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# Fourth Quarter 2014 Earnings Presentation

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February 6, 2015



# 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*

# Forward-Looking Statements

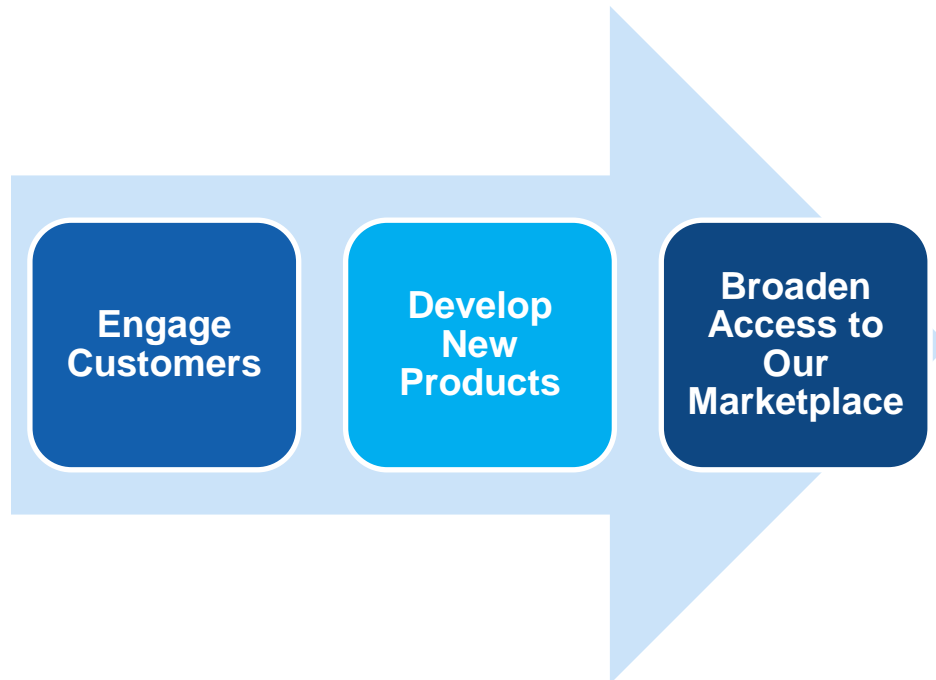
*This presentation may contain forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are those statements that reflect our expectations, assumptions or projections about the future and involve a number of risks and uncertainties. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause actual results 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 the amount of trading volumes or a shift in the mix of products traded on our exchanges; the accuracy of our estimates and expectations; legislative or regulatory changes, including heightened capital requirements for some of our customers; increasing competition by foreign and domestic entities; 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 order transaction traffic without failure or degradation of performance of our systems; our ability to protect our systems and communication networks from security risks, including cyber-attacks; economic, political and market conditions; our ability to maintain access fee revenues; our ability to meet our compliance obligations; our ability to attract and retain skilled management and other personnel; our ability to maintain 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 SEC, including in our Annual Report on Form 10-K for the year ended December 31, 2013 and other filings made from time to time with the SEC.*

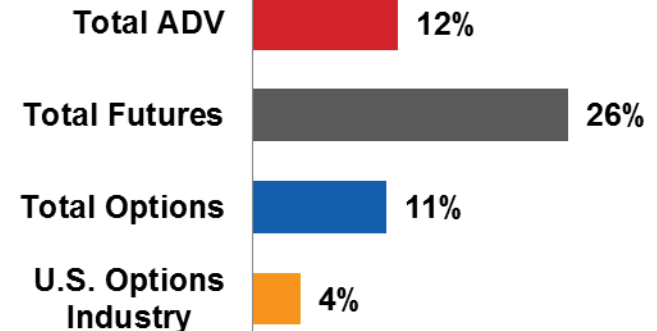
**➤ Strategic Review**  
**Edward Tilly**  
*CEO*

# 2014 Marks Fourth Consecutive Year of Record Financial Results

Record trading volume, particularly in our proprietary products, drove new highs in key financial metrics



## ADV Growth 2014 vs 2013

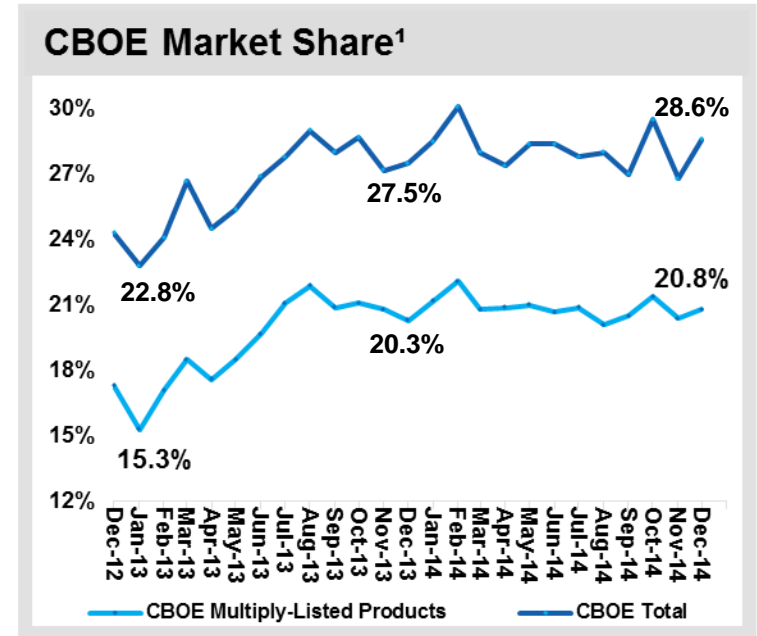


# Optimizing Revenue and Market Share in Multiply-Listed Options

## Focused on being among the leaders in options market share

### ► In December 2014:

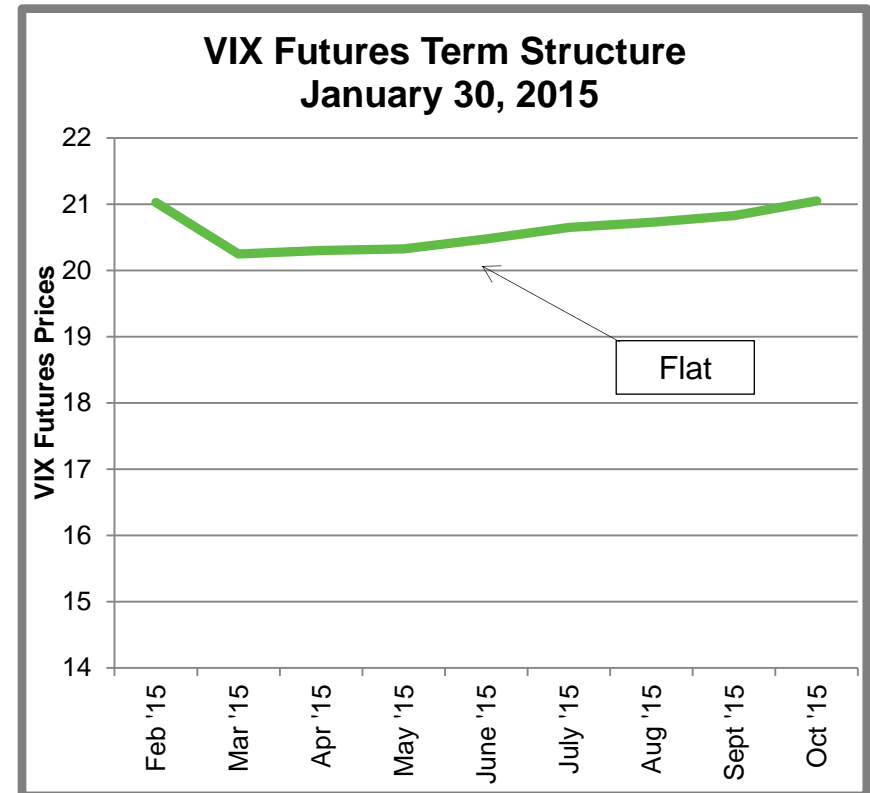
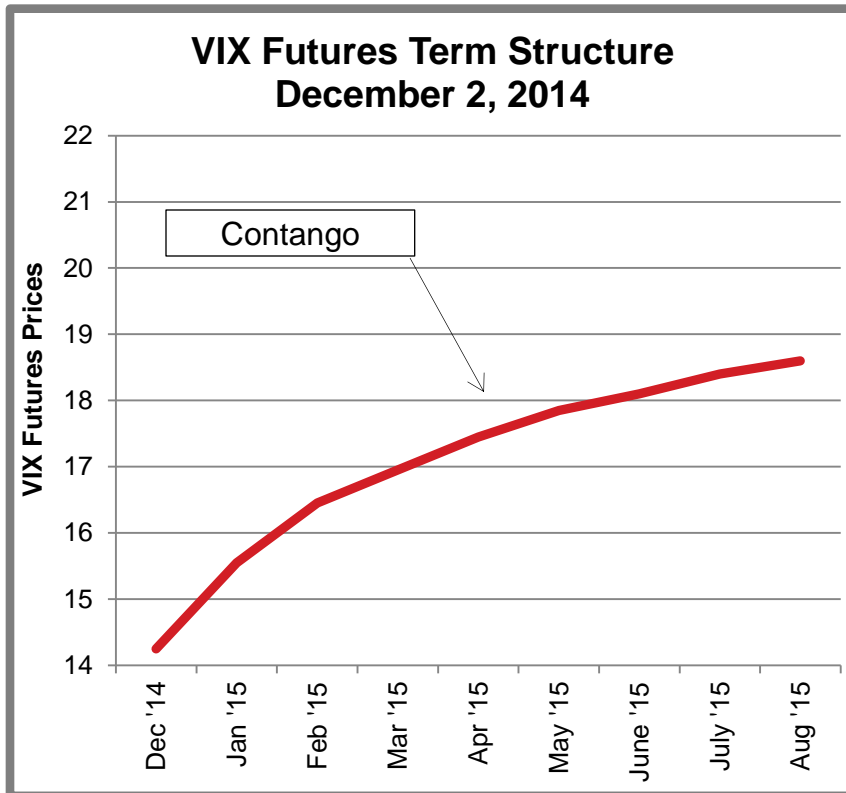
- CBOE total market share of 28.6% versus 27.5% in December 2013
- CBOE multiply-listed market share of 20.8% versus 20.3% in December 2013
- CBOE & C2 accounted for 30.6% of industry volume; up versus 29.3% in December 2013



