CBOE Holdings, Inc.
Form 10-Q
May 03, 2016
Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-Q

ý QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended March 31, 2016
OR
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission File No. 001-34774
CBOE HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware	20-5446972
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

400 South LaSalle Street Chicago, Illinois	60605
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code
(312) 786-5600

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ý No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No ¨
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ý	Accelerated filer ¨
Non-accelerated filer ¨	Smaller reporting company ¨

(Do not check if a smaller reporting company)
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ¨ No ý
Indicate the number of shares outstanding of each of the registrant's classes of unrestricted common stock, as of the latest practicable date:

Class	April 22, 2016
Common Stock, par value $0.01	81,396,052 shares

Table of Contents

CBOE HOLDINGS, INC.
INDEX

		Page
	PART I - FINANCIAL INFORMATION	
Item 1.	Condensed Consolidated Financial Statements (Unaudited)	5
	Condensed Consolidated Statements of Income — Three Months Ended March 31, 2016 and 2015	5
	Condensed Consolidated Statements of Comprehensive Income — Three Months Ended March 31, 2016 and 2015	6
	Condensed Consolidated Balance Sheets — March 31, 2016 and December 31, 2015	7
	Condensed Consolidated Statement of Stockholders' Equity and Redeemable Noncontrolling Interests — Three Months Ended March 31, 2016	8
	Condensed Consolidated Statements of Cash Flows — Three Months Ended March 31, 2016 and 2015	9
	Notes to Condensed Consolidated Financial Statements	10
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	22
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	29
Item 4.	Controls and Procedures	29
	PART II - OTHER INFORMATION	30
Item 1.	Legal Proceedings	30
Item 1A.	Risk Factors	31
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	31
Item 3.	Defaults Upon Senior Securities	31
Item 4.	Mine Safety Disclosures	31
Item 5.	Other Information	31
Item 6.	Exhibits	31
	Signatures	32
	Exhibits	33

Table of Contents

CERTAIN DEFINED TERMS

Throughout this document, unless otherwise specified or the context so requires:

- "CBOE Holdings," "we," "us," "our" or "the Company" refers to CBOE Holdings, Inc. and its subsidiaries.
- "CBOE" refers to Chicago Board Options Exchange, Incorporated, a wholly-owned subsidiary of CBOE Holdings, Inc.
- "C2" refers to C2 Options Exchange, Incorporated, a wholly-owned subsidiary of CBOE Holdings, Inc.
- "CFE" refers to CBOE Futures Exchange, LLC, a wholly-owned subsidiary of CBOE Holdings, Inc.
- "CFTC" refers to the U.S. Commodity Futures Trading Commission.
- "Consent Order" refers to the consent order that CBOE and C2 entered into with the SEC on June 11, 2013.
- "FASB" refers to the Financial Accounting Standards Board.
- "GAAP" refers to Generally Accepted Accounting Principles in the United States.
- "OCC" refers to The Options Clearing Corporation, which is the issuer and registered clearing agency for all U.S. exchange-listed options and is the designated clearing organization for futures traded on CFE.
- "OPRA" refers to the Options Price Reporting Authority, which is a limited liability company of member exchanges, including CBOE and C2, and is authorized by the SEC to provide consolidated options information.
- "Our exchanges" refers to CBOE, C2 and CFE.
- "SEC" refers to the U.S. Securities and Exchange Commission.
- "SPX" refers to our S&P 500 Index exchange-traded options products.
- "VIX" refers to the CBOE Volatility Index methodology.

Table of Contents

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve a number of risks and uncertainties. You can identify these statements by forward-looking words such as "may," "might," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential" or "continue," and the negative of these terms and other comparable terminology. All statements that reflect our expectations, assumptions or projections about the future other than statements of historical fact are forward-looking statements, including statements in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this report. These forward-looking statements, which are subject to known and unknown risks, uncertainties and assumptions about us, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from that expressed or implied by the forward-looking statements. In particular, you should consider the risks and uncertainties described under “Risk Factors” in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015, Part II, Item 1A of this Quarterly Report on Form 10-Q and our other filings with the SEC.

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

Some factors that could cause actual results to differ include:

- the loss of our right to exclusively list and trade certain index options and futures products;
- economic, political and market conditions;
- compliance with legal and regulatory obligations, including our obligations under the Consent Order;
- 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.

We caution you not to place undue reliance on the forward-looking statements, which speak only as of the date of this filing. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

4

Table of Contents

PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (Unaudited)

CBOE Holdings, Inc. and Subsidiaries
Condensed Consolidated Statements of Income
Three Months Ended March 31, 2016 and 2015

