Provost**<br>*President and Chief Operating Officer*<br>**John Deters**<br>*Chief Strategy Officer and*<br>*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; increasing price competition in our industry; compliance with legal and regulatory obligations and obligations under agreements with regulatory agencies; decreases in trading volumes or a shift in the mix of products traded on our exchanges; our ability to accommodate trading volume and transaction traffic, including significant increases, without failure or degradation of performance of our systems; our ability to meet our compliance obligations, including managing potential conflicts between our regulatory responsibilities and our for-profit status; the accuracy of our estimates and expectations; legislative or regulatory changes; increasing competition by foreign and domestic entities; 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 maintain access fee revenues; our ability to protect our systems and communication networks from security risks, including cyber-attacks; economic, political and market conditions; our ability to attract and retain skilled management and other personnel; our ability to manage our growth effectively; our dependence on third party service providers; and the ability of our compliance and risk management methods to effectively monitor and manage our risks.*

*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, 2014 and other filings made from time to time with the SEC.*

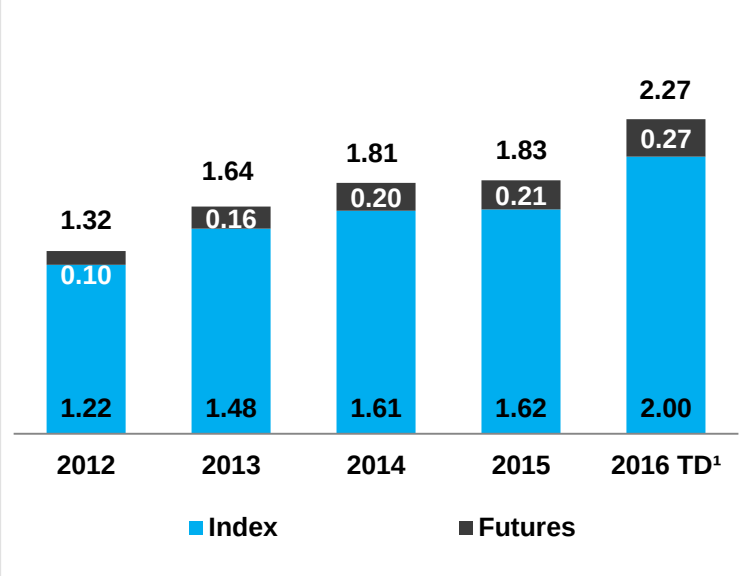
# Strategic Review
# Edward Tilly
*CEO*

# 2015 Marks Fifth Consecutive Year of Record Financial Results for CBOE

## Expanded our premium products and global customer reach, while forming new alliances to complement our core strengths and diversify product offering

- **Posted record ADV in index complex in 2015**
  - Lead by record trading in SPX options and VIX futures
- **CBOE continues to lead the industry in all options trading**

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




[1]Through January 31, 2016

# Translating our Mission and Strategic Initiatives into Value

CBOE HOLDINGS

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

## Strategic Initiatives

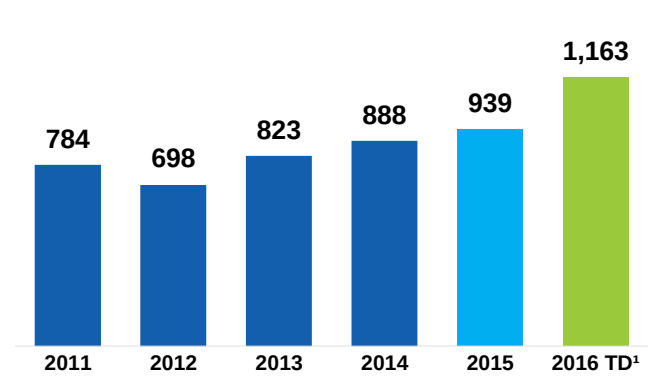
- Develop unique products
- Expand our customer base globally
- Form alliances that leverage and complement our core business
- Define and lead the options and volatility space globally

# Further Developing Current Products to Grow Index Product Line

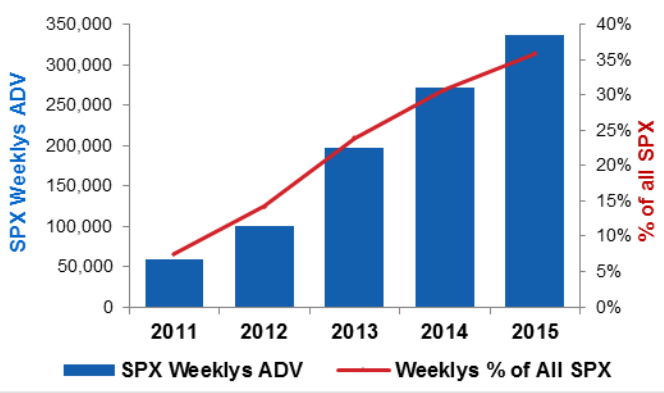
## S&P 500 Index (SPX) options, the most actively traded U.S. index option

- **SPX ADV up 6% year over year in 2015**
  - January ADV up 19% over January 2015
- **SPX Weeklys ADV up 24% year over year**
  - Attracted retail investors to largely institutional SPX marketplace
- **Plan to introduce SPX Weeklys with Wednesday Expirations**
  - "Wednesday Weeklys" will increase opportunities to trade SPX

**SPX ADV* by Year** (in thousands)




**SPX Weeklys by Year**



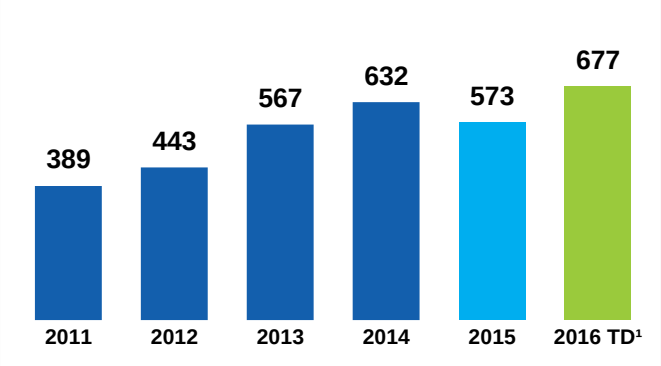

*Includes SPX Weeklys
¹Through January 31, 2016

# Further Developing Current Products to Grow Index Product Line

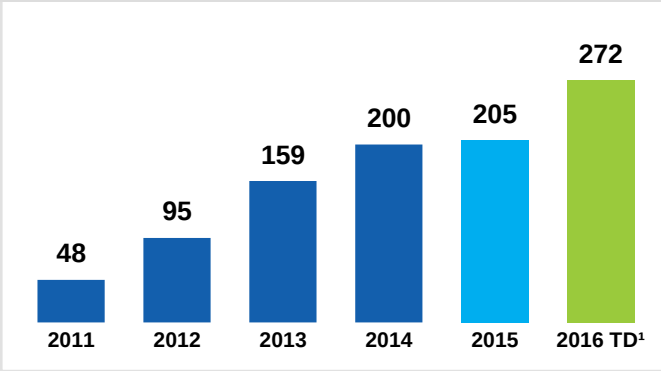
## CBOE Volatility Index (VIX) futures and options anchor volatility products

- **Most of 2015 was marked by historically low levels of volatility, punctuated by volatility spikes in 3Q**
- **VIX options ADV was down 9% from last year's record ADV**
- **VIX futures ADV was up 2% over 2014**
  - Sixth consecutive record
- **January ADV for VIX options and futures up 34% and 19%, respectively**