<sup>1</sup>Market share stats exclude dividend trades

# Positive Momentum Carried into 2015

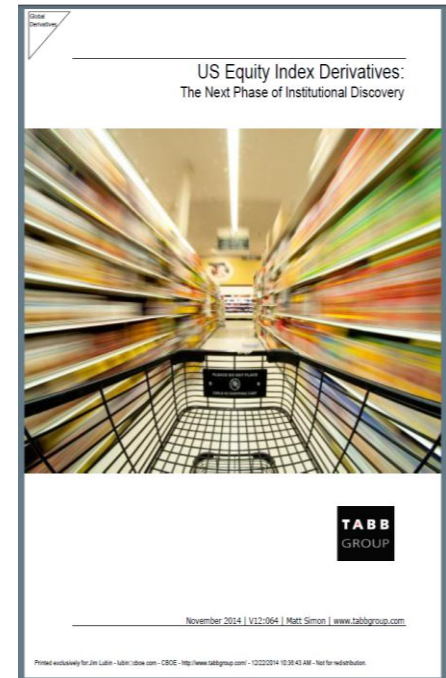
- **Total ADV of 5.4MM in January, up 5% versus December 2014**
  - Strong volume continued in SPX options and VIX futures
  - Flat VIX term structure impacted VIX options trading in January



# Use of Equity Derivatives Expected to Continue to Grow

## TABB Group study highlights strong growth in U.S. Equity Index derivatives over past 5 years

- TABB projects use of equity index derivatives to increase 6% in 2015
- Over 90% of asset managers surveyed plan to increase use of equity index derivatives this year
- Reasons for increased usage included:
  - Market structure changes in both OTC and cash markets
  - Inherent utility and versatility of the products



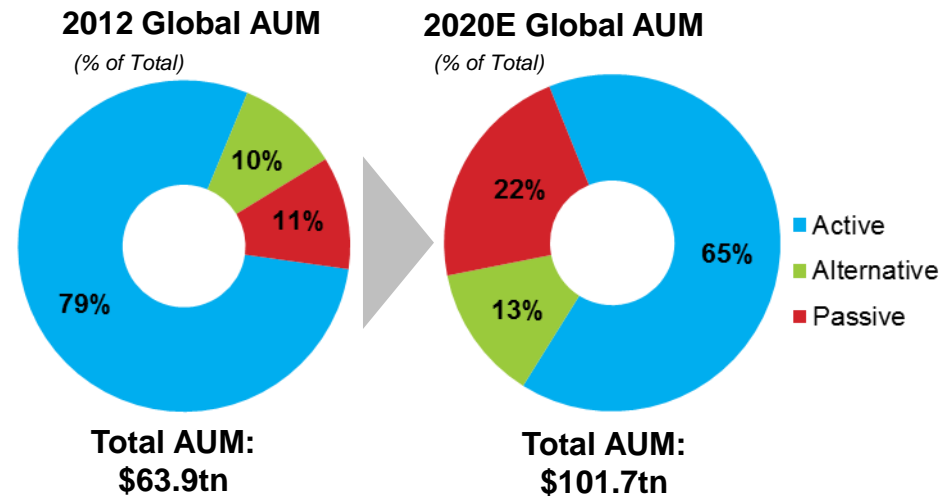


# Use of Equity Derivatives Expected to Continue to Grow

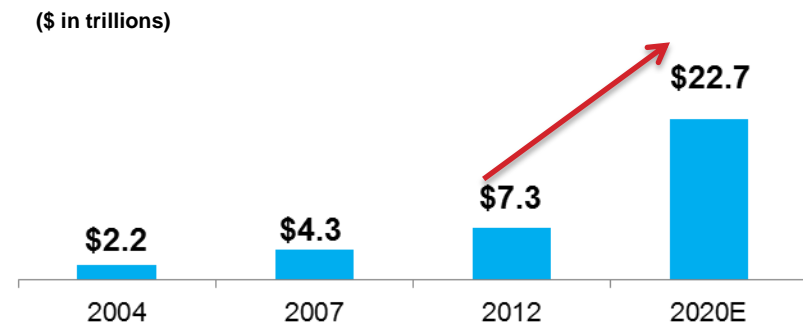
## Study shows ongoing shift from active to passive investments

- Passive assets more than tripled from 2004 to 2012
- Expect passive assets to triple again from 2012 to 2020
- Expect passive assets to shift from 11% of global AUM in 2012 to 22% in 2020
- Shift expected to drive increase in index options and futures trading

### Share of Global Assets (2012 / 2020E)



### Growth in Global Passive Assets (2004-2020E)



Source: PwC

# Expanding and Leveraging Partnerships with Index Providers

## Expanding Index Complex

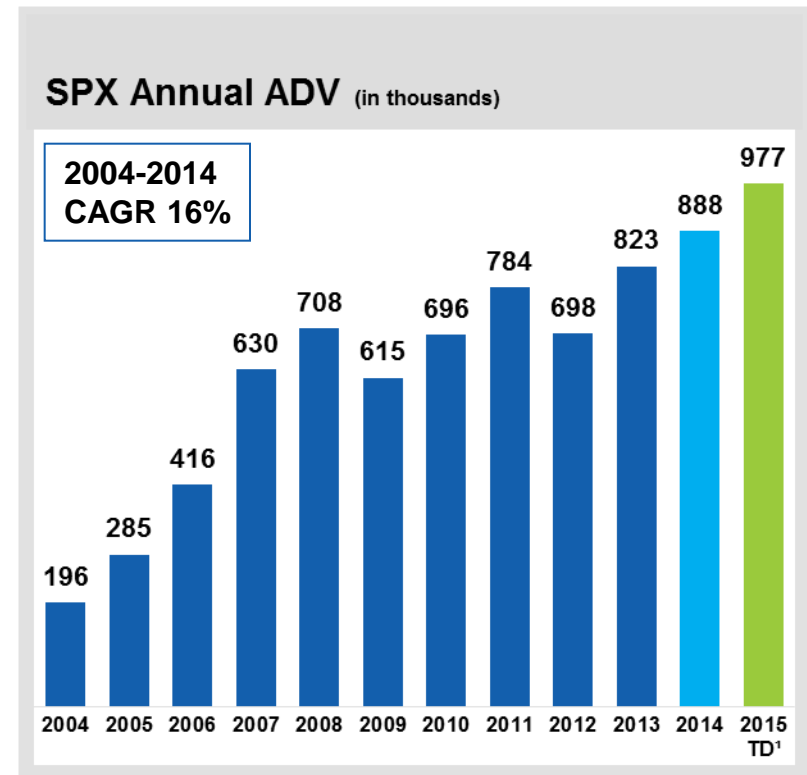
- **New licensing agreement with MSCI**
- **Combining MSCI's experience in global benchmark indexes with CBOE's leadership in developing and trading successful index options**
- **CBOE only U.S. exchange for trading MSCI Index options**
- **Launch two of MSCI's best-known indexes in first quarter:**
  - MSCI EAFE Index (Europe, Australasia, Far East)
  - MSCI Emerging Markets Index
  - 4 others to follow later in 2015
- **MSCI volatility products a future possibility**



# Developing New Products While Leveraging Current Products

## CBOE offers the widest array of index options and volatility products

- ▶ Committed to tapping growth opportunities in current index product mix
- ▶ Intensifying educational efforts to grow trading in SPX options
  - Institutional investors
    - OTC participants
    - Fund managers
    - Overseas investors



¹Through January 31, 2015

# Increasing Access to Our Marketplace

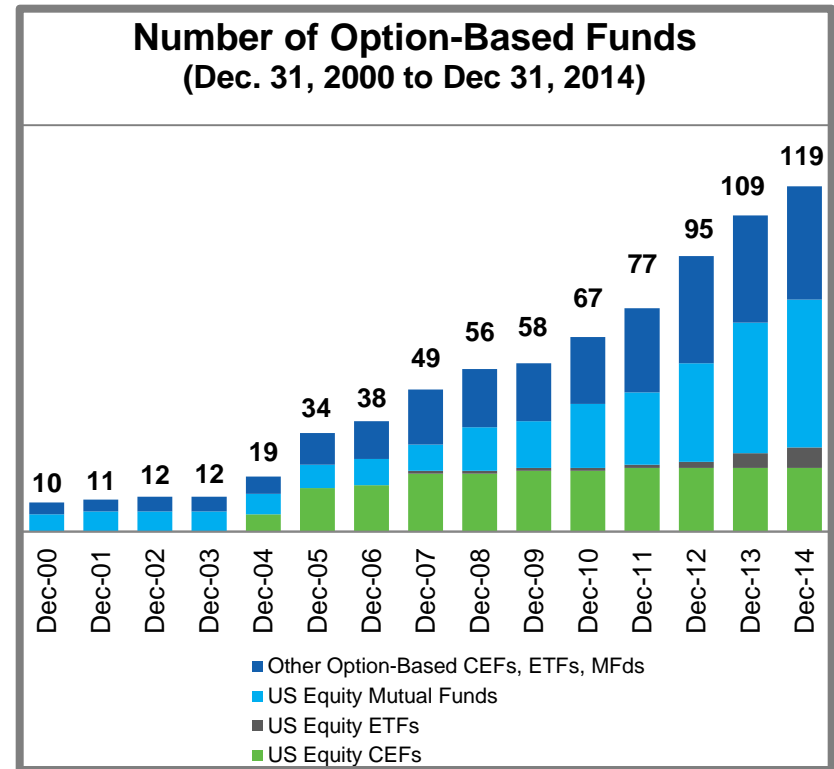
## Expanding SPX marketplace globally in 2015

### ➤ Key findings of new white paper on fund use of options

- Number of option-based funds growing
- Option-based funds had higher risk-adjusted returns and lower volatility

### ➤ Plan to launch extended hours for SPX options on March 9, following VIX options on March 2

- Hours: 2:00 a.m. to 8:15 a.m., CT, Monday through Friday



Sources: Morningstar and Bloomberg

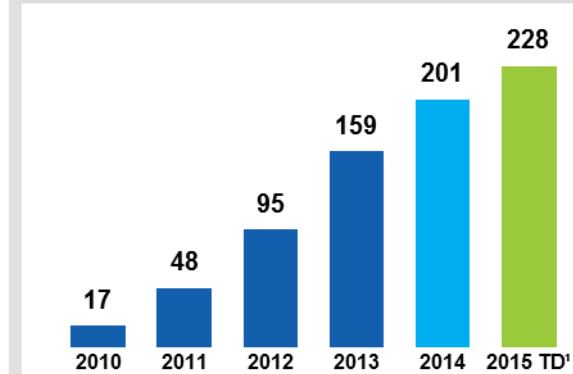
# Expanding and Growing Volatility Space

## VIX futures and options post record trading volume in 2014

- VIX futures ADV up 26% in 2014
- VIX options ADV up 11% in 2014
- Diversifying volatility product line
  - Calculating and disseminating values for three new volatility indexes on CME Group Products:
    - Dollar/Euro
    - Dollar/British Pound
    - Dollar/Japanese Yen
- Committed to developing markets for new volatility products:
  - Short-term VIX futures and options
  - 10-year U.S. Treasury Note VIX (VXTYN)

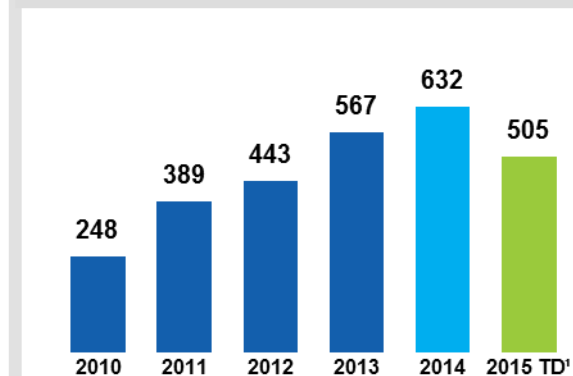
### VIX Futures ADV

(in thousands)