(in thousands, except per share amounts)	Three Months Ended March 31, 2016 (unaudited)	2015
Operating Revenues:		
Transaction fees	$118,004	$98,723
Access fees	13,249	13,686
Exchange services and other fees	11,391	9,728
Market data fees	7,969	8,012
Regulatory fees	9,100	8,382
Other revenue	2,617	4,308
Total Operating Revenues	162,330	142,839
Operating Expenses:		
Compensation and benefits	27,106	25,439
Depreciation and amortization	11,851	10,402
Technology support services	5,678	5,325
Professional fees and outside services	13,631	11,950
Royalty fees	19,114	14,150
Order routing	104	787
Travel and promotional expenses	2,515	2,501
Facilities costs	1,528	1,384
Other expenses	1,322	1,348
Total Operating Expenses	82,849	73,286
Operating Income	79,481	69,553
Other Income/(Expense):		
Investment income	707	51
Net income/(loss) from investments	306	(327)
Interest and other borrowing costs	(27)	—
Total Other Income/(Expense)	986	(276)
Income Before Income Taxes	80,467	69,277
Income tax provision	31,291	27,018
Net Income	49,176	42,259
Net loss attributable to noncontrolling interests	224	—
Net Income Excluding Noncontrolling Interests	49,400	42,259
Net income allocated to participating securities	(202)	(180)
Net Income Allocated to Common Stockholders	$49,198	$42,079
Net Income Per Share Allocated to Common Stockholders:		
Basic	$0.60	$0.50
Diluted	0.60	0.50
Weighted average shares used in computing income per share:		
Basic	81,818	83,956

Diluted	81,818	83,956

See notes to condensed consolidated financial statements

Table of Contents

CBOE Holdings, Inc. and Subsidiaries
Condensed Consolidated Statements of Comprehensive Income
Three Months Ended March 31, 2016 and 2015

(in thousands)	Three Months Ended March 31, 2016	2015
	(unaudited)	
Net Income	$49,176	$42,259
Comprehensive Income (Loss) - net of tax:		
Post-retirement benefit obligation	29	(181)
Comprehensive Income	49,205	42,078
Comprehensive loss attributable to noncontrolling interests	224	—
Comprehensive Income Excluding Noncontrolling Interests	49,429	42,078
Comprehensive income allocated to participating securities	(202)	(180)
Comprehensive Income Allocated to Common Stockholders	$49,227	$41,898

See notes to condensed consolidated financial statements

Table of Contents

CBOE Holdings, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
March 31, 2016 and December 31, 2015

(in thousands, except share amounts)	March 31, 2016 (unaudited)	December 31, 2015
Assets		
Current Assets:		
Cash and cash equivalents	$107,482	$ 102,253
Accounts receivable—net allowances of 2016 - $75 and 2015 - $150	57,604	62,535
Marketing fee receivable	6,585	5,682
Income taxes receivable	4,778	27,901
Other prepaid expenses	7,978	5,122
Other current assets	264	625
Total Current Assets	184,691	204,118
Investments	53,485	48,430
Land	4,914	4,914
Property and Equipment:		
Construction in progress	2,308	885
Building	70,550	70,531
Furniture and equipment	146,732	144,597
Less accumulated depreciation and amortization	(161,527)	(155,653)
Total Property and Equipment—Net	58,063	60,360
Goodwill	26,468	7,655
Other Assets:		
Intangible assets (less accumulated amortization—2016 - $544 and 2015 - $182)	10,016	2,378
Software development work in progress	16,519	13,836
Data processing software and other assets (less accumulated amortization—2016 - $167,746 and 2015 - $164,152)	40,674	43,097
Total Other Assets—Net	67,209	59,311
Total	$394,830	$ 384,788
Liabilities, Redeemable Noncontrolling Interest and Stockholders' Equity		
Current Liabilities:		
Accounts payable and accrued liabilities	$50,387	$ 60,104
Marketing fee payable	7,058	6,141
Deferred revenue and other liabilities	14,726	4,019
Post-retirement benefit obligation - current	81	100
Contingent consideration - current	3,407	2,000
Income tax payable	7,695	1,633
Total Current Liabilities	83,354	73,997
Long-term Liabilities:		
Post-retirement benefit obligation - long-term	1,881	1,896
Contingent consideration - long term	—	1,379
Income tax liability	40,929	39,679
Other long-term liabilities	2,995	2,883
Deferred income taxes	5,144	5,309
Total Long-term Liabilities	50,949	51,146
Commitments and Contingencies		
Total Liabilities	134,303	125,143

Redeemable Noncontrolling Interests	12,600	—
Stockholders' Equity:		
Preferred stock, $0.01 par value: 20,000,000 shares authorized, no shares issued and outstanding at March 31, 2016 or December 31, 2015	—	—
Common stock, $0.01 par value: 325,000,000 shares authorized; 92,934,561 issued and 81,550,703 outstanding at March 31, 2016; 92,738,803 issued and 82,088,549 outstanding at December 31, 2015	929	927
Additional paid-in-capital	128,080	123,577
Retained earnings	633,876	603,597
Treasury stock at cost – 11,383,858 shares at March 31, 2016 and 10,650,254 shares at December 31, 2015	(514,163)	(467,632)
Accumulated other comprehensive loss	(795)	(824)
Total Stockholders' Equity	247,927	259,645
Total	$394,830	$ 384,788

See notes to condensed consolidated financial statements

Table of Contents

CBOE Holdings, Inc. and Subsidiaries
Condensed Consolidated Statement of Stockholders' Equity and Redeemable Noncontrolling Interests
Three Months Ended March 31, 2016
(Unaudited)