**VIX Options ADV**
(in thousands)




**VIX Futures ADV**
(in thousands)




¹Through January 31, 2016

# Leveraging VIX Methodology to Create New Products and Grow Index Product Line

## VIX Weeklys expand array of trading strategies and opportunities to trade volatility

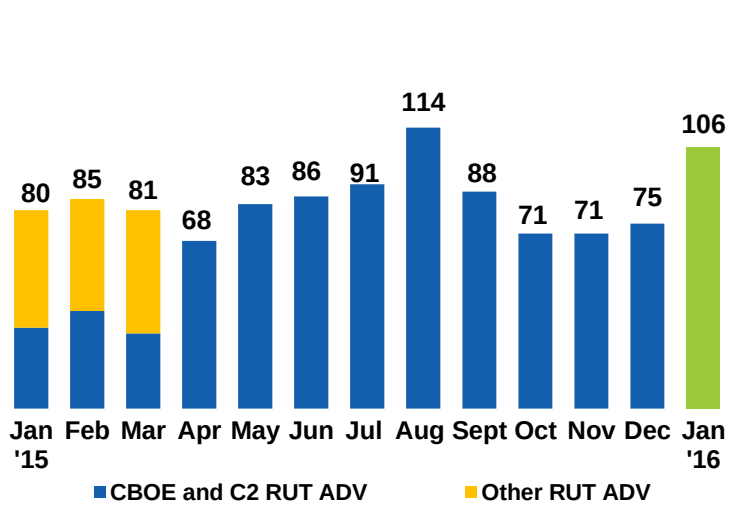
- **Launched VIX Weeklys futures in July, options in October**
- **VIX Weeklys options averaged nearly 35,000 contracts per day in 2015**
- **Plan to begin overnight dissemination of "spot" VIX Index**
  - Allows overseas investors to reference VIX during their regular trading hours

# Leveraging Partnerships With Index Providers to Grow Index Product Line

## Sole U. S. provider of major FTSE Russell Products, beginning with Russell 2000 Index (RUT) on April 1

- **Focused on further developing RUT marketplace**
- **Launched Russell 1000 Growth and Value indexes in October**
- **FTSE 100 and FTSE China 50 indexes to launch next month**

**RUT Options ADV Industrywide**
(in thousands)




Source: OCC and CBOE

# Forming Alliances that Leverage our Strengths

**Teamed with London Stock Exchange Group (LSEG) and major dealer banks to form CurveGlobal, a new interest rate derivatives platform**

- **Products will trade on the LSE Derivatives Market and clear through LCH.Clearnet**
- **Expected to provide more product choices, increased trading efficiencies and reduced transition costs**
- **CBOE plans to develop products suited for this venue and introduce the platform to our U.S. customer base**
- **Planned to launch in 2Q16**

CURVEGLOBAL

# Forming Alliances to Develop New Products and Markets

## Teamed with Environmental Financial Products (EFP) to launch American Financial Exchange (AFX), an interbank lending exchange

- **AFX is an electronic marketplace for small and mid-sized banks to lend and borrow short-term funds**
- **CBOE hosts and operates the AFX trading platform and also supports surveillance and membership services**
- **Total value of $326 million transacted in January, the first full month of trading**
- **In 2016, AFX plans to launch a 30-day unsecured loan product and a new transaction-based interest rate benchmark, Ameribor**

AFX

AMERICAN FINANCIAL EXCHANGE

# Expanding Our Global Customer Base

## Expanding outreach and investor education around the world

- **Launched the first extension of CBOE's Options Institute with Singapore Exchange (SGX) in December**
- **In 2015, expanded CBOE Risk Management Conference (RMC) to include Asia**
  - First RMC Asia held in Hong Kong in December
- **In 2016, CBOE plans to establish its first international business development outpost with the opening of an office in London**

# Expanding Options and Volatility Trading

## CBOE made a majority equity investment in Vest Financial (VEST), an investment advisor that provides options-centric products

- **Vest through its subsidiaries provides:**
  - Options-based investment advisory services through packaged products
  - Develops technology solutions for options-based investments
- **Vest allows for enhanced integration of CBOE's proprietary products, strategy indexes and options expertise with Vest's platform**
  - Substantially reduces the complexity of options trading
  - Provides investors with targeted protection, enhanced returns, and a level of predictability unattainable with most other investments

VEST
a CBOE company

# Focused on Advancing our Strategic Growth Initiatives

## Excited About Opportunities for 2016 and Beyond

### Strategic Initiatives

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

# Financial Review
## Alan Dean
*EVP, CFO and Treasurer*

# 4Q15 Financial Overview

| **Adjusted Basis[1]** (in millions, except EPS and RPC) | **4Q15** | **4Q14** | **$ Change** | **% Change** |
|---|---|---|---|---|
| Adjusted Operating Revenues | $154.0 | $166.5 | $(12.5) | -8% |
| Adjusted Operating Expenses | 80.1 | 77.7 | 2.4 | 3% |
| Adjusted Operating Income | $ 73.9 | $ 88.8 | $(14.9) | -17% |
| *Adjusted Operating Margin %* | *48.0%* | *53.4%* | | -540 bps |
| Adjusted Net Income Allocated to Common Stockholders | $ 48.9 | $ 53.6 | $ (4.7) | -9% |
| Adjusted Diluted EPS | $ 0.59 | $ 0.64 | $(0.05) | -8% |
| | | | | |
| Total ADV | 4.25 | 5.64 | | -25% |
| Revenue per Contract | $0.408 | $0.340 | $0.068 | 20% |

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

# Operating Revenue Down On Lower Trading Volume

## Key drivers:

- **Transaction fees down $11.9MM**
  - 25% decrease in trading volume
  - 20% increase in RPC
    - Shift in product mix
    - Lower volume discounts and incentives

| **Adjusted Operating Revenue[1]** (in millions) | **4Q15** | **4Q14** | **% Chg** |
|---|---|---|---|
| Transaction fees | $110.8 | $122.7 | -10% |
| Access fees | 13.2 | 14.5 | -9% |
| Exchange services and other fees | 11.8 | 9.4 | 25% |
| Market data fees | 7.3 | 7.7 | -5% |
| Regulatory fees[2] | 8.2 | 8.6 | -5% |
| Other revenue | 2.7 | 3.6 | -25% |
| **Total Adjusted Operating Revenue** | **$154.0** | **$166.5** | **-8%** |

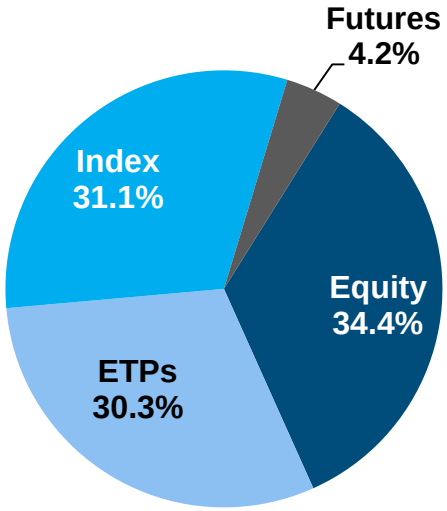
[1]Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

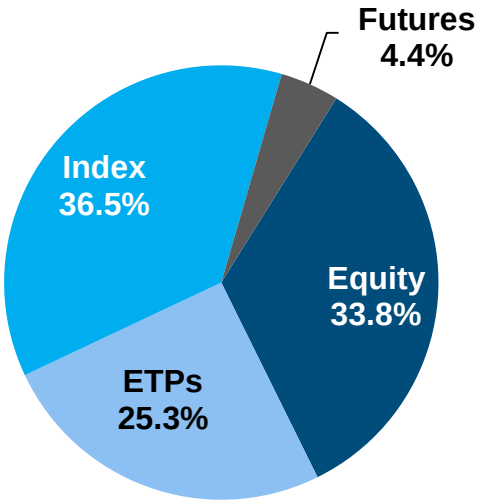
[2]Regulatory fees can only be used to cover expenses for the company's regulatory functions

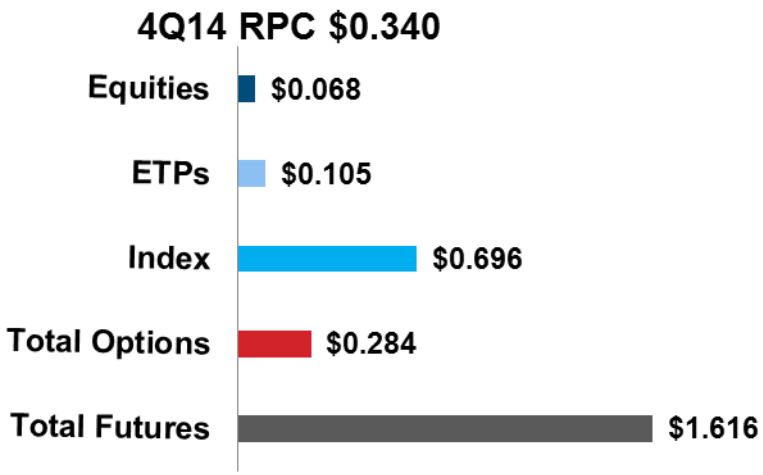
# RPC Increase Primarily Reflects Mix Shift and Lower Volume Discounts