### VIX Options ADV

(in thousands)

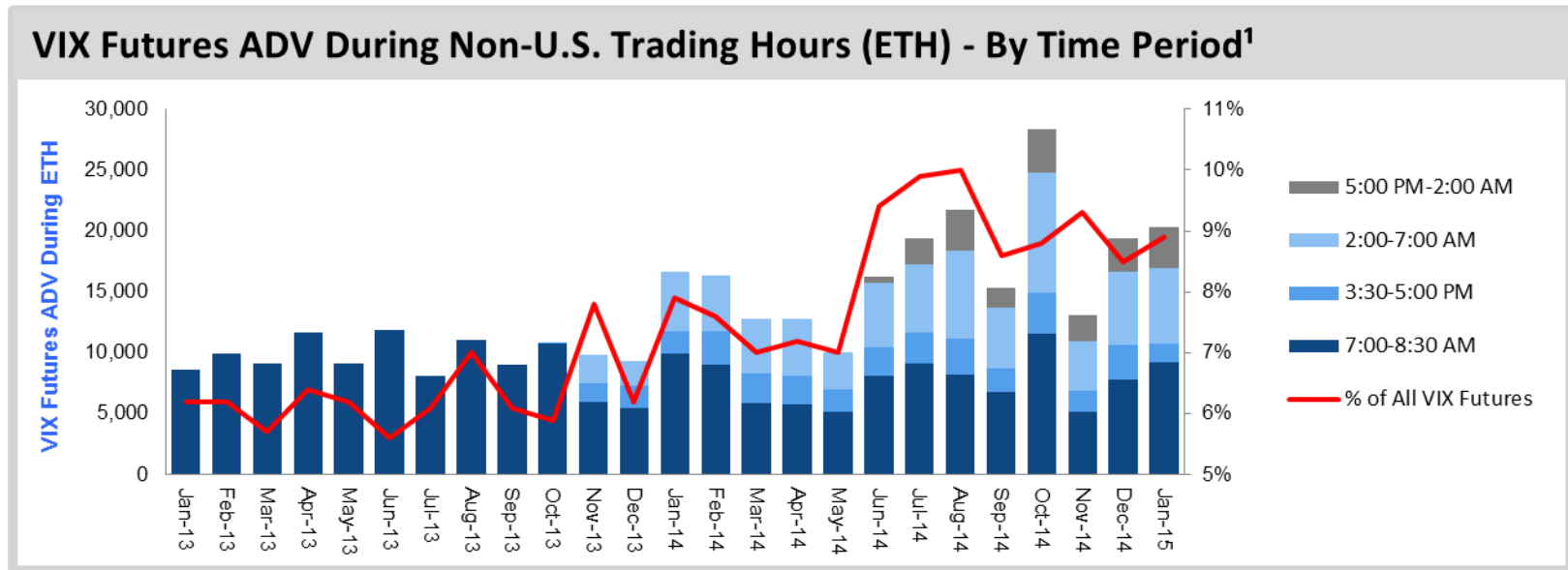


<sup>1</sup>Through January 31, 2015

# Broadening Access to Our Marketplace

Over 9% of VIX futures trading takes place during non-U.S. trading hours since full implementation of 24-hour trading<sup>1</sup>

- Plan to extend trading hours for VIX options on March 2 and SPX options on March 9
  - New session will run from 2:00 a.m. to 8:15 a.m. CT, Monday through Friday

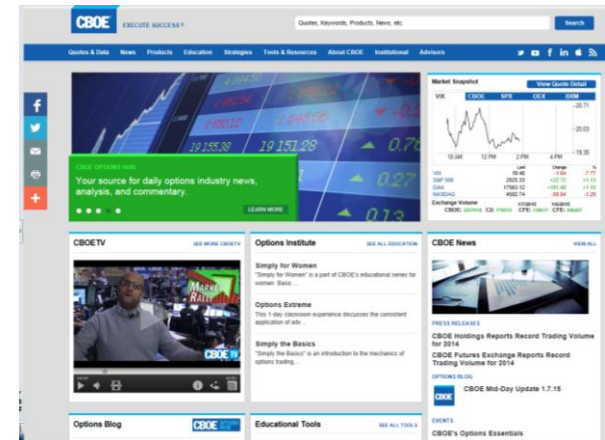


<sup>1</sup>Extended hours to nearly 24X5 on June 22, 2014

# Educating and Engaging Customers

Continue to leverage marketing and educational efforts of our comprehensive index suite

- Launched enhanced CBOE.com website and new “CBOE Mobile” App
- Expanding annual Risk Management Conference beyond the U.S. and Europe to include Asia
- Investing in systems to insure they are efficient, robust and secure



# Enhancing Market Regulation

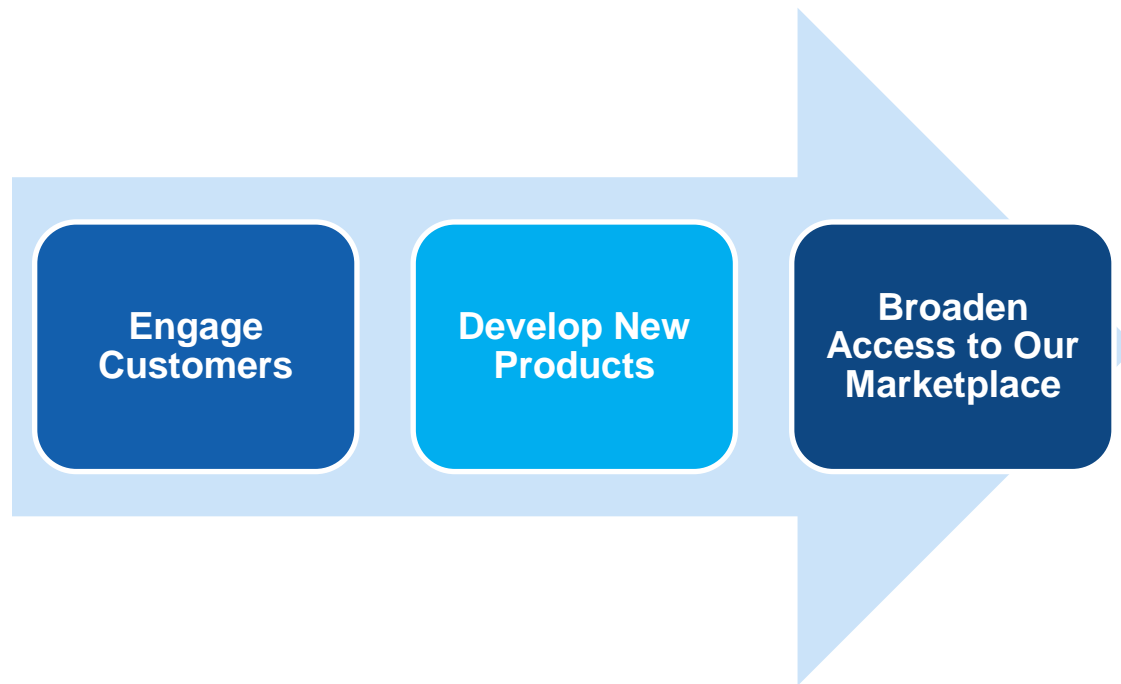
## **CBOE and C2 are committed to providing the highest standards in market regulation**

- **On January 1, FINRA began performing the majority of CBOE and C2's options regulatory services**
- **We believe FINRA's regulatory independence and efficiency together with CBOE's regulatory oversight experience and options expertise further reinforces the integrity of our markets and investor protection**



# Focused on Advancing our Strategic Growth Initiatives

**Well positioned to meet the considerable opportunities on the horizon this year and beyond**





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

# 4Q14 Financial Overview

<b>Adjusted Basis<sup>1</sup></b> (in millions, except EPS and RPC)	<b>4Q14</b>	<b>4Q13</b>	<b>\$ Change</b>	<b>% Change</b>
Operating Revenues	\$166.5	\$141.8	\$ 24.7	17%
Adjusted Operating Expenses	77.7	69.2	8.5	12%
Adjusted Operating Income	\$ 88.8	\$ 72.6	\$16.2	22%
<i>Adjusted Operating Margin %</i>	<i>53.4%</i>	<i>51.2%</i>		220 bps
Adjusted Net Income Allocated to Common Stockholders	\$ 53.6	\$ 45.6	\$ 8.0	18%
Adjusted Diluted EPS	\$ 0.64	\$ 0.52	\$ 0.12	23%
Total ADV	5.64	4.89		15%
Revenue per Contract	\$0.340	\$0.316	\$0.024	8%

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

# 4Q Operating Revenues Increase 17% YOY

## Transaction fees key driver of revenue growth

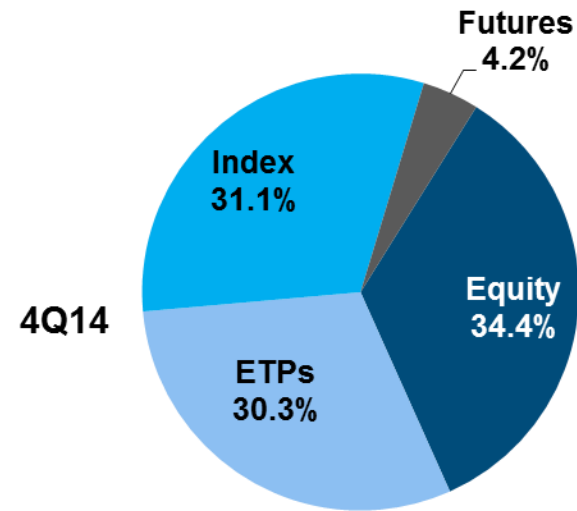
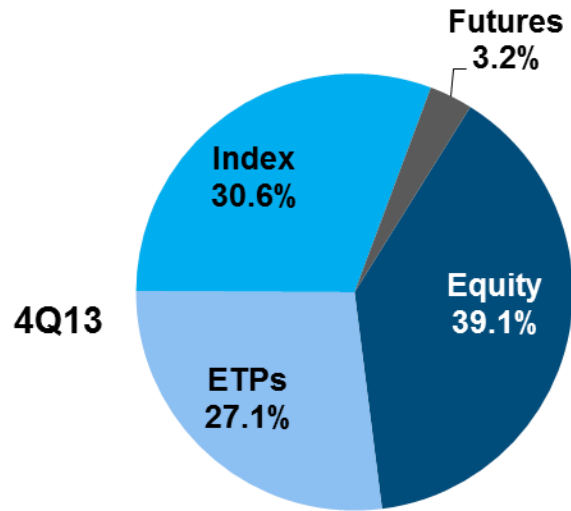
### ➤ Transaction fees up \$23.7MM