(in thousands)	Preferred Stock	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total Stockholders Equity	Redeemable Noncontrolling Interests
Balance—January 1, 2016	$ —	$ 927	$ 123,577	$ 603,597	$ (467,632)	$ (824)	$ 259,645	$ —
Cash dividends on common stock				(18,897)			(18,897)	
Stock-based compensation			3,363				3,363	
Excess tax benefits from stock-based compensation plan			1,142				1,142	
Issuance of vested restricted stock granted to employees		2	(2)				—	
Purchase of common stock					(46,531)		(46,531)	
Net Income excluding noncontrolling interests				49,400			49,400	
Increase due to acquiring majority of outstanding equity of Vest								12,600
Net loss attributable to redeemable noncontrolling interest								(224)
Redemption value adjustment				(224)			(224)	224
Post-retirement benefit obligation adjustment—net of tax expense $18						29	29	
Balance—March 31, 2016	$ —	$ 929	$ 128,080	$ 633,876	$ (514,163)	$ (795)	$ 247,927	$ 12,600

See notes to condensed consolidated financial statements

Table of Contents

CBOE Holdings, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
Three Months Ended March 31, 2016 and 2015

(in thousands)	Three Months Ended March 31, 2016 (unaudited)	March 31, 2015
Cash Flows from Operating Activities:		
Net income	$49,176	$42,259
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation and amortization	11,851	10,402
Other amortization	21	11
Provision for deferred income taxes	(184)	601
Stock-based compensation	3,363	2,655
Loss on disposition of property	1	170
Equity (gain) in investment	(306)	(37)
Impairment of investment and other assets	—	118
Change in assets and liabilities:		
Accounts receivable	4,931	6,154
Marketing fee receivable	(903)	1,908
Income taxes receivable	23,123	20,383
Prepaid expenses	(2,831)	(3,966)
Other current assets	365	(372)
Accounts payable and accrued expenses	(10,221)	(13,239)
Marketing fee payable	917	(1,916)
Deferred revenue and other liabilities	10,819	11,200
Post-retirement benefit obligations	(6)	(5)
Income tax liability	1,250	1,249
Income tax payable	6,062	880
Net Cash Flows provided by Operating Activities	97,428	78,455
Cash Flows from Investing Activities:		
Capital and other assets expenditures	(8,934)	(7,536)
Acquisition of a majority interest in a business, net of cash received	(14,257)	—
Investments	(4,749)	(30,469)
Other	27	246
Net Cash Flows used in Investing Activities	(27,913)	(37,759)
Cash Flows from Financing Activities:		
Payment of quarterly dividends	(18,897)	(17,725)
Excess tax benefit from stock-based compensation	1,142	1,194
Purchase of common stock from employees	(4,119)	(3,119)
Purchase of common stock under announced program	(42,412)	(31,415)
Net Cash Flows used in Financing Activities	(64,286)	(51,065)
Net Increase/(Decrease) in Cash and Cash Equivalents	5,229	(10,369)
Cash and Cash Equivalents at Beginning of Period	102,253	147,927
Cash and Cash Equivalents at End of Period	$107,482	$137,558
Supplemental Disclosure of Cash Flow Information		
Cash paid for income taxes	$—	$2,695

See notes to condensed consolidated financial statements

9

Table of Contents

CBOE HOLDINGS, INC. AND SUBSIDIARIES

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
For the three months ended March 31, 2016 and 2015
(Unaudited)

NOTE 1 —DESCRIPTION OF BUSINESS

CBOE Holdings, Inc. is the holding company for Chicago Board Options Exchange, Incorporated, CBOE Futures Exchange, LLC, C2 Options Exchange, Incorporated and other subsidiaries, including our majority ownership in Vest Financial Group Inc. ("Vest").

The Company's principal business is operating markets that offer for trading options on various market indexes (index options), mostly on an exclusive basis, and futures contracts, as well as on non-exclusive "multiply-listed" options, such as options on the stocks of individual corporations (equity options) and options on other exchange-traded products (ETP options), such as exchange-traded funds (ETF options) and exchange-traded notes (ETN options). The Company operates CBOE, CFE and C2 as stand-alone exchanges, but reports the results of its operations in a single reporting segment.

CBOE is our primary options market and offers trading in listed options through a single system that integrates electronic trading and traditional open outcry trading on our trading floor in Chicago. This integration of electronic trading and traditional open outcry trading into a single exchange is known as our Hybrid trading model. CFE, our all-electronic futures exchange, offers trading of futures on the VIX Index and other products. C2 is our all-electronic exchange that also offers trading for listed options, and may operate with a different market model and fee structure than CBOE. All of our exchanges operate on our proprietary technology platform known as CBOE Command.

NOTE 2 — BASIS OF PRESENTATION

These interim unaudited condensed consolidated financial statements have been prepared in accordance with GAAP for interim financial information and with the instructions to Form 10-Q and should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company’s Annual Report on Form 10-K for the year ended December 31, 2015.

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities, valuation of redeemable noncontrolling interests and reported amounts of revenues and expenses. On an ongoing basis, management evaluates its estimates based upon historical experience, observance of trends, information available from outside sources and various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different conditions or assumptions.

In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation of financial position, results of operations and cash flows at the dates and for the periods presented have been included.