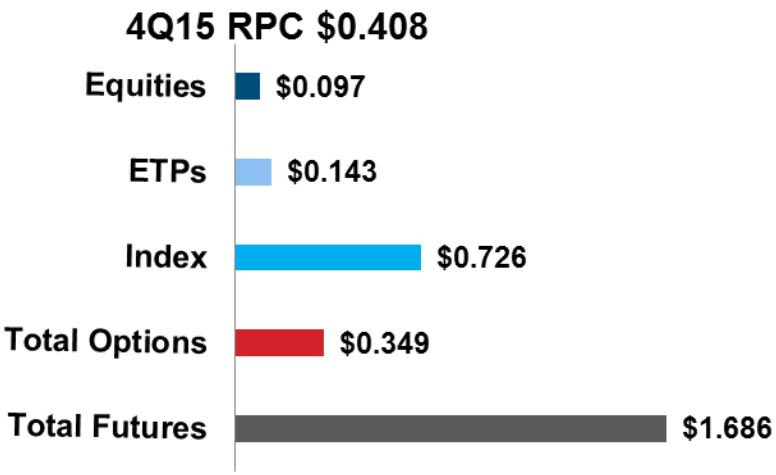
## Trading volume mix and RPC 4Q14 versus 4Q15

4Q14



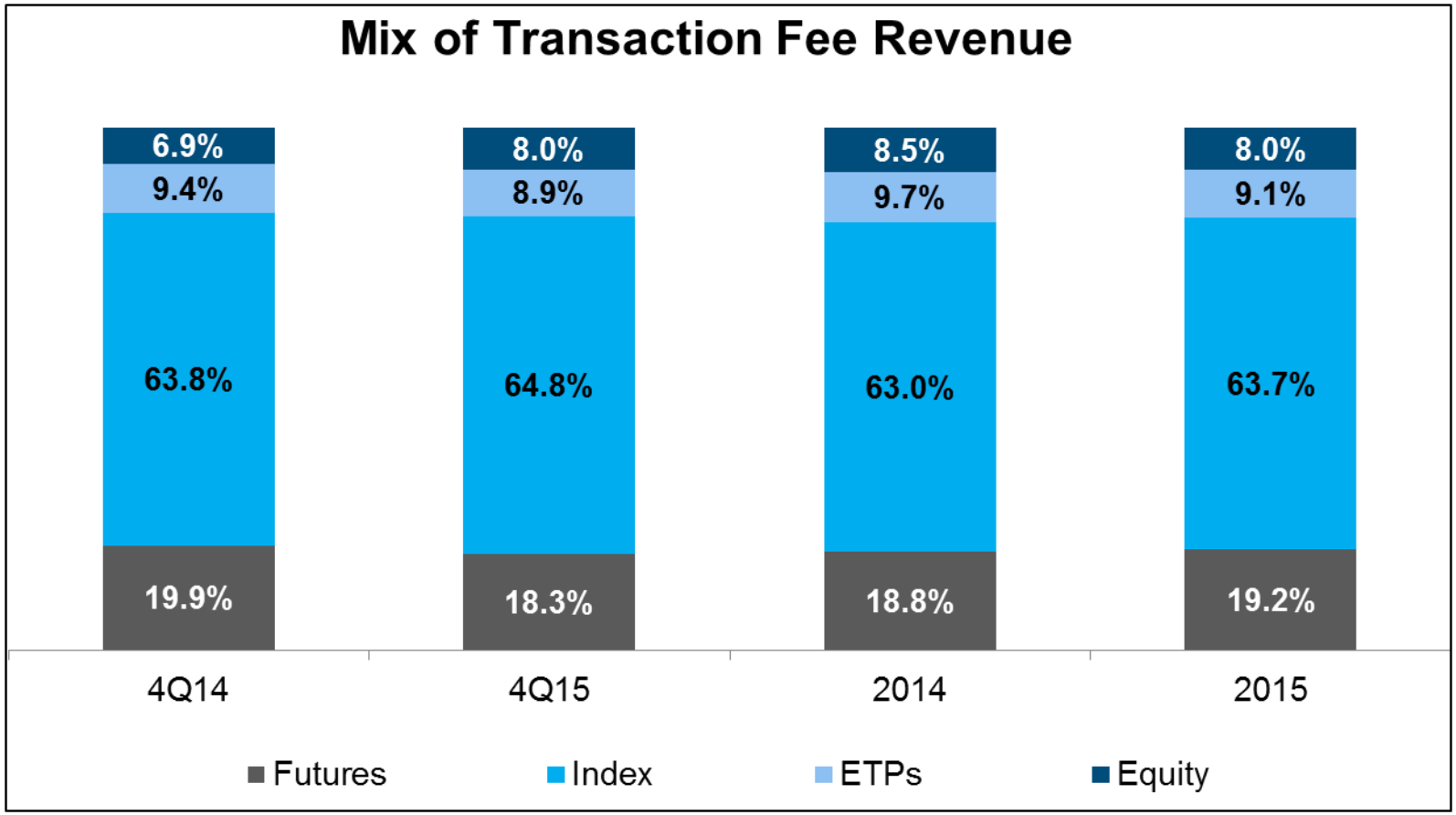



# Proprietary Products Account for Growing Percentage of Transaction Fee Revenue

**Index options and futures contracts accounted for 83.1% of transaction fees in 4Q15 and 82.9% for full-year 2015**



# Other Revenue Drivers

- **Access fees down $1.3MM**
  - Decrease in trading permits
- **Exchange services up $2.4MM**
  - Higher revenue from systems services and Livevol

| **Adjusted Operating Revenue[1]** (in millions) | **4Q15** | **4Q14** | **% Chg** |
|---|---|---|---|
| Transaction fees | $110.8 | $122.7 | -10% |
| Access fees | 13.2 | 14.5 | -9% |
| Exchange services and other fees | 11.8 | 9.4 | 25% |
| Market data fees | 7.3 | 7.7 | -5% |
| Regulatory fees | 8.2 | 8.6 | -5% |
| Other revenue | 2.7 | 3.6 | -25% |
| **Total Adjusted Operating Revenue** | **$154.0** | **$166.5** | **-8%** |

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

# Ongoing Focus on Expense Management

## Key drivers:

- **Professional fees and outside services up $4.4MM**
- **Depreciation and amortization up $1.1MM**
- **Royalty fees down $1.5MM**
- **Compensation and benefits down $0.7MM**

| Adjusted Operating Expenses[1] (in millions) | 4Q15 | 4Q14 | % Chg |
|---|---|---|---|
| Compensation and benefits | $26.8 | $27.5 | -2% |
| Depreciation and amortization | 12.2 | 11.1 | 10% |
| Technology support services | 5.2 | 4.9 | 6% |
| Professional fees and outside services | 12.9 | 8.5 | 52% |
| Royalty fees | 17.8 | 19.3 | -8% |
| Order routing | 0.3 | 0.9 | -66% |
| Travel and promotional | 2.5 | 2.7 | -7% |
| Facilities costs | 1.4 | 1.4 | -- |
| Other expenses | 0.9 | 1.4 | -36% |
| **Total Adjusted Operating Expenses** | **$80.1** | **$77.7** | **3%** |

[1]Adjusted to reflect the impact of certain items. See appendix for "Non-GAAP Information."
May not foot due to rounding.

# Core Operating Expenses Up 7% in 4Q15 vs 4Q14

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## Key drivers:

- **Professional fees and outside services up $4.4MM**
  - Outsourcing of certain regulatory services
- **Compensations and benefits down $0.7MM**
  - Lower salaries resulting from a decline in staffing

| Core Operating Expenses[1] (in millions) | 4Q15 | 4Q14 | % Chg |
|---|---|---|---|
| Compensation and benefits | $26.8 | $27.5 | -2% |
| Technology support services | 5.2 | 4.9 | 5% |
| Professional fees and outside services | 12.9 | 8.5 | 52% |
| Travel and promotional | 2.5 | 2.7 | -7% |
| Facilities costs | 1.4 | 1.4 | - |
| Other expenses | 0.9 | 1.4 | -36% |
| **Total Adjusted Core Operating Expenses** | **$49.7** | **$46.5** | **7%** |

[1]Adjusted to reflect the impact of certain items. See appendix for "Non-GAAP Information."
May not foot due to rounding.