- 15% increase in trading volume
- 8% increase in RPC
  - Shift in product mix

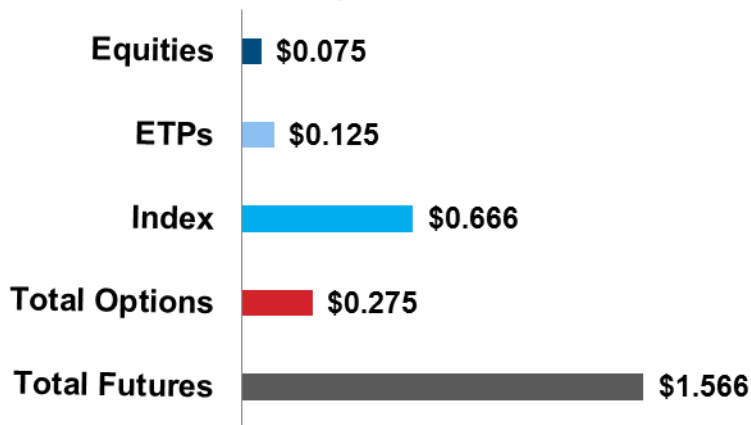
Operating Revenues (in millions)	4Q14	4Q13	% Chg
Transaction fees	\$ 122.7	\$ 99.0	24%
Access fees	14.5	15.3	-5%
Exchange services and other fees	9.4	9.6	-2%
Market data fees	7.7	7.0	10%
Regulatory fees	8.6	7.6	13%
Other revenue	3.6	3.3	9%
<b>Total Operating Revenues</b>	<b>\$166.5</b>	<b>\$141.8</b>	<b>17%</b>

# Change in RPC Primarily Reflects Mix Shift Towards Proprietary Products

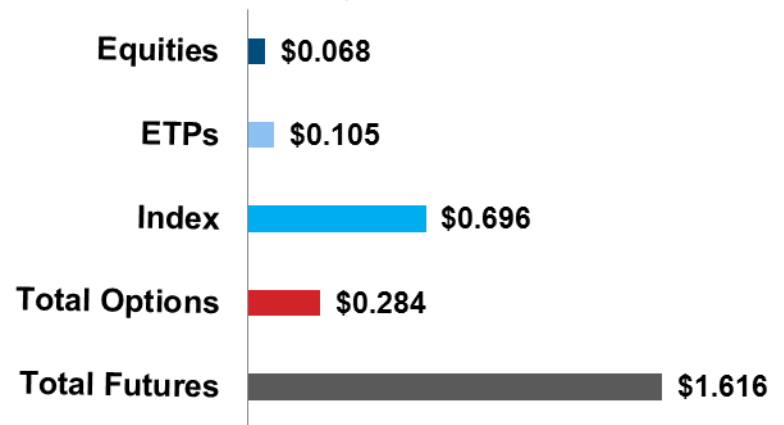
## Trading volume mix and RPC 4Q13 versus 4Q14



**4Q13 RPC \$0.316**

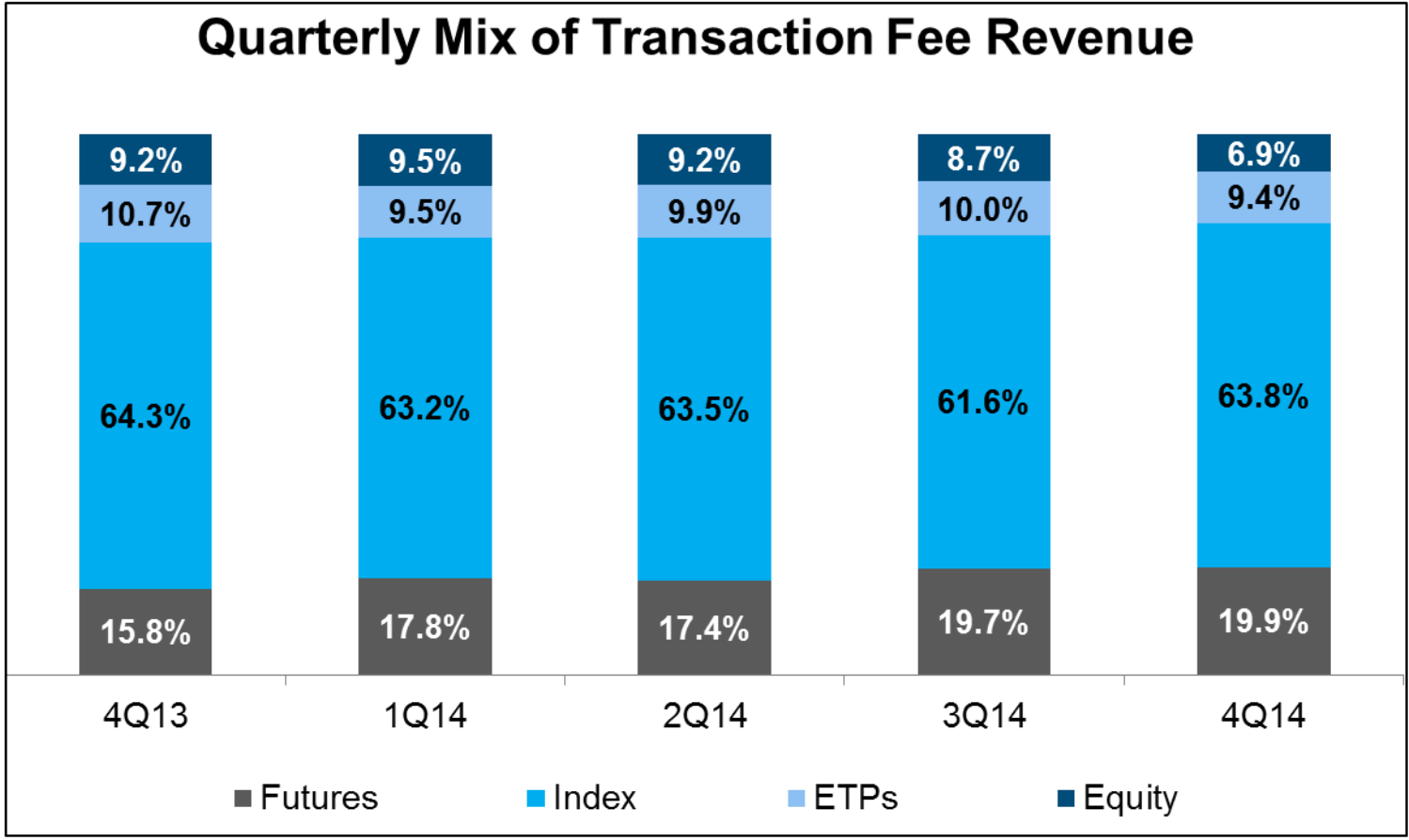


**4Q14 RPC \$0.340**



# Proprietary Products Account for Growing Percentage of Transaction Fee Revenue

Index options and futures contracts accounted for 83.7% of transaction fees in 4Q14, up from 80.1% in 4Q13



# Other Revenue Drivers

## ➤ Regulatory fees up \$1.0MM

- Higher ORF and volume

## ➤ Market data fees up \$0.7MM

- Higher share of OPRA market data revenue and increase in revenue from CBOE Streaming Markets

## ➤ Access fees down \$0.8MM

- Decrease in market maker permits

Operating Revenues (in millions)	4Q14	4Q13	% Chg
Transaction fees	\$ 122.7	\$ 99.0	24%
Access fees	14.5	15.3	-5%
Exchange services and other fees	9.4	9.6	-2%
Market data fees	7.7	7.0	10%
Regulatory fees	8.6	7.6	13%
Other revenue	3.6	3.3	9%
<b>Total Operating Revenues</b>	<b>\$166.5</b>	<b>\$141.8</b>	<b>17%</b>

# Ongoing Focus on Expense Management

## Key drivers:

- **Royalty fees up \$4.2MM**
  - Primarily driven by higher trading volume in licensed products
- **Outside services up \$2.6MM**
  - Mainly reflects higher costs related to legal expenses and contract services
- **Depreciation up \$2.0MM**
  - Increased capital spending in 2014

Adjusted Operating Expenses <sup>1</sup> (in millions)	4Q14	4Q13	% Chg
Employee costs	\$27.5	\$28.1	-2%
Depreciation and amortization	11.1	9.1	22%
Data processing	4.9	4.3	14%
Outside services	8.5	5.9	44%
Royalty fees	19.3	15.1	28%
Trading volume incentives	0.9	1.2	-25%
Travel and promotional	2.7	3.3	-18%
Facilities costs	1.4	1.2	17%
Other expenses	1.4	1.1	27%
<b>Total Adjusted Operating Expenses</b>	<b>\$77.7</b>	<b>\$69.2</b>	<b>12%</b>

<sup>1</sup>Adjusted to reflect the impact of certain items. See appendix for "Non-GAAP Information."  
May not foot due to rounding.



# Core Operating Expenses Up 6% in 4Q14 vs 4Q13

## Key drivers:

### ➤ Outside services up \$2.6MM

- Benefit from an insurance reimbursement in 4Q13
- Higher costs for contract services

Core Operating Expenses <sup>1</sup> (in millions)	4Q14	4Q13	% Chg
Employee costs	\$27.5	\$28.1	-2%
Data processing	4.9	4.3	14%
Outside services	8.5	5.9	44%
Travel and promotional	2.7	3.3	-18%
Facilities costs	1.4	1.2	17%
Other expenses	1.4	1.1	27%
<b>Total</b>	<b>\$46.5</b>	<b>\$43.9</b>	<b>6%</b>

<sup>1</sup>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 up \$4.2MM

- Higher trading volume in licensed products in 4Q14 versus 4Q13
  - Index options volume up 18%
  - VIX futures volume up 51%

Volume-based Expenses (in millions)	4Q14	4Q13	% Chg
Royalty fees	\$ 19.3	\$ 15.1	28%
Trading volume incentives	0.9	1.2	-25%
<b>Total</b>	<b>\$ 20.2</b>	<b>\$ 16.3</b>	<b>24%</b>

May not foot due to rounding

# Fourth Quarter and Full-Year Effective Tax Rate

## ➤ GAAP effective tax rate for 4Q14

- Increase in 4Q14 versus 4Q13 primarily due to tax adjustments related to changes in assessments of uncertain tax positions and a lower benefit from discrete items versus the prior-year quarter

## ➤ Non-GAAP effective tax rate for 4Q14

- Excludes a charge of \$1.6 million for changes in assessments of uncertain tax positions related to a prior period

	4Q14	4Q13	Change	Year 2014	Year 2013	Change
GAAP	41.2%	36.1%	510 bps	38.7%	38.0%	70 bps
Adjusted <sup>1</sup>	39.4%	36.1%	330 bps	38.2%	37.8%	40 bps