The results of operations for interim periods are not necessarily indicative of the results of operations for the full year.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers. This standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. In addition, the ASU

provides guidance on accounting for certain revenue-related costs including when to capitalize costs associated with obtaining and fulfilling a contract. ASU 2014-09 provides companies with two implementation methods. Companies can choose to apply the standard retrospectively to each prior reporting period presented (full retrospective application) or retrospectively with the cumulative effect of initially applying the standard as an adjustment to the opening balance of retained earnings of the annual reporting period that includes the date of initial application (modified retrospective application). This guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early application is not permitted. The FASB deferred the effective date by one year to December 15, 2017 for annual reporting periods beginning after that date. Early adoption of the standard is permitted, but not before the original effective date of December 15,

Table of Contents

2016. The Company is in the process of evaluating this guidance, though we do not expect it will materially impact our consolidated balance sheets, statements of income, comprehensive income or cash flows.

In September 2015, the FASB issued ASU 2015-16, Business Combinations. This standard simplifies the accounting for adjustments made to provisional amounts recognized in a business combination. First, it requires that the acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amount is determined. The acquirer also should record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. The amendments should be applied prospectively to adjustments to provisional amounts that are identified after December 15, 2015 and that are within the measurement period. Upon transition, an entity would be required to disclose the nature of, and reason for, the change in accounting principle. An entity would provide that disclosure in the first annual period of adoption and in the interim periods within the first annual period. The Company has adopted this guidance, though we do not expect it will materially impact our consolidated balance sheets, statements of income, comprehensive income or cash flows.

In February 2016, the FASB issued ASU 2016-02, Leases. This update requires a lessee to recognize on the balance sheet a liability to make lease payments and a corresponding right-of-use asset. The guidance also requires certain qualitative and quantitative disclosures about the amount, timing and uncertainty of cash flows arising from leases. This update is effective for annual and interim periods beginning after December 15, 2018. Early adoption is permitted. The Company is in the process of evaluating this guidance, though we do not expect it will materially impact our consolidated balance sheets, statements of income, comprehensive income or cash flows.

In March 2016, the FASB issued ASU 2016-09, Compensation — Stock Compensation. This standard simplifies several aspects of the accounting for stock-based payment transactions, including the recognition of excess tax benefits and deficiencies, the classification of those excess tax benefits on the statement of cash flows, an accounting policy election for forfeitures, the amount an employer can withhold to cover income taxes and still qualify for equity classification and the classification of those taxes paid on the statement of cash flows. This update is effective for annual and interim periods beginning after December 15, 2016 and can be applied either prospectively, retrospectively or using a modified retrospective transition method, depending on the area covered in this update. Early adoption is permitted. The Company is in the process of evaluating this guidance, though we do not expect it will materially impact our consolidated balance sheets, statements of income, comprehensive income or cash flows.

Table of Contents

3. ACQUISITIONS - GOODWILL AND INTANGIBLE ASSETS

Vest Financial Group Inc.

In January 2016, the Company, through its subsidiary CBOE Vest, LLC, acquired a majority of the outstanding equity of Vest, an asset management firm that provides options-based investments through structured protective strategies and innovative technology solutions which allows for enhanced integration of our proprietary products, strategy indexes and options expertise. The purchase price consisted of $18.9 million in cash, reflecting payments of $14.9 million to former stockholders and $4.0 million to Vest for newly issued shares, and represented an ownership interest of 60% resulting in the consolidation of the operations. The purchase price was allocated on a preliminary basis, subject to final allocation, to the assets acquired based on their fair values at the acquisition date.

(amounts in thousands)	As of March 31, 2016
Purchase price	$18,900
Fair Value of Assets Acquired:	
Cash	$4,700
Intangible assets	8,000
Goodwill	18,800
Total Assets Acquired	$31,500
Redeemable noncontrolling interests	12,600
Net Assets Acquired	$18,900

The intangible assets acquired are listed below and consisted of the following as of March 31, 2016 (in thousands):

	As of March 31, 2016	Estimated Useful Lives
Customer relationships	$3,000	8 years
Trade names	1,000	7 years
Technology	4,000	5 years
Total Intangible Assets Acquired	$8,000	

The remaining 40% noncontrolling interest is held by the remaining Vest stockholders. The remaining Vest stockholders have a put option that can be exercised to Vest and Vest has a call option that can be exercised to the remaining stockholders. The put and call options can be exercised after five years though they could be accelerated by certain employment-related actions. The combination of the noncontrolling interest and a redemption feature resulted in a redeemable noncontrolling interest, which is classified outside of permanent equity on the condensed consolidated balance sheet.

In addition to the tangible and intangible assets, goodwill totaling $18.8 million was recorded in connection with the acquisition. Goodwill was calculated as the excess of the consideration transferred over the net assets recognized and represents potential future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. The goodwill is not expected to be deductible for tax purposes.

Pro forma financial information has not been provided as the Vest acquisition is not material to our consolidated balance sheets, statements of income, comprehensive income or cash flows and did not meet the conditions of a significant
subsidiary under Rule 1-02 of Regulation S-X.

Livevol, Inc.

On August 7, 2015, the Company acquired the market data services and trading analytics platforms of Livevol, Inc. ("Livevol"), which included Livevol Core, Livevol Pro and Livevol X trading analytics platforms, as well as Livevol Enterprise and other market data solutions products. The purchase price consisted of $7.0 million cash, including $4.0 million paid to existing Livevol debt holders and $3.0 million to Livevol owners, upon closing plus contingent consideration based on achievement of certain performance targets, measured at nine and eighteen months from the acquisition date of August 7, 2015.