# Volume-Based Expenses

- **Royalty fees down $1.5MM**
  - Lower trading volume in licensed products in 4Q15 versus 4Q14
    - Index options volume down 12%
    - VIX futures volume down 20%
- **Order routing down $0.6MM**
  - Lower trading volume in multiply-listed options
    - Equities and exchange-traded products volume down 31%

| **Volume-Based Expenses** (in millions) | **4Q15** | **4Q14** | **% Chg** |
|---|---|---|---|
| Royalty fees | $ 17.8 | $ 19.3 | -8% |
| Order routing | 0.3 | 0.9 | -66% |
| **Total** | $ 18.1 | $ 20.2 | -10% |

# Fourth Quarter and Full-Year Effective Tax Rate

## 4Q15 GAAP and adjusted effective tax rate

- Decrease in effective tax rate for 2015 primarily resulted from the preferential tax treatment of dividend income recognized in the fourth quarter of 2015
- 4Q14's adjusted effective tax rate excluded benefit from the change in assessments of uncertain tax positions related to prior periods

| Effective tax rate | 4Q15 | 4Q14 | Year 2015 | Year 2014 |
|---|---|---|---|---|
| GAAP | 36.7% | 41.2% | 36.7% | 38.7% |
| Adjusted[1] | 36.7% | 39.4% | 38.0% | 38.2% |

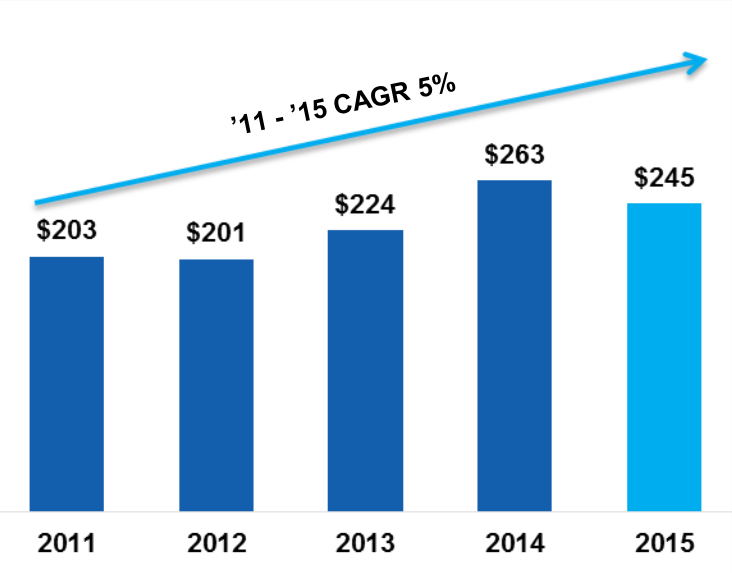
[1]Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

# Enhancing Shareholder Value

## Strong cash flow generation and disciplined approach to managing cash

- **Generated $245MM in operating cash flow**
- **Capital outlays for 2015 include:**
  - $73 million to pay dividends
  - $135 million to repurchase shares[1]
  - $39 million in capital expenditures
- **$102MM of cash at Dec. 31, 2015**
- **$57MM remaining on share repurchase authorizations at Dec. 31, 2015**

**Operating Cash Flow** ($ in millions)



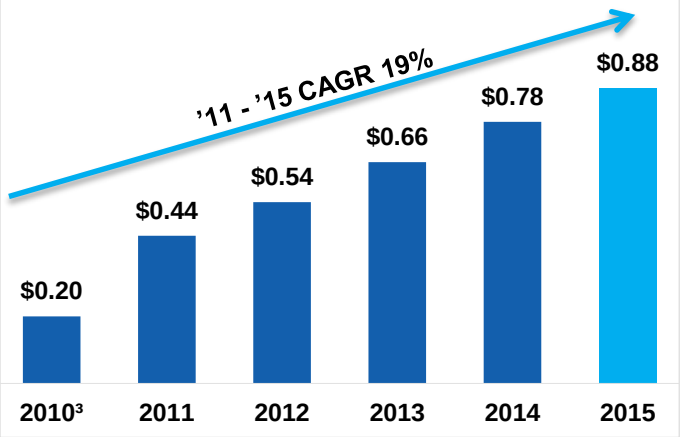

[1]Includes stock purchased under repurchase plan and from employees

# Committed to Returning Capital to Shareholders

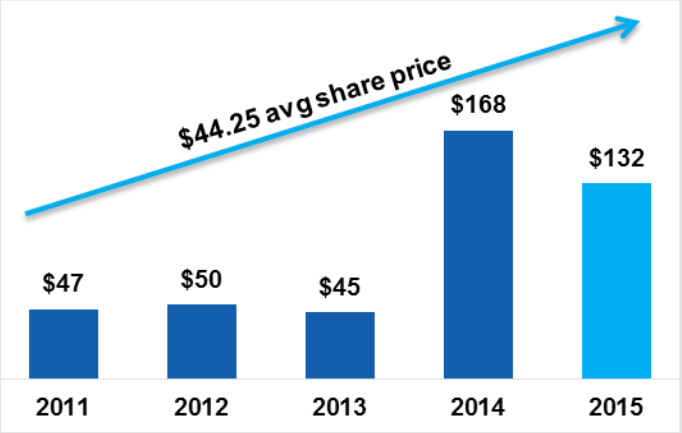
## Capital allocation philosophy

- Reinvest in our business to fund growth
- Sustainable dividends and steady growth
- Opportunistic share repurchases

**Annual Dividend Rate Per Share[1,2]**




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




[1]Excludes special dividends
[2]Starting in 2016, dividend declarations may not align with quarterly earnings announcements due to the timing of Board actions
[3]Dividends paid for last two quarters of the year, post IPO

# 2016 Full-Year Guidance

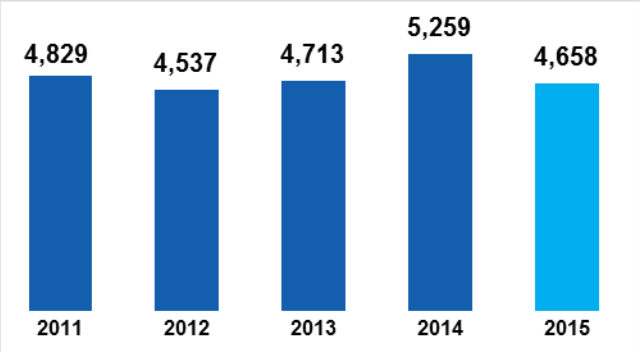
| As of February 3, 2016<br>($ in millions) | 2016 Full-Year Guidance | 2015 Actual |
|---|---|---|
| Core operating expenses | $211 to $215 | $195 |
| Continuing stock-based compensation[1] | $13.5 | $12 |
| Depreciation and amortization | $46 to $48 | $46 |
| Capital expenditures | $47 to $49 | $39 |
| Effective tax rate | 38.5% to 39.5% | 38.0%[2] |

[1]Stock-based compensation expense is included in employee costs
[2]Presented on a non-GAAP basis for comparison purposes

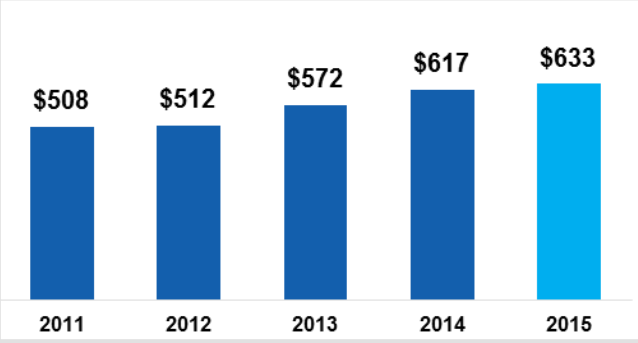
# Strong Track Record of Organic Growth

## Focused on executing strategic initiatives while effectively managing expenses and deploying capital

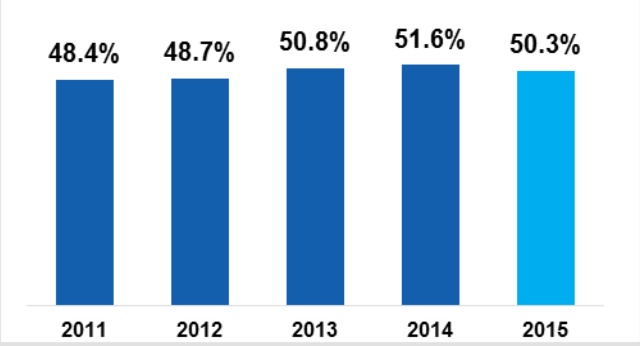
### Total ADV (in thousands)