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

# Enhancing Stockholder Value

➤ **Generated \$263MM in operating cash flow in 2014**

➤ **2014 Capital Outlays**

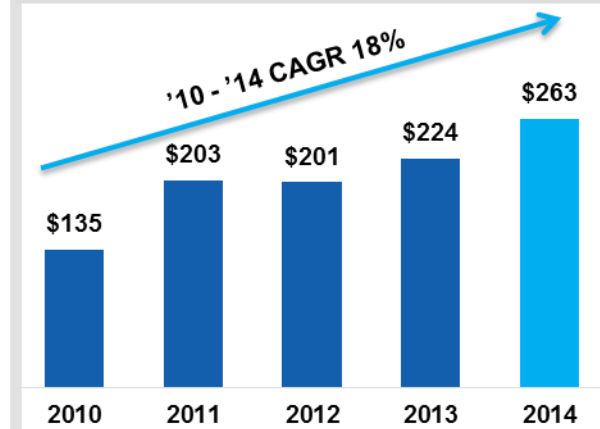
Share repurchases <sup>1</sup>	\$ 177 MM
Quarterly dividends	67 MM
Special dividend	44 MM
Capital expenditures	50 MM
<b>Total</b>	<b>\$ 338 MM</b>

➤ **Cash of \$148MM at year-end 2014 compared with \$221MM at year-end 2013**

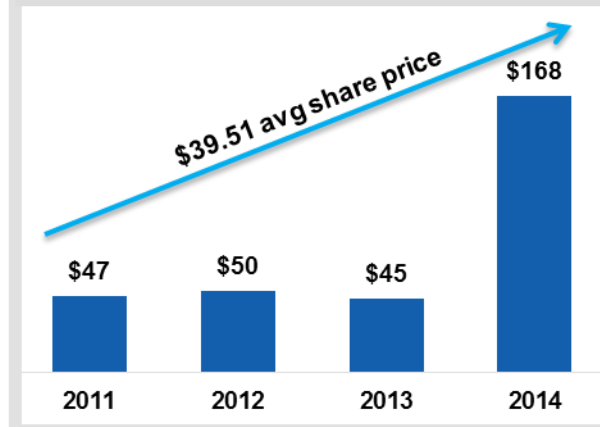
➤ **\$90MM remaining on share repurchase authorization at year-end 2014**

<sup>1</sup>Includes stock purchased under repurchase plan and from employees

Operating Cash Flow (\$ in millions)



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



# 2015 Full-Year Guidance

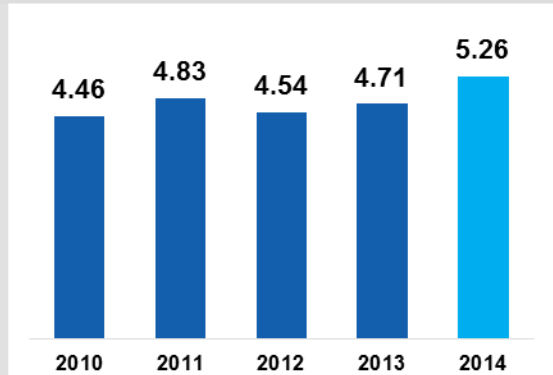
<b>As of February 6, 2015</b> (\$ in millions)	<b>2015 Full-Year Guidance</b>	<b>2014 Actual</b>
Core operating expenses	\$195 to \$199	\$189
Continuing stock-based compensation <sup>1</sup>	\$12	\$13
Depreciation and amortization	\$46 to \$48	\$40
Capital expenditures	\$37 to \$40	\$50
Effective tax rate	38.5% to 39.5%	38.2% <sup>2</sup>

<sup>1</sup>Stock-based compensation expense is included in employee costs.

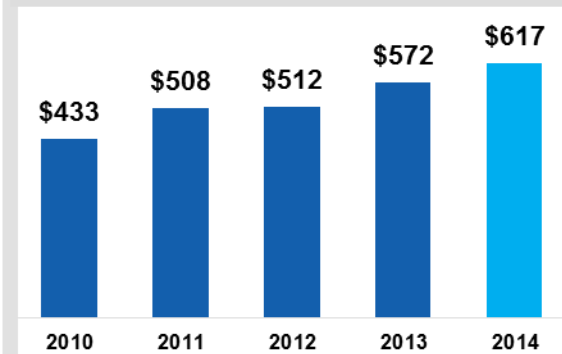
<sup>2</sup>Presented on a non-GAAP basis

# Well Positioned for Long-Term Growth

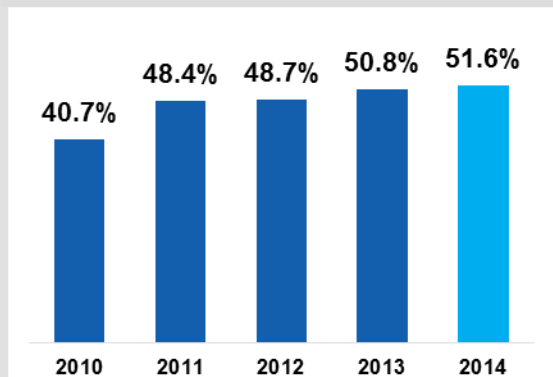
**Total ADV (in millions)**



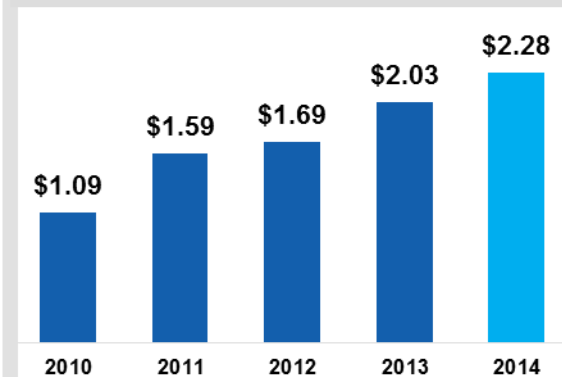
**Adjusted Operating Revenues<sup>1</sup> (in millions)**



**Adjusted Operating Margin<sup>1</sup>**



**Adjusted Diluted EPS<sup>1</sup>**



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

**➤ Questions & Answers**

**➤ Appendix Materials**

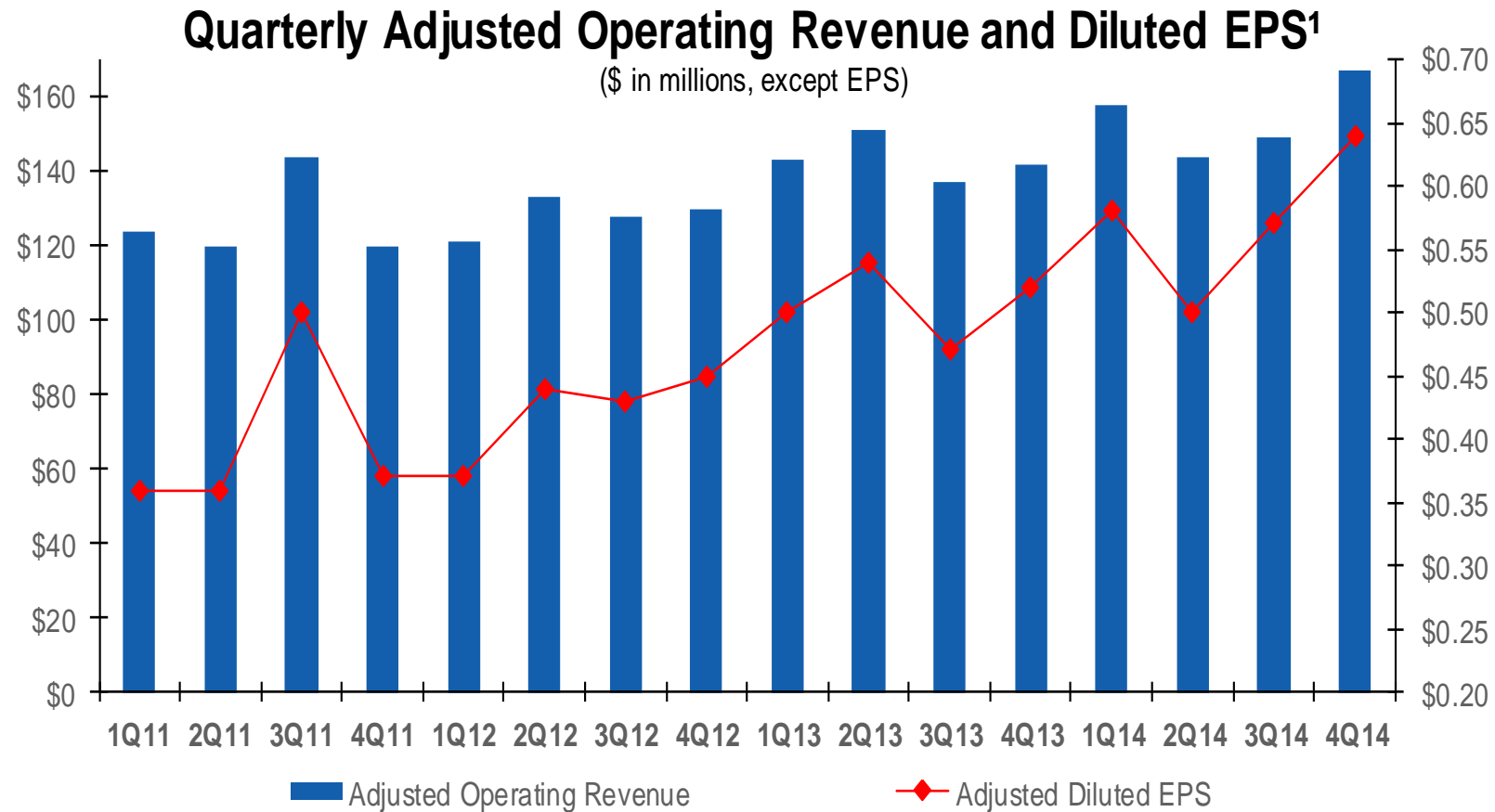


# 2014 Financial Overview

<b>Adjusted Basis<sup>1</sup></b> (in millions, except EPS and RPC)	<b>2014</b>	<b>2013</b>	<b>\$ Change</b>	<b>% Change</b>
Operating Revenues	\$617.2	\$572.1	\$ 45.1	8%
Adjusted Operating Expenses	299.0	281.2	17.8	6%
Adjusted Operating Income	\$318.2	\$290.9	\$ 27.3	9%
<i>Operating Margin %</i>	<i>51.6%</i>	<i>50.8%</i>		80 bps
Adjusted Net Income Allocated to Common Stockholders	\$194.5	\$177.4	\$ 17.1	10%
Adjusted Diluted EPS	\$ 2.28	\$ 2.03	\$ 0.25	12%
Total ADV	5.26	4.71		12%
Revenue per Contract	\$0.330	\$0.334	-\$0.004	-1%