Table of Contents

The purchase price was allocated on a preliminary basis, subject to final allocation, to the assets acquired based on their fair values at the acquisition date. The acquisition included tangible and intangible assets totaling $0.1 million and $2.6 million, respectively. The tangible assets primarily reflect computer hardware and intangible assets include: customer relationships, trade names, existing technology, non-compete agreements and a leasehold right.

In addition to the assets, goodwill totaling $7.7 million was recorded in connection with the acquisition. Goodwill was calculated as the excess of the consideration transferred over the net assets recognized and represents potential future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. The goodwill is expected to be fully deductible for tax purposes.

As of March 31, 2016, the company recorded contingent consideration of $3.4 million, which is based on management's estimate of the performance target achievement by Livevol. If Livevol were to exceed management's estimates it could result in an additional payment in excess of the recorded contingent consideration.

Livevol - Intangible Assets

Intangible assets totaling $2.6 million were recorded in 2015 in connection with the acquisition of Livevol. The intangible assets include: customer relationships, trade names, existing technology, non-compete agreements and leasehold rights. Intangible assets and related accumulated amortization consisted of the following as of March 31, 2016 (in thousands):

	As of March 31, 2016	Estimated Useful Lives
Customer relationships	$910	13 years
Trade names	370	10 years
Technology	1,130	2-5 years
Other	150	1-4 years
Total	2,560	
Less accumulated amortization	291	
Total Intangibles, net	$2,269	

For the three months ended March 31, 2016, amortization of Livevol intangible assets was $0.1 million. The remaining weighted average useful lives of the intangible assets is 7.9 years as of March 31, 2016. The future expected amortization expense from the intangible assets related to the Livevol acquisition as of March 31, 2016 is as follows (in thousands):

Year	Amortization expense
2016 (1)	$ 326
2017	428
2018	349
2019	348
2020	277
Total	$ 1,728

(1) Includes expected amortization for the remaining nine months of 2016.

NOTE 4 — REDEEMABLE NONCONTROLLING INTEREST

Redeemable noncontrolling interests are reported on the condensed consolidated balance sheets in mezzanine equity in "Redeemable Noncontrolling Interests." We recognize changes to the redemption value of redeemable noncontrolling interests as they occur and adjust the carrying value to equal the redemption value at the end of each reporting period. The resulting increases or decreases in the estimated redemption amount are affected by corresponding charges or credits against retained earnings, or in the absence of retained earnings, additional paid in capital. The redemption amounts have been estimated based

Table of Contents

on the fair value of the majority-owned subsidiary, determined based on a weighting of the discounted cash flow and other economic factors.

For the three months ended March 31, 2016, the following reflects changes in our redeemable noncontrolling interests (in thousands):

	Three Months Ended March 31, 2016
Balance as of 1/1/2016	$—
Increase due to acquiring majority of outstanding equity of Vest	12,600
Net loss attributable to redeemable noncontrolling interest	(224)
Redemption value adjustment	224
Balance as of March 31, 2016	$12,600

NOTE 5 — NET INCOME PER COMMON SHARE

The computation of basic net income allocated to common stockholders is calculated by reducing net income for the period by dividends paid or declared and undistributed net income for the period that are allocated to participating securities to arrive at net income allocated to common stockholders. Net income allocated to common stockholders is divided by the weighted average number of common shares outstanding during the period to determine net income per share allocated to common stockholders.

The computation of diluted earnings per share is calculated by dividing net income allocated to common stockholders by the sum of the weighted average number of common shares outstanding plus all additional common shares that would have been outstanding if the potentially dilutive common shares had been issued. The dilutive effect is calculated using the more dilutive of the two-class or treasury stock method.

The following table reconciles net income allocated to common stockholders and the number of shares used to calculate the basic and diluted net income per common share for the three months ended March 31, 2016 and 2015:

Table of Contents

(in thousands, except per share amounts)	Three Months Ended March 31, 2016	2015
Basic EPS Numerator:		
Net Income	$49,176	$42,259
Add: Loss attributable to noncontrolling interests	224	—
Net income excluding noncontrolling interests	49,400	42,259
Less: Earnings allocated to participating securities	(202)	(180)
Net Income allocated to common stockholders	$49,198	$42,079
Basic EPS Denominator:		
Weighted average shares outstanding	81,818	83,956
Basic Net Income Per Common Share	$0.60	$0.50
Diluted EPS Numerator:		
Net Income	$49,176	$42,259
Add: Loss attributable to noncontrolling interests	224	—
Net income excluding noncontrolling interests	49,400	42,259
Less: Earnings allocated to participating securities	(202)	(180)
Net Income allocated to common stockholders	$49,198	$42,079
Diluted EPS Denominator:		
Weighted average shares outstanding	81,818	83,956
Dilutive common shares issued under stock program	—	—
Diluted Net Income Per Common Share	$0.60	$0.50

For the periods presented, the Company did not have shares of restricted stock or restricted stock units that would have an anti-dilutive effect on the computation of diluted net income per common share.

NOTE 6 — STOCK-BASED COMPENSATION

Stock-based compensation is based on the fair value of the award on the date of grant, which is recognized over the related service period, net of estimated forfeitures. The service period is the period over which the related service is performed, which is generally the same as the vesting period.