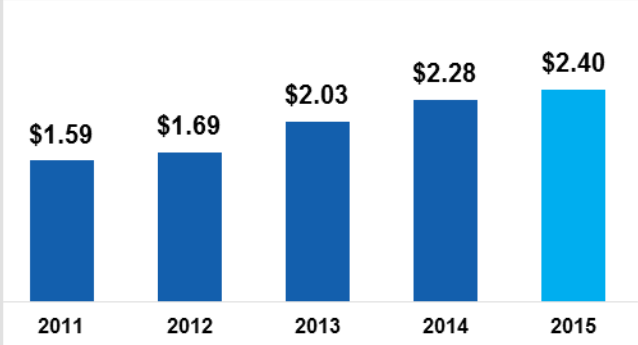

### Adjusted Operating Revenue[1]
(in millions)




### Adjusted Operating Margin[1]




### Adjusted Diluted EPS[1]




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

# Questions & Answers

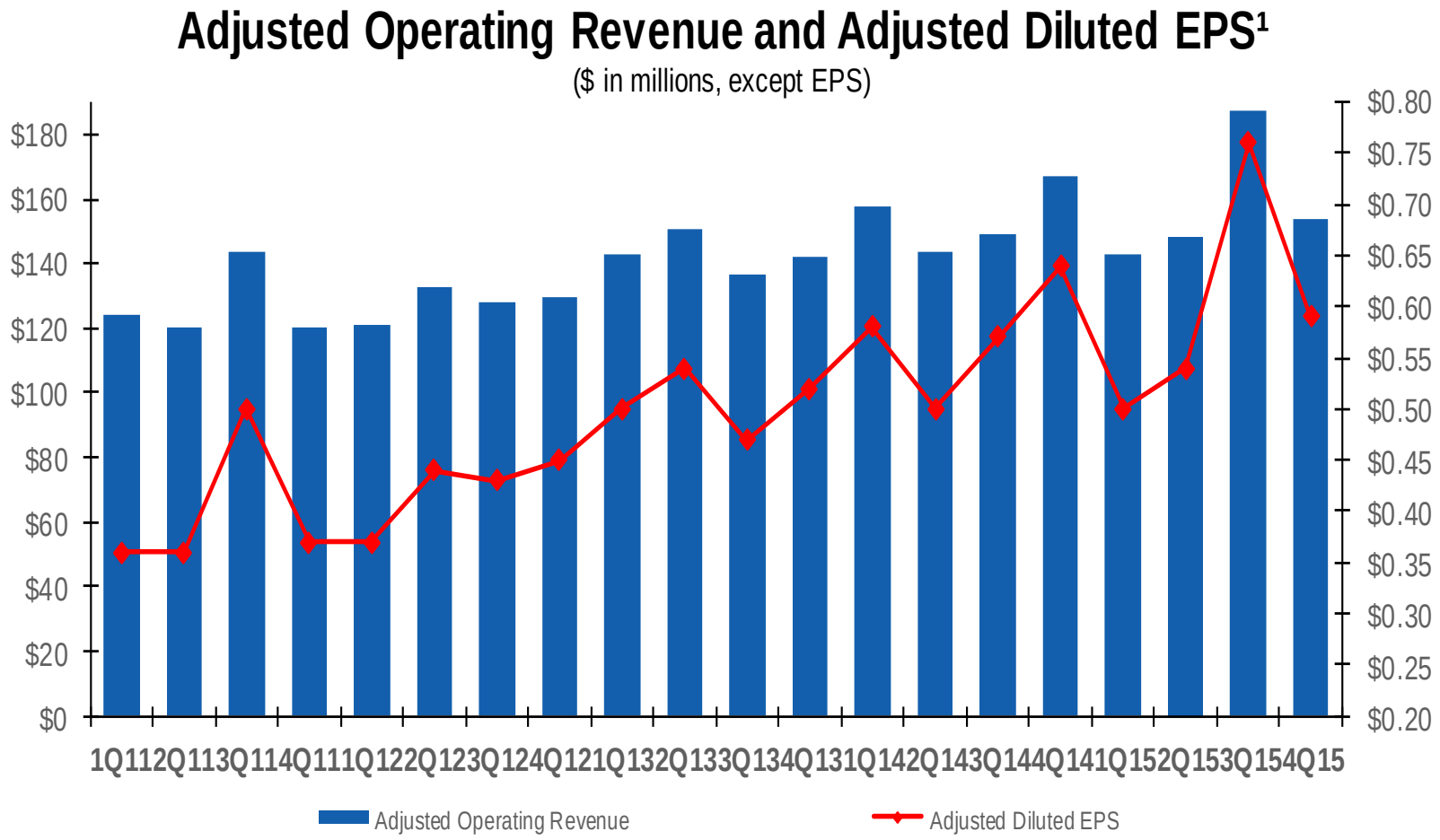
# Appendix Materials

# 2015 Financial Overview

| **Adjusted Basis[1]** (in millions, except EPS and RPC) | **2015** | **2014** | **$ Change** | **% Change** |
|---|---|---|---|---|
| Adjusted Operating Revenues | $632.5 | $617.2 | $ 15.3 | 2% |
| Adjusted Operating Expenses | 314.6 | 299.0 | 15.6 | 5% |
| Adjusted Operating Income | $317.9 | $318.2 | $ ( 0.3) | -- |
| *Operating Margin %* | *50.3%* | *51.6%* | | -130 bps |
| Adjusted Net Income Allocated to Common Stockholders | $198.9 | $194.5 | $ 4.4 | 2% |
| Adjusted Diluted EPS | $ 2.40 | $ 2.28 | $ 0.12 | 5% |
| | | | | |
| Total ADV | 4.66 | 5.26 | | -11% |
| Revenue per Contract | $0.388 | $0.330 | $0.058 | 18% |