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

# Optimistic About Long-term Growth Prospects

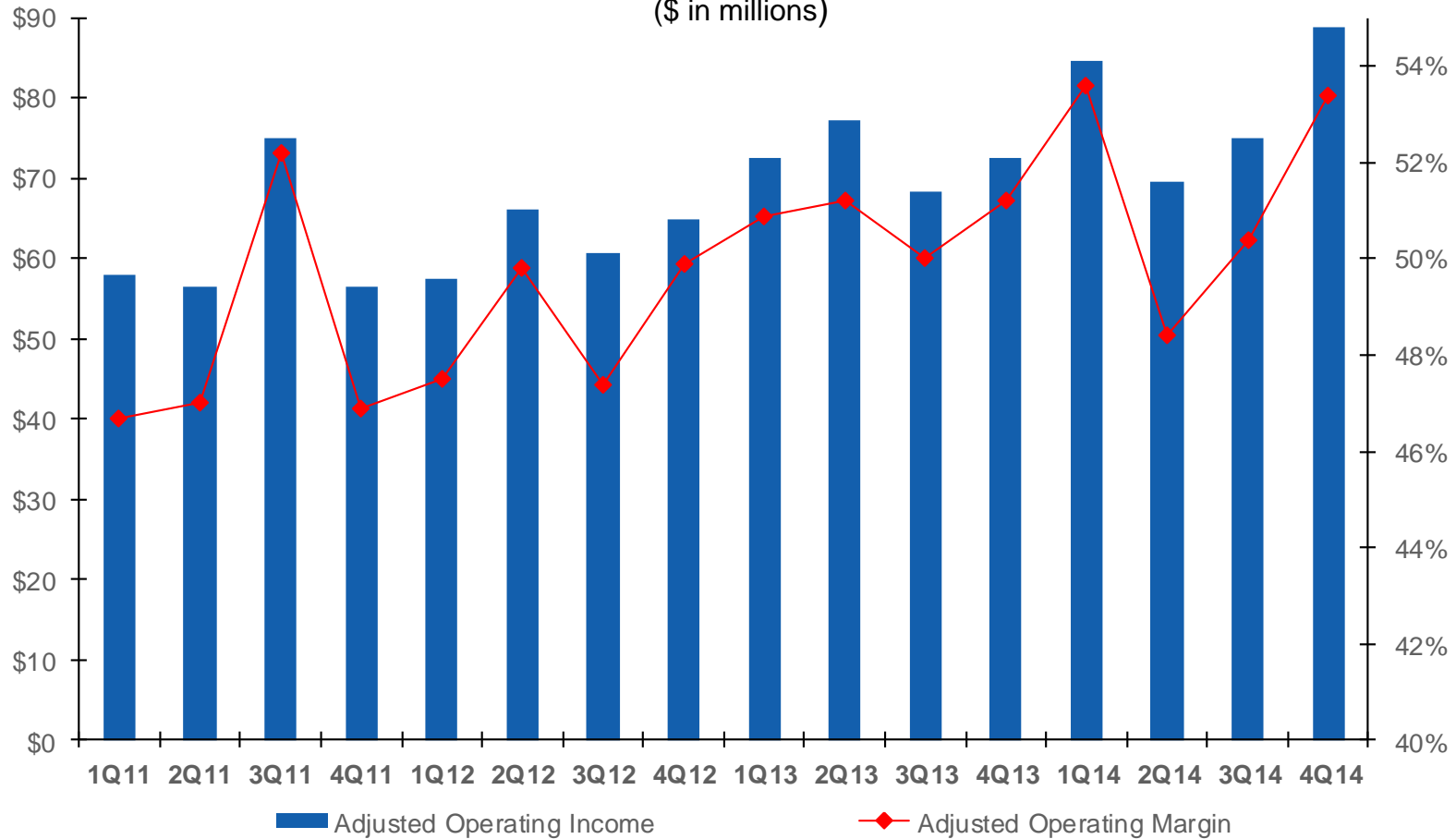


<sup>1</sup>Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

# Well Positioned to Gain Additional Leverage

## Quarterly Adjusted Operating Income and Margin<sup>1</sup>

(\$ in millions)

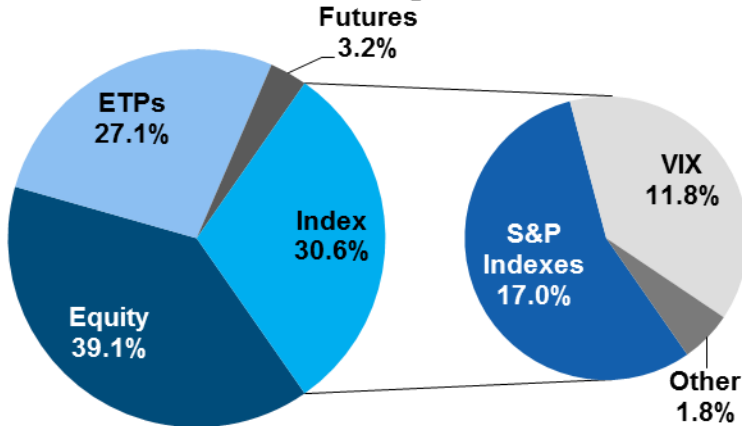


<sup>1</sup>Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

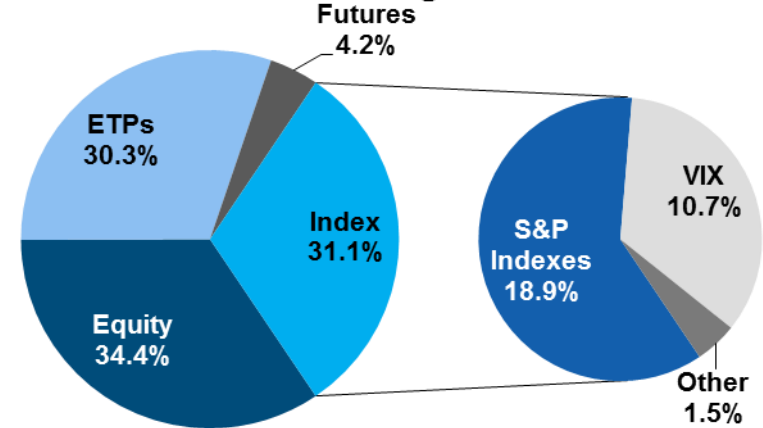
# Trading Volume Mix and RPC 4Q13 vs 4Q14

**RPC increase primarily reflects shift in volume mix**

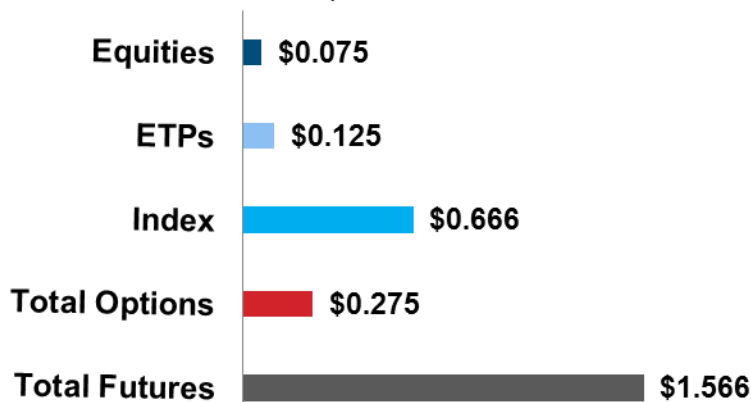
**4Q13 Trading Volume Mix**



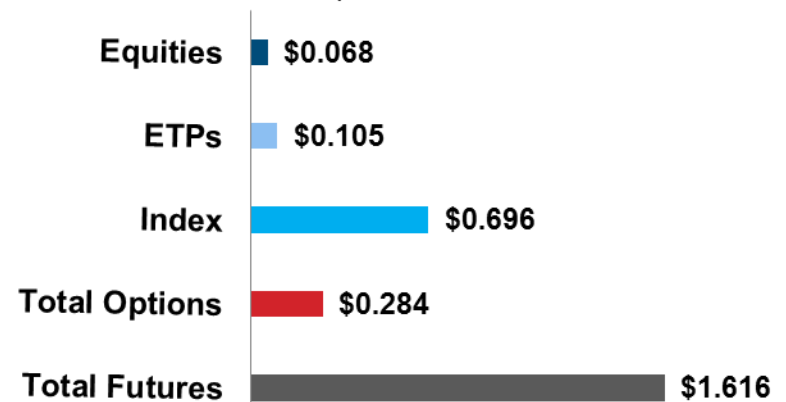
**4Q14 Trading Volume Mix**



**4Q13 RPC \$0.316**

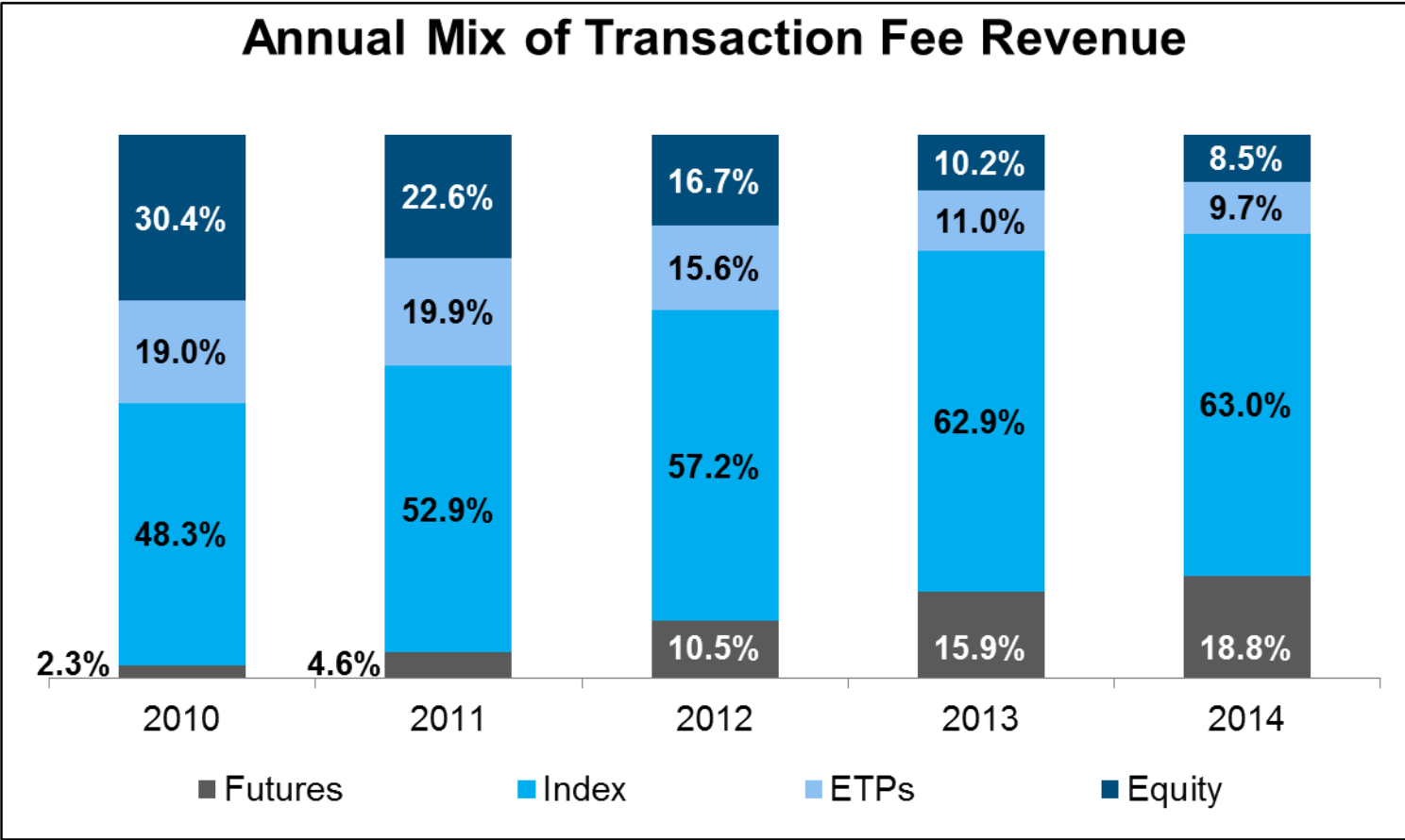


**4Q14 RPC \$0.340**



# Proprietary Products Account for Growing Percentage of Transaction Fee Revenue

Index options and futures contracts account for 81.8% of transaction fees in 2014, up from 50.6% in 2010