On February 19, 2016, the Company granted 170,081 restricted stock units ("RSUs"), each of which entitles the holders to one share of common stock upon vesting, to certain officers and employees at a fair value of $61.80 per share. The RSUs vest ratably over three years, with one-third vesting on each anniversary of the grant date, and vesting accelerates upon the occurrence of a change in control. Unvested RSUs will be forfeited if the officer or employee leaves the Company prior to the applicable vesting date, except in limited circumstances. The RSUs have no voting rights but entitle the holder to receive dividend equivalents.

In addition, on February 19, 2016, the Company granted 49,238 RSUs contingent on the achievement of performance conditions, including 24,619 RSUs, at a fair value of $61.80 per RSU, related to earnings per share during the performance period and 24,619 RSUs, at a fair value of $83.00 per RSU, related to total shareholder return during the performance period. The Company used the Monte Carlo valuation model method to estimate the fair value of the total shareholder return RSUs which incorporated the following assumptions: risk-free interest rate (0.90%), three-year volatility (21.1%) and three-year correlation with S&P 500 Index (0.41). Each of these performance shares has a performance condition under which the number of units ultimately awarded will vary from 0% to 200% of the original grant, with each unit representing the contingent right to receive one share of our common stock. The vesting period for the RSUs contingent on the achievement of performance is three years. For each of the performance awards, the RSUs will be settled in shares of our common stock following vesting of the RSU assuming that the participant has been continuously employed during the vesting period, subject to acceleration in the event of a change

in control of the Company or in the event of a participant's earlier death or disability. Participants have no voting rights with respect to RSUs until the issuance of the shares of stock. Dividends are accrued by the Company and will be paid once the RSUs contingent on the achievement of performance conditions vest.

Table of Contents

For the three months ended March 31, 2016 and 2015, the Company recognized $3.4 million and $2.7 million of stock-based compensation expense, respectively. The three months ended March 31, 2016 included $0.2 million of accelerated stock-based compensation expense for certain officers and employees as a result of attaining certain age and service based requirements in our long-term incentive plan and award agreements. Stock-based compensation expense is included in compensation and benefits in the condensed consolidated statements of income.

As of March 31, 2016, the Company had unrecognized stock-based compensation of $24.0 million. The remaining unrecognized stock-based compensation is expected to be recognized over a weighted average period of 29.9 months.

The activity in the Company's restricted stock and restricted stock units for the three months ended March 31, 2016 was as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2016	456,570	$ 55.70
Granted	219,319	64.18
Vested	(195,731)	47.36
Forfeited	(4,133)	59.67
Unvested at March 31, 2016	476,025	$ 63.17

NOTE 7 — INVESTMENTS

At March 31, 2016 and December 31, 2015, the Company's investments were comprised of the following (in thousands):

	March 31, 2016	December 31, 2015
Equity Method		
Investment in Signal Trading Systems, LLC	12,971	12,185
Investment in CBOE Stock Exchange, LLC	—	—
Total equity method investments	12,971	12,185
Cost Method		
Investment in OCC	30,333	30,333
Other cost method investments	10,181	5,912
Total cost method investments	40,514	36,245
Total Investments	$ 53,485	$ 48,430

Equity Method

The carrying amount of our equity method investments totaled $13.0 million and $12.2 million as of March 31, 2016 and December 31, 2015, respectively, and is included in Investments in our Consolidated Balance Sheet. Our equity method investments include our investments in Signal Trading Systems, LLC ("Signal") and CBOE Stock Exchange, LLC ("CBSX").

In May 2010, CBOE acquired a 50% interest in Signal from FlexTrade Systems, Inc. ("FlexTrade"). The joint venture develops and markets a multi-asset front-end order entry system, known as "Pulse," which has a particular emphasis on options trading. The Company assists in the development of the terminals and provides marketing services to the joint venture, which is accounted for under the equity method. We account for the investment in Signal under the equity method due to the substantive participating rights provided to the other limited liability company member,

FlexTrade. In the three months ended March 31, 2016, the Company recorded contributions to Signal of $0.5 million and equity earnings in Signal of $0.3 million.

Table of Contents

The Company currently holds a 49.96% equity interest in CBSX in return for non-cash property contributions. CBSX ceased trading operations on April 30, 2014. CBOE is responsible for the compliance and regulation of the CBSX marketplace. In addition, the Company has a services agreement under which it provides CBSX with financial, accounting and technology support.

Cost method

The carrying amount of our cost method investments totaled $40.5 million and $36.2 million as of March 31, 2016 and December 31, 2015, respectively, and is included in Investments in our Consolidated Balance Sheet. We account for investments under the cost-method primarily as a result of our inability to exercise significant influence. As of March 31, 2016, our cost method investments primarily reflect our 20% investment in OCC and minority investments in American Financial Exchange ("AFX") and CurveGlobal.

As previously reported in our Annual Report on Form 10-K for the year ended December 31, 2015, the SEC approved OCC’s rule change implementing OCC's new capital plan on February 11, 2016. Certain petitioners subsequently appealed the SEC approval order for the OCC capital plan to the U.S. Court of Appeals for the D.C. Circuit and moved to stay the SEC approval order. On February 23, 2016, the Court denied the petitioners’ motion to stay. The appeal of the SEC approval order remains pending.

In 2015, CBOE Holdings, through its subsidiary Loan Markets, LLC, acquired a minority interest in AFX, an electronic marketplace for small and mid-sized banks to lend and borrow short-term funds.