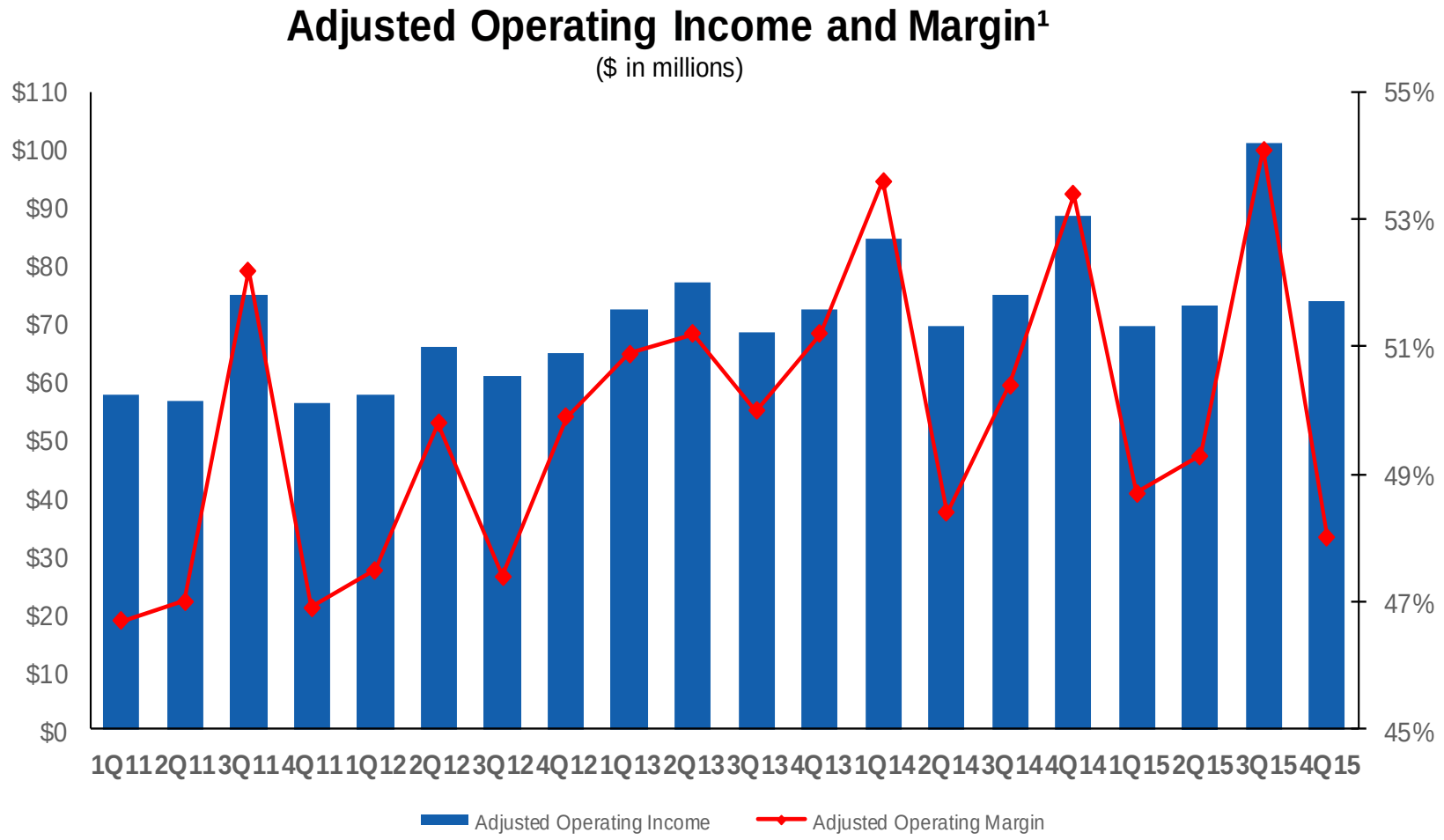
[1]Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

# Optimistic About Long-Term Growth Prospects




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

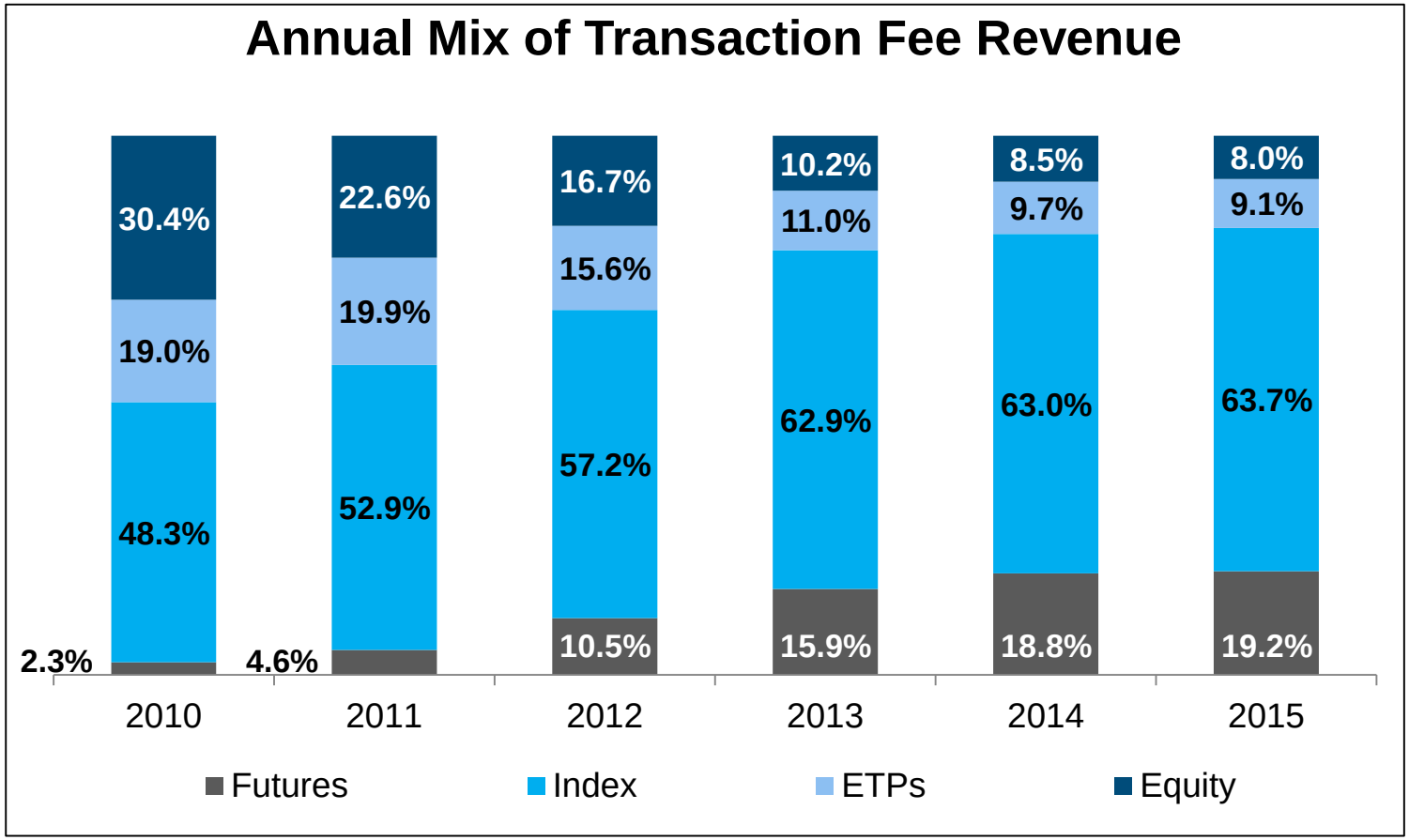
# Well Positioned to Gain Additional Leverage




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

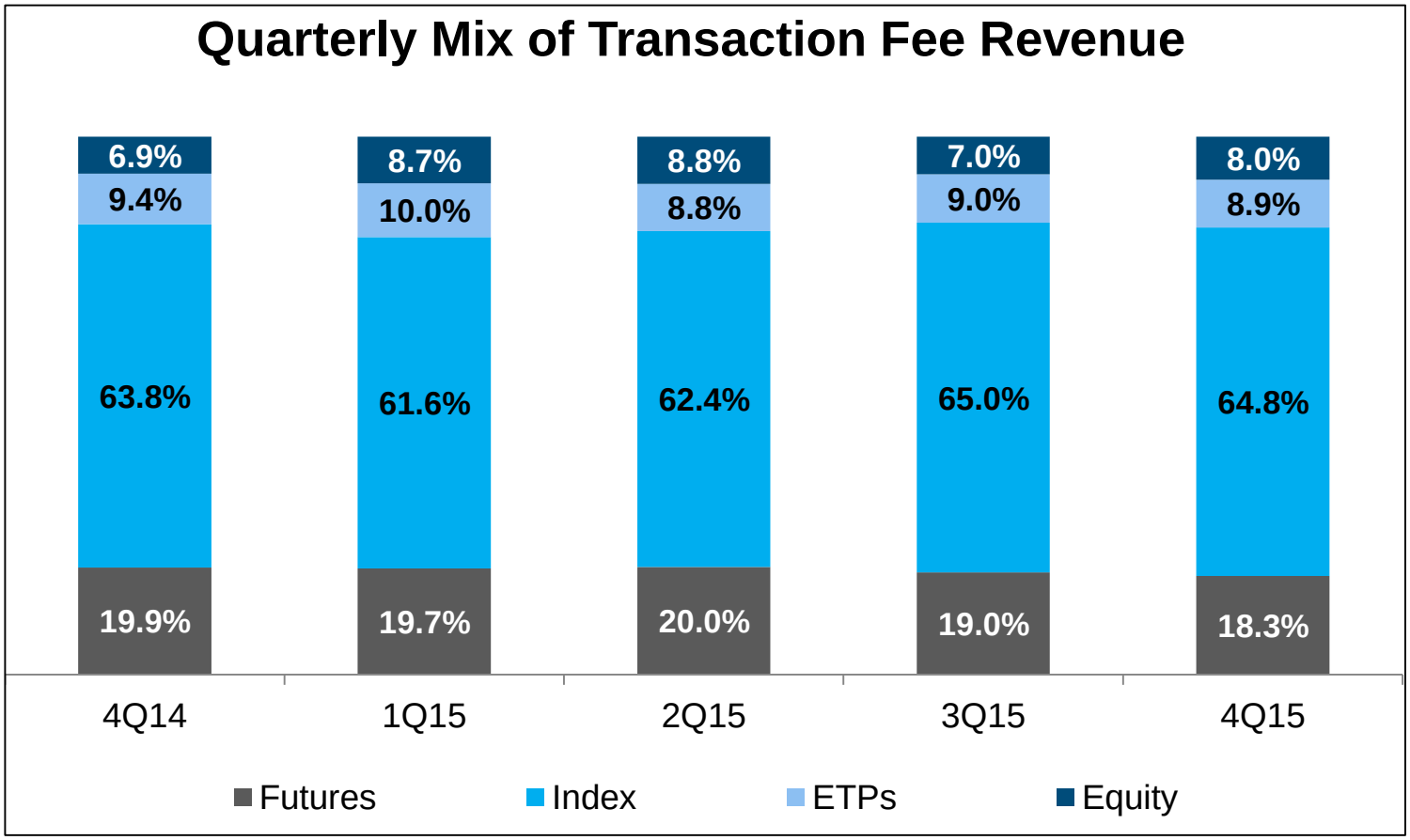
# Proprietary Products Account for Growing Percentage of Transaction Fee Revenue