# CBOE Holdings Rolling 3-Month RPC

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

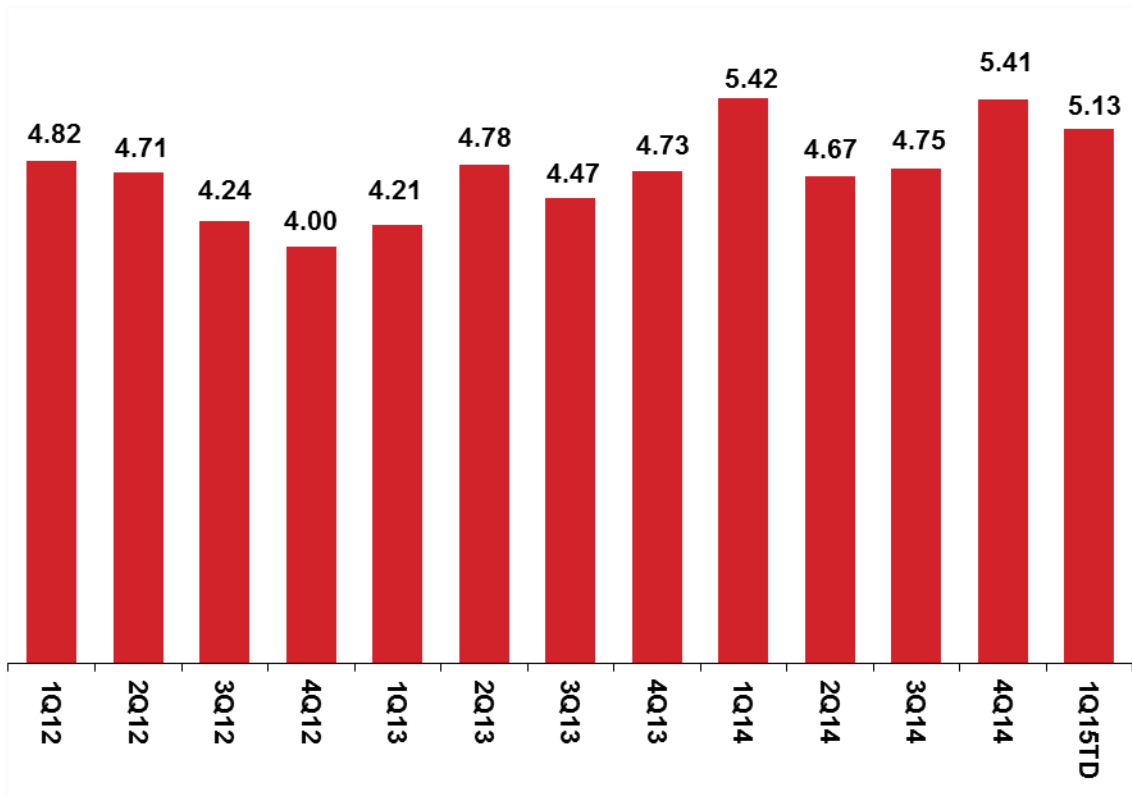
2012	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Equities	\$0.151	\$0.128	\$0.110	\$0.112	\$0.117	\$0.123	\$0.124	\$0.122	\$0.118	\$0.121	\$0.124	\$0.134
Indexes	0.640	0.651	0.658	0.667	0.673	0.677	0.680	0.684	0.682	0.675	0.670	0.670
Exchange-traded products	0.206	0.188	0.171	0.172	0.176	0.180	0.177	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

2011	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Equities	\$0.170	\$0.164	\$0.160	\$0.163	\$0.168	\$0.169	\$0.171	\$0.159	\$0.159	\$0.155	\$0.163	\$0.167
Indexes	0.592	0.601	0.604	0.615	0.618	0.627	0.624	0.606	0.605	0.605	0.621	0.631
Exchange-traded products	0.223	0.215	0.207	0.207	0.208	0.202	0.197	0.187	0.192	0.194	0.205	0.212
Total options RPC	0.276	0.272	0.275	0.282	0.289	0.295	0.303	0.300	0.301	0.300	0.308	0.312
Futures	1.657	1.591	1.507	1.493	1.514	1.477	1.437	1.376	1.371	1.348	1.328	1.329
Total RPC	\$0.286	\$0.282	\$0.285	\$0.293	\$0.301	\$0.308	\$0.316	\$0.313	\$0.313	\$0.311	\$0.317	\$0.321

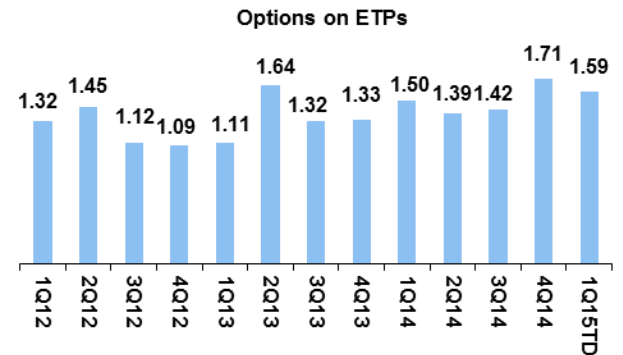
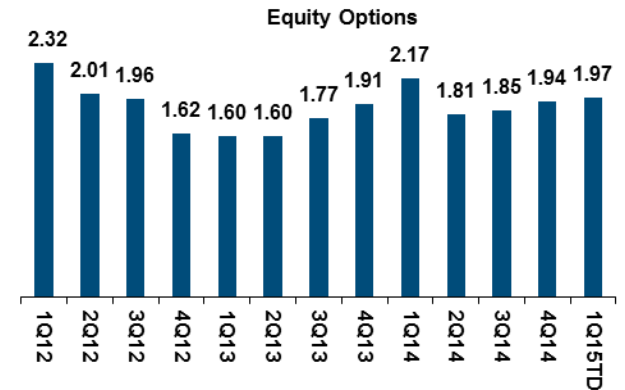
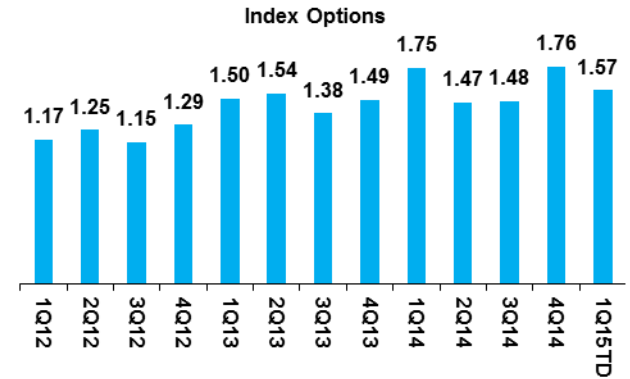
# Quarterly Options ADV

## CBOE Holdings Quarterly Options ADV

(contracts in millions)



<sup>1</sup>Through January 31, 2015



# Annual Core Operating Expenses<sup>1</sup>

(\$ in thousands)

	2014	% rev	2013	% rev	2012	% rev	2011	% rev	2010	% rev
<b>Total Operating Expenses</b>	\$303,424	49%	\$286,236	50%	\$268,241	52%	\$266,512	52%	\$269,763	62%
<b>Less:</b>										
Depreciation and Amortization	39,913	6%	34,488	6%	31,485	6%	34,094	7%	29,891	7%
Accelerated stock-based compensation	2,530	-	3,996	1%	343	-	453	-	12,968	3%
Severance	1,863	-	-	-	-	-	3,709	1%	-	-
Estimated liability/expense related to SEC investigation	0	-	1,000	-	5,000	1%	-	-	-	-
<b>Volume-based Expense:</b>										
Royalty Fees	66,110	11%	56,576	10%	46,135	9%	47,822	9%	41,353	10%
Trading Volume Incentives	4,080	1%	4,355	1%	6,275	1%	14,239	3%	21,294	5%
<b>Core Operating Expenses (non-GAAP)<sup>1</sup>:</b>	<b>\$188,928</b>	<b>31%</b>	<b>\$185,821</b>	<b>32%</b>	<b>\$179,003</b>	<b>35%</b>	<b>\$166,195</b>	<b>33%</b>	<b>\$164,257</b>	<b>38%</b>
Less: Continuing stock-based compensation	13,047	2%	16,828	3%	12,005	2%	12,166	2%	7,833	2%
<b>Core Operating Expenses excluding continuing stock-based compensation (non-GAAP)<sup>1</sup>:</b>	<b>\$175,881</b>	<b>28%</b>	<b>\$168,993</b>	<b>30%</b>	<b>\$166,998</b>	<b>33%</b>	<b>\$154,029</b>	<b>30%</b>	<b>\$156,424</b>	<b>36%</b>
<b>Core Operating Expense Detail:</b>										
Employee Costs	\$117,341	19%	\$114,087	20%	\$103,853	20%	\$100,292	20%	\$93,275	22%
Data Processing	19,189	3%	17,898	3%	19,603	4%	17,933	4%	19,501	5%
Outside Services	31,976	5%	34,473	6%	36,300	7%	27,310	5%	31,245	7%
Travel and Promotion Expenses	9,046	1%	9,806	2%	10,006	2%	9,812	2%	9,569	2%
Facilities Costs	5,721	1%	5,053	1%	5,066	1%	5,400	1%	5,801	1%
Other Expenses	5,655	1%	4,504	1%	4,175	1%	5,448	1%	4,866	1%
Number of Full Time Employees at year end	520		650		605		596		581	

<sup>1</sup>Please see our disclaimer regarding non-GAAP financial measures.