In January 2016, CBOE Holdings, through its subsidiary CBOE III, LLC, acquired a minority interest in CurveGlobal, a new interest rate derivatives venture.

NOTE 8 — ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

As of March 31, 2016 and December 31, 2015, accounts payable and accrued liabilities consisted of the following (in thousands):

	March 31, 2016	December 31, 2015
Compensation and benefit-related liabilities (1)	$ 8,593	$ 23,304
Royalties	16,588	15,409
Contract services	7,139	6,684
Accounts payable	4,178	1,762
Purchase of common stock (2)	1,825	1,778
Facilities	1,868	2,099
Legal	2,042	1,536
Market linkage	522	628
Other	7,632	6,904
Total	$ 50,387	$ 60,104

(1) As of March 31, 2016, primarily reflects accrued costs for 2016 incentive compensation expense. At December 31, 2015, primarily reflects 2015 annual incentive compensation expense, which was paid in the first quarter of 2016.

(2) Reflects shares purchased at the end of the period not settled until three trading days after the trade occurs.

NOTE 9 — MARKETING FEE

CBOE facilitates the collection and payment of marketing fees assessed on certain trades taking place at CBOE. Funds resulting from the marketing fees are made available to Designated Primary Market Makers and Preferred Market Makers as an economic inducement to route orders to CBOE. Pursuant to ASC 605-45, Revenue Recognition—Principal Agent Considerations, the Company reflects the assessments and payments on a net basis, with no impact on revenues or expenses.

As of March 31, 2016 and December 31, 2015, amounts assessed by the Company on behalf of others included in current assets totaled $6.6 million and $5.7 million, respectively, and payments due to others included in current liabilities totaled $7.1 million and $6.1 million, respectively.

Table of Contents

NOTE 10 — DEFERRED REVENUE

The following table summarizes the activity in deferred revenue for the three months ended March 31, 2016 (in thousands):

	Balance at December 31, 2015	Cash Additions	Revenue Recognition	Balance at March 31, 2016
Other – net	$ 4,019	$ 4,556	$ (2,849)	$5,726
Liquidity provider sliding scale (1)	—	11,400	(2,400)	9,000
Total deferred revenue	$ 4,019	$ 15,956	$ (5,249)	$14,726

(1) Liquidity providers are eligible to participate in the sliding scale program, which involves prepayment of transaction fees, and receive reduced fees based on the achievement of certain volume thresholds within a calendar month. The prepayment of 2016 transaction fees totaled $11.4 million. This amount is amortized and recorded ratably, as transaction fees, over the respective twelve month period.

NOTE 11 — EMPLOYEE BENEFITS

Employees are eligible to participate in the Chicago Board Options Exchange SMART Plan (“SMART Plan”). The SMART Plan is a defined contribution plan, which is qualified under Internal Revenue Code Section 401(k). In addition, eligible employees may participate in the Supplemental Employee Retirement Plan, Executive Retirement Plan and Deferred Compensation Plan. Each plan is a defined contribution plan that is non-qualified under Internal Revenue Code. The Company contributed $1.3 million and $1.1 million to the defined contribution plans for the three months ended March 31, 2016 and 2015, respectively.

The Company has a post-retirement medical plan for former members of senior management. The Company recorded immaterial post-retirement benefits expense for the three months ended March 31, 2016 and 2015.

NOTE 12 — INCOME TAXES

Income tax provision includes United States federal, state and local taxes and is based on reported pre-tax income. For the three months ended March 31, 2016 and 2015, the Company recorded income tax provisions of $31.3 million and $27.0 million, resulting in an effective tax rate of 38.9% and 39.0%, respectively.

Income tax expense is provided on an interim basis based upon our estimate of the annual effective income tax rate, adjusted each quarter for discrete items. In determining the estimated annual effective income tax rate, we analyze various factors, including projections of our annual earnings and taxing jurisdictions in which the earnings will be generated, the impact of state and local income taxes, and our ability to use tax credits.

As of March 31, 2016 and December 31, 2015, the Company had $32.4 million and $31.9 million, in unrecognized tax benefits, respectively, all of which would favorably impact the effective tax rate if recognized. As of March 31, 2016 and December 31, 2015, the Company has recognized a liability for interest and penalties of $8.4 million and $7.7 million, respectively.

We file income tax returns in the U.S. federal jurisdiction and various state jurisdictions. Federal income tax returns are generally not subject to examination by the Internal Revenue Service ("IRS") for tax years prior to 2010. Tax years open to examination by state and local taxing authorities vary by jurisdiction. We are generally not subject to state or local tax examinations for tax years prior to 2007. The IRS is currently examining tax years 2008 through 2013. The New York State Department of Taxation and Finance is currently examining the returns filed for tax years 2007

through 2012. Tax returns for tax years 2010 through 2012 are currently under examination by the New Jersey Division of Taxation. We have been notified by the Illinois Department of Revenue that it intends to examine our tax returns filed for the 2013 and 2014 tax years.

NOTE 13 — FAIR VALUE MEASUREMENTS

Fair value is the price that would be received upon the sale of an asset or paid upon the transfer of a liability in an orderly transaction between market participants at the measurement date and in the principal or most advantageous market for that asset or liability. The fair value should be calculated based on assumptions that market participants would use in pricing the

Table of Contents

asset or liability, not on assumptions specific to the entity. In addition, the fair value of liabilities should include consideration of non-performance risk, including the Company's own credit risk.

The Company applied FASB ASC 820, Fair Value Measurement and Disclosure, which provides guidance for using fair value to measure assets and liabilities by defining fair value and establishing the framework for measuring fair value. ASC 820 applies to financial and non-financial instruments that are measured and reported on a fair value basis. The three-level hierarchy of fair value measurements is based on whether the inputs to those measurements are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. The fair-value hierarchy requires the use of observable market data when available and consists of the following levels:

- Level 1—Unadjusted inputs based on quoted markets for identical assets or liabilities.
- Level 2—Observable inputs, either direct or indirect, not including Level 1, corroborated by market data or based upon quoted prices in non-active markets.
- Level 3—Unobservable inputs that reflect management's best assumptions of what market participants would use in valuing the asset or liability.

The Company has included a tabular disclosure for financial assets that are measured at fair value on a recurring basis in the condensed consolidated balance sheet as of March 31, 2016 and December 31, 2015. The Company holds no financial liabilities that are measured at fair value on a recurring basis.

(amounts in thousands)	Level 1	Level 2	Level 3	Total
Assets at fair value:				
Money market funds	$87,000	$ —	$ —	$87,000
Total assets at fair value at March 31, 2016	$87,000	$ —	$ —	$87,000

(amounts in thousands)	Level 1	Level 2	Level 3	Total
Assets at fair value:				
Money market funds	$84,000	$ —	$ —	$84,000
Total assets at fair value at December 31, 2015	$84,000	$ —	$ —	$84,000

In 2015, CBOE Holdings, through its subsidiary Loan Markets, LLC, acquired a minority interest in AFX. The investment, measured at fair value on a non-recurring basis, is classified as level 3 as the fair value was based on both observable and unobservable inputs.

In January 2016, CBOE Holdings, through its subsidiary CBOE III, LLC, acquired a minority interest in CurveGlobal. The investment, measured at fair value on a non-recurring basis, is classified as level 3 as the fair value was based on both observable and unobservable inputs.

The Company has recorded contingent consideration of $3.4 million through March 31, 2016, categorized as level 3, which is based on management's estimate of the achievement by Livevol of certain performance targets at nine and eighteen months from the acquisition date. If Livevol were to exceed management's estimates it could result in an additional payment in excess of the recorded contingent consideration.

NOTE 14 — LEGAL PROCEEDINGS

As of March 31, 2016, the end of the period covered by this report, the Company was subject to various legal proceedings and claims, as well as certain other legal proceedings and claims that have not been fully resolved and that have arisen in the ordinary course of business. For a description of each of these proceedings, please see Note 12 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015.

The Company reviews its legal proceedings and claims, regulatory reviews and inspections and other legal proceedings on an ongoing basis and follows appropriate accounting guidance when making accrual and disclosure decisions.

Table of Contents

The Company establishes accruals for those contingencies where the incurrence of a loss is probable and can be reasonably estimated, and we disclose the amount accrued and the amount of a reasonably possible loss in excess of the amount accrued, if such disclosure is necessary for our financial statements to not be misleading. The Company does not record liabilities when the likelihood that the liability has been incurred is probable, but the amount cannot be reasonably estimated, or when the liability is believed to be only reasonably possible or remote. The Company's assessment of whether a loss is reasonably possible or probable is based on its assessment of the ultimate outcome of the matter following all appeals.

As of March 31, 2016, the Company does not believe that there is a reasonable possibility that any material loss exceeding the amounts already recognized for these reviews, inspections or other legal proceedings, if any, has been incurred. While the consequences of certain unresolved proceedings are not presently determinable, the outcome of any litigation is inherently uncertain and an adverse outcome from certain matters could have a material effect on our earnings in any given reporting period. However, in the opinion of management, the ultimate liability is not expected to have a material effect on our financial position, liquidity or capital resources.

ISE -- QRM

On November 12, 2012, CBOE brought suit against International Securities Exchange, LLC ("ISE") in the United States District Court for the Northern District of Illinois alleging that ISE infringed three of its patents (United States Patent Nos. 7,356,498; 7,980,457; and 8,266,044 (the "QRM patents")) related to quote risk monitor ("QRM") technology. CBOE had requested injunctive relief and monetary damages. On February 20, 2013, the court ruled that the case be transferred to the United States District Court for the Southern District of New York, and on October 31, 2013, the Court stayed the litigation pending resolution of Covered Business Method ("CBM") Patent Reviews at the United States Patent and Trademark Office ("USPTO"), which ISE requested. On March 4, 2014, the USPTO instituted CBM Patent Reviews on CBOE’s three QRM patents. On May 22, 2014, the USPTO instituted Inter Parties Review ("IPR") Proceedings, which ISE requested, on some but not all claims of two of CBOE’s QRM patents (United States Patent Nos. 7,356,498 and 7,980,457). On March 2, 2015, the USPTO ruled in the CBM proceedings, finding that the subject matter of the patents is not eligible for patent protection, and in the IPR proceedings, finding for CBOE that the claims were not invalidated by the asserted prior art. On April 30, 2015, ISE filed notice of its appeal