## Index options and futures contracts account for 82.9% of transaction fees in 2015, up from 50.6% in 2010

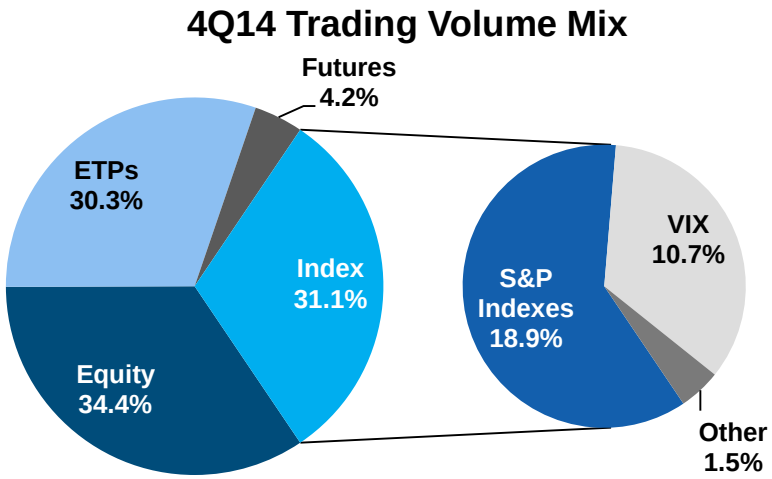


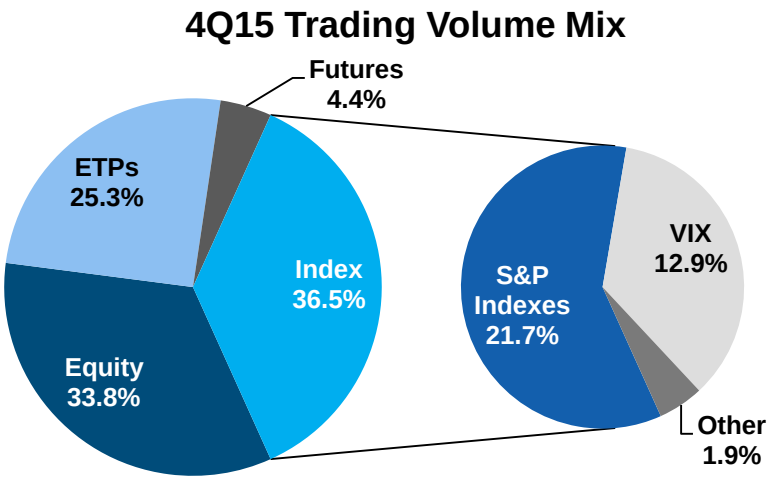
# Proprietary Products Account for Growing Percentage of Transaction Fee Revenue

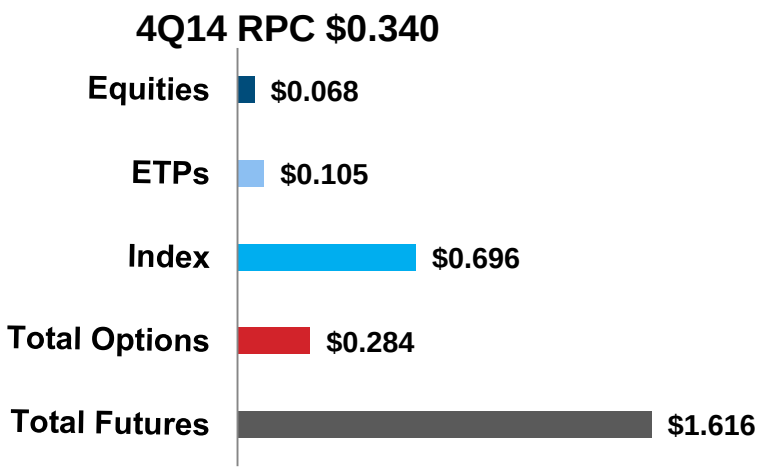
## Index options and futures contracts accounted for 82.1% of transaction fees in 4Q15 versus 83.7% in 4Q14