May not foot due to rounding



# Quarterly Core Operating Expenses<sup>1</sup>

(\$ in thousands)

	4Q 2014	% rev	3Q 2014	% rev	2Q 2014	% rev	1Q 2014	% rev	4Q 2013	% rev
<b>Total Operating Expenses</b>	\$79,525	48%	\$73,826	50%	\$74,226	52%	\$75,847	48%	\$69,231	49%
<b>Less:</b>										
Depreciation and amortization	11,053	7%	10,361	7%	9,895	7%	8,604	5%	9,108	6%
Accelerated stock-based compensation	-	-	-	-	-	-	2,530	2%	-	-
Severance expense	1,863	1%	-	-	-	-	-	-	-	-
<b>Volume-based expense:</b>										
Royalty fees	19,266	12%	16,235	11%	14,707	10%	15,902	10%	15,043	11%
Trading volume incentives	874	1%	961	1%	1,120	1%	1,126	1%	1,227	1%
<b>Core Operating Expenses (non-GAAP)<sup>1</sup>:</b>	<b>\$46,469</b>	<b>28%</b>	<b>\$46,269</b>	<b>31%</b>	<b>\$48,504</b>	<b>34%</b>	<b>\$47,685</b>	<b>30%</b>	<b>\$43,853</b>	<b>31%</b>
Less: Continuing stock-based compensation	2,098	1%	2,109	1%	4,457	3%	4,383	3%	3,957	3%
<b>Core Operating Expenses excluding continuing stock-based compensation (non-GAAP)<sup>1</sup>:</b>	<b>\$44,371</b>	<b>27%</b>	<b>\$44,160</b>	<b>30%</b>	<b>\$44,047</b>	<b>31%</b>	<b>\$43,302</b>	<b>27%</b>	<b>\$39,896</b>	<b>28%</b>
<b>Core Operating Expense Detail:</b>										
Employee costs	\$27,493	17%	\$28,698	19%	\$30,306	21%	\$30,844	20%	\$28,059	20%
Data processing	4,915	3%	4,769	3%	4,783	3%	4,721	3%	4,286	3%
Outside services	8,539	5%	8,204	6%	7,855	5%	7,378	5%	5,867	4%
Travel and promotional expenses	2,727	2%	1,885	1%	2,446	2%	1,987	1%	3,254	2%
Facilities costs	1,445	1%	1,373	1%	1,590	1%	1,313	1%	1,245	1%
Other expenses	1,350	1%	1,340	1%	1,524	1%	1,442	1%	1,142	1%
<b>Total</b>	<b>\$46,469</b>		<b>\$46,269</b>		<b>\$48,504</b>		<b>\$47,685</b>		<b>\$43,853</b>	
Number of full-time employees at quarter end	520		639		661		656		650	

<sup>1</sup>Please see our disclaimer regarding non-GAAP financial measures.

May not foot due to rounding

# GAAP to Non-GAAP Reconciliation For Years 2009, 2010 and 2011

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

	3Q10	4Q10	1Q11	2Q11	3Q11	4Q11	FY 2009	FY2010	FY2011
<b>Reconciliation of GAAP Net Income Allocated to Common Stockholder to Non-GAAP</b>									
GAAP net income allocated to common stockholders	\$ 20,020	\$ 30,687	\$ 32,089	\$ 32,609	\$ 40,597	\$ 31,287	\$ 106,451	\$ 98,166	\$ 136,582
Less: Recognition of deferred access fee revenue							(24,086)		
Less: Recognition of prior-period revenue		(4,406)						(4,406)	
Add: Exercise right appeal settlement							2,086		
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)	8,786	(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)
<b>Adjusted net income allocated to common stockholders</b>	<b>\$ 26,380</b>	<b>\$ 30,207</b>	<b>\$ 32,540</b>	<b>\$ 32,674</b>	<b>\$ 44,745</b>	<b>\$ 33,164</b>	<b>\$ 93,237</b>	<b>\$ 104,238</b>	<b>\$ 143,134</b>
<b>Reconciliation of GAAP Diluted EPS to Non-GAAP</b>									
GAAP diluted earnings per common share	\$ 0.20	\$ 0.31	\$ 0.36	\$ 0.36	\$ 0.45	\$ 0.35	\$ 1.17	\$ 1.03	\$ 1.52
Per share impact of items above	0.06				0.05	0.02	(0.14)	0.06	0.07
<b>Non-GAAP diluted earnings per common share</b>	<b>\$ 0.26</b>	<b>\$ 0.31</b>	<b>\$ 0.36</b>	<b>\$ 0.36</b>	<b>\$ 0.50</b>	<b>\$ 0.37</b>	<b>\$ 1.03</b>	<b>\$ 1.09</b>	<b>\$ 1.59</b>
<b>Reconciliation of GAAP Operating Margin to Non-GAAP</b>									
GAAP operating revenue	\$ 106,015	\$ 117,391	\$ 124,042	\$ 120,290	\$ 143,604	\$ 120,208	\$ 426,082	\$ 437,104	\$ 508,144
Non-GAAP adjustments noted above		(4,406)					(24,086)	(4,406)	
<b>Adjusted operating revenue</b>	<b>\$ 106,015</b>	<b>\$ 112,985</b>	<b>\$ 124,042</b>	<b>\$ 120,290</b>	<b>\$ 143,604</b>	<b>\$ 120,208</b>	<b>\$ 401,996</b>	<b>\$ 432,698</b>	<b>\$ 508,144</b>
GAAP operating income	\$ 34,933	\$ 51,854	\$ 57,535	\$ 56,452	\$ 74,966	\$ 52,679	\$ 177,584	\$ 167,341	\$ 241,632
Non-GAAP adjustments noted above	10,965	(2,402)	340	113	-	3,709	(22,000)	8,562	4,162
<b>Adjusted operating income</b>	<b>\$ 45,898</b>	<b>\$ 49,452</b>	<b>\$ 57,875</b>	<b>\$ 56,565</b>	<b>\$ 74,966</b>	<b>\$ 56,388</b>	<b>\$ 155,584</b>	<b>\$ 175,903</b>	<b>\$ 245,794</b>
<b>Adjusted operating margin</b>	<b>43.3%</b>	<b>43.8%</b>	<b>46.7%</b>	<b>47.0%</b>	<b>52.2%</b>	<b>46.9%</b>	<b>38.7%</b>	<b>40.7%</b>	<b>48.4%</b>

For further information go to [cboe.com/Investor Relations](http://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
<b>Reconciliation of GAAP Net Income Allocated to Common Stockholder to Non-GAAP</b>										
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)
<b>Adjusted net income allocated to common stockholders</b>	<b>\$ 32,975</b>	<b>\$ 37,903</b>	<b>\$ 37,675</b>	<b>\$ 38,921</b>	<b>\$ 147,510</b>	<b>\$ 43,874</b>	<b>\$ 46,958</b>	<b>\$ 40,955</b>	<b>\$ 45,649</b>	<b>\$ 177,447</b>
<b>Reconciliation of GAAP Diluted EPS to Non-GAAP</b>										
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
<b>Non-GAAP diluted earnings per common share</b>	<b>\$ 0.37</b>	<b>\$ 0.44</b>	<b>\$ 0.43</b>	<b>\$ 0.45</b>	<b>\$ 1.69</b>	<b>\$ 0.50</b>	<b>\$ 0.54</b>	<b>\$ 0.47</b>	<b>\$ 0.52</b>	<b>\$ 2.03</b>
<b>Reconciliation of GAAP Operating Margin to Non-GAAP</b>										
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										
<b>Adjusted operating revenue</b>	<b>\$ 121,392</b>	<b>\$ 132,549</b>	<b>\$ 128,319</b>	<b>\$ 130,077</b>	<b>\$ 512,338</b>	<b>\$ 142,705</b>	<b>\$ 150,772</b>	<b>\$ 136,743</b>	<b>\$ 141,830</b>	<b>\$ 572,050</b>
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
<b>Adjusted operating income</b>	<b>\$ 57,609</b>	<b>\$ 66,069</b>	<b>\$ 60,861</b>	<b>\$ 64,901</b>	<b>\$ 249,440</b>	<b>\$ 72,610</b>	<b>\$ 77,174</b>	<b>\$ 68,427</b>	<b>\$ 72,599</b>	<b>\$ 290,810</b>
<b>Adjusted operating margin</b>	<b>47.5%</b>	<b>49.8%</b>	<b>47.4%</b>	<b>49.9%</b>	<b>48.7%</b>	<b>50.9%</b>	<b>51.2%</b>	<b>50.0%</b>	<b>51.2%</b>	<b>50.8%</b>

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# GAAP to Non-GAAP Reconciliation For 2014

## GAAP to Non-GAAP Reconciliation

(in thousands, except per share amounts)

	1Q14	2Q14	3Q14	4Q14	FY2014
<b>Reconciliation of GAAP Net Income Allocated to Common Stockholder to Non-GAAP</b>					
GAAP net income allocated to common stockholders	\$ 48,528	\$ 42,598	\$ 48,146	\$ 49,119	\$ 188,392
Add: Accelerated stock-based compensation	2,530				2,530
Add: Seavance expense related to outsourcing certain regulatory services				1,863	1,863
Add: Impairment charge				3,000	3,000
Add: Tax adjustment related to prior year				1,600	1,600
Income tax benefit/(expense) related to the items above	(1,009)			(2,005)	(2,861)
Net income allocated to participating securities - effect on reconciling items	(15)			(20)	(43)
<b>Adjusted net income allocated to common stockholders</b>	<b>\$ 50,034</b>	<b>\$ 42,598</b>	<b>\$ 48,146</b>	<b>\$ 53,557</b>	<b>\$ 194,481</b>

## Reconciliation of GAAP Diluted EPS to Non-GAAP

GAAP diluted earnings per common share	\$ 0.56	\$ 0.50	\$ 0.57	\$ 0.58	\$ 2.21
Per share impact of items above	0.02			0.06	0.07
<b>Non-GAAP diluted earnings per common share</b>	<b>\$ 0.58</b>	<b>\$ 0.50</b>	<b>\$ 0.57</b>	<b>\$ 0.64</b>	<b>\$ 2.28</b>

## Reconciliation of GAAP Operating Margin to Non-GAAP

GAAP operating revenue	\$ 157,885	\$ 143,942	\$ 148,910	\$ 166,487	\$ 617,225
Non-GAAP adjustments noted above					
<b>Adjusted operating revenue</b>	<b>\$ 157,885</b>	<b>\$ 143,942</b>	<b>\$ 148,910</b>	<b>\$ 166,487</b>	<b>\$ 617,225</b>
GAAP operating income	\$ 82,038	\$ 69,716	\$ 75,084	\$ 86,962	\$ 313,801
Non-GAAP adjustments noted above	2,530			1,863	4,393
<b>Adjusted operating income</b>	<b>\$ 84,568</b>	<b>\$ 69,716</b>	<b>\$ 75,084</b>	<b>\$ 88,825</b>	<b>\$ 318,194</b>
<b>Adjusted operating margin</b>	<b>53.6%</b>	<b>48.4%</b>	<b>50.4%</b>	<b>53.4%</b>	<b>51.6%</b>

For further information go to [cboe.com/Investor Relations](http://cboe.com/Investor Relations)

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# Non-GAAP Information

- In addition to disclosing results determined in accordance with GAAP, CBOE Holdings has disclosed certain non-GAAP measures of operating performance. 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 and adjusted diluted earnings per share.
- Management believes that the non-GAAP financial measures presented 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. 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.
- 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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