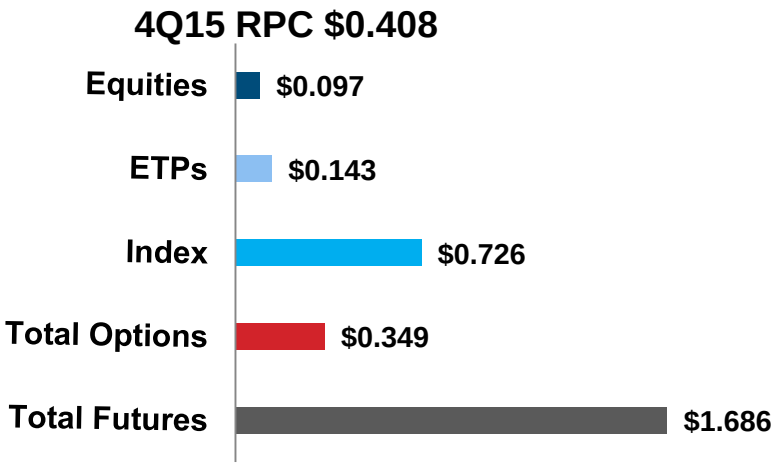


# Increase in Rate Per Contract (RPC) Primarily Reflects Favorable Shift in Mix of Products Traded



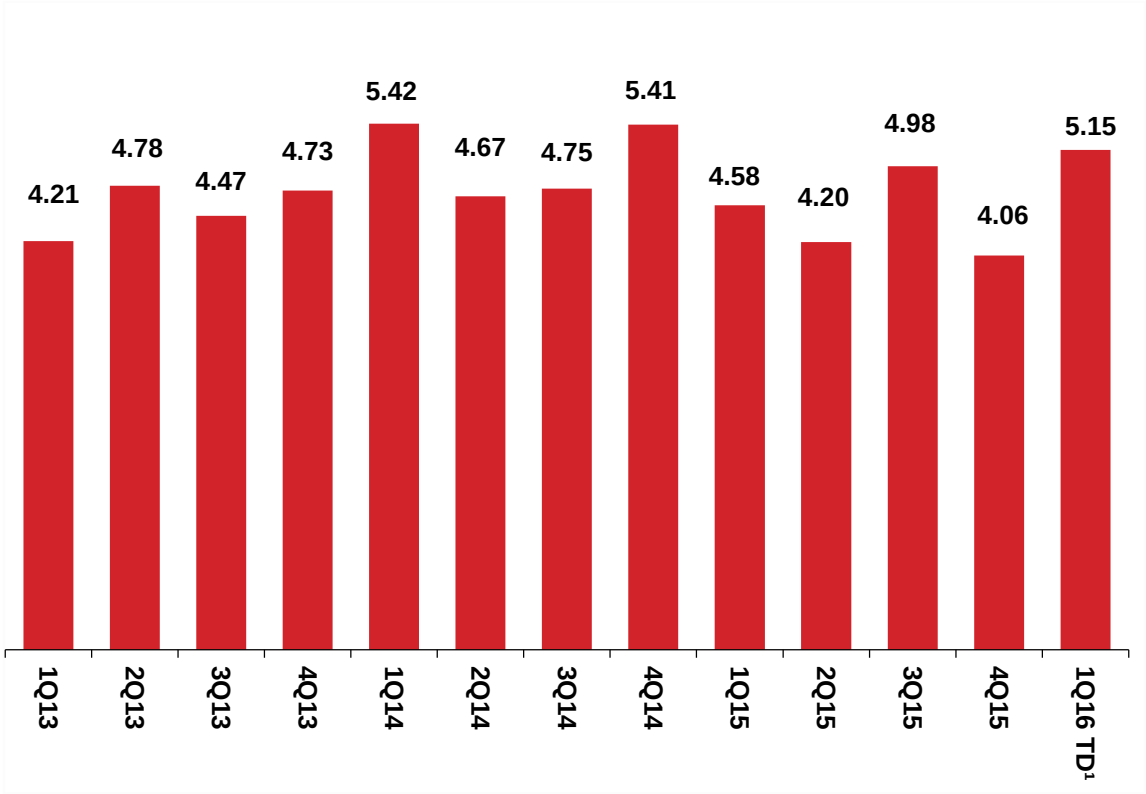



# Quarterly Options ADV

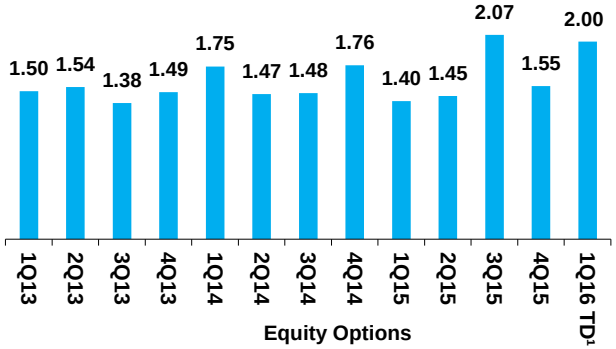
## CBOE and C2 Quarterly Options ADV

(in millions)

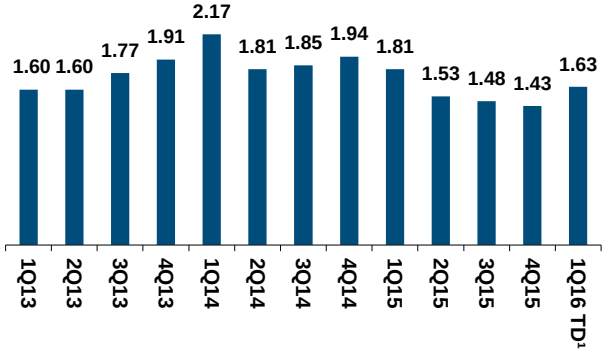



[1]Through January 31, 2016

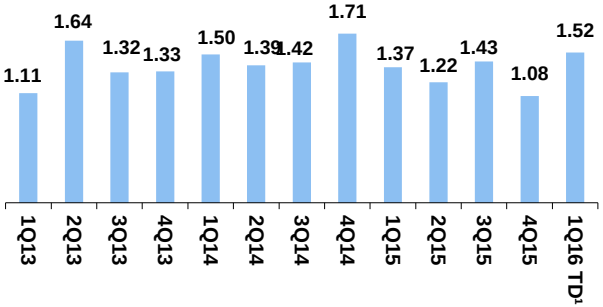
Index Options




Equity Options




Options on ETPs



# CBOE Holdings Rolling 3-Month RPC

| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

| 2012 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Equities | $0.151 | $0.128 | $0.110 | $0.112 | $0.117 | $0.123 | $0.124 | $0.122 | $0.118 | $0.121 | $0.124 | $0.134 |
| Indexes | 0.640 | 0.651 | 0.658 | 0.667 | 0.673 | 0.677 | 0.680 | 0.684 | 0.682 | 0.675 | 0.670 | 0.670 |
| Exchange-traded products | 0.206 | 0.188 | 0.171 | 0.172 | 0.176 | 0.180 | 0.177 | 0.177 | 0.177 | 0.180 | 0.183 | 0.186 |
| Total options RPC | 0.297 | 0.275 | 0.261 | 0.267 | 0.279 | 0.288 | 0.289 | 0.286 | 0.287 | 0.294 | 0.309 | 0.322 |
| Futures | 1.474 | 1.610 | 1.697 | 1.655 | 1.650 | 1.607 | 1.598 | 1.626 | 1.606 | 1.573 | 1.473 | 1.442 |
| Total RPC | $0.308 | $0.289 | $0.280 | $0.290 | $0.304 | $0.314 | $0.316 | $0.315 | $0.317 | $0.326 | $0.342 | $0.355 |

# Quarterly Core Operating Expenses[1]

($ in thousands)

| | 4Q 2015 | % rev | 3Q 2015 | % rev | 2Q 2015 | % rev | 1Q 2015 | % rev | 4Q 2014 | % rev |
|---|---|---|---|---|---|---|---|---|---|---|
| **Total Operating Expenses** | $80,052 | 52% | $85,925 | 43% | $75,355 | 51% | $73,286 | 51% | $79,525 | 48% |
| **Less:** | | | | | | | | | | |
| Depreciation and amortization | 12,202 | 8% | 12,394 | 7% | 11,275 | 8% | 10,402 | 7% | 11,053 | 7% |
| Severance expense | - | - | - | - | - | - | - | - | 1,863 | 1% |
| **Volume-based expenses:** | | | | | | | | | | |
| Royalty fees | 17,830 | 12% | 21,840 | 10% | 16,755 | 11% | 14,150 | 10% | 19,266 | 12% |
| Order routing | 299 | 0% | 581 | - | 627 | 0% | 787 | 1% | 874 | 1% |
| **Core Operating Expenses (non-GAAP)[1]:** | **$49,721** | **32%** | **$51,110** | **27%** | **$46,698** | **31%** | **$47,947** | **34%** | **$46,469** | **28%** |
| Less: Continuing stock-based compensation | 3,194 | 2% | 3,185 | 2% | 3,147 | 2% | 2,655 | 2% | 2,098 | 1% |
| **Core Operating Expenses excluding continuing stock-based compensation (non-GAAP)[1]:** | **$46,527** | **30%** | **$47,925** | **25%** | **$43,551** | **29%** | **$45,292** | **32%** | **$44,371** | **27%** |
| **Core Operating Expense Detail:** | | | | | | | | | | |
| Compensation and benefits | $26,768 | 17% | $29,583 | 14% | $24,136 | 16% | $25,439 | 18% | $27,493 | 17% |
| Technology support services | 5,182 | 3% | 5,342 | 3% | 4,813 | 3% | 5,325 | 4% | 4,915 | 3% |
| Profession fees and outside services | 12,897 | 8% | 12,619 | 7% | 12,594 | 8% | 11,950 | 8% | 8,539 | 5% |
| Travel and promotional expenses | 2,548 | 2% | 1,407 | 1% | 2,526 | 2% | 2,501 | 2% | 2,727 | 2% |
| Facilities costs | 1,446 | 1% | 874 | - | 1,293 | 1% | 1,384 | 1% | 1,445 | 1% |
| Other expenses | 880 | 1% | 1,285 | 0% | 1,336 | 1% | 1,348 | 1% | 1,350 | 1% |
| Total | $49,721 | 32% | $51,110 | 27% | $46,698 | 31% | $47,947 | 34% | $46,469 | 28% |
| Number of full-time employees at quarter end | 564 | | 553 | | 532 | | 528 | | 520 | |

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

May not foot due to rounding

# Annual Core Operating Expenses[1]

($ 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 | |

[1]Please 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%** |

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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: Sevance 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

# 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 effective tax rate, adjusted net income, 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 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.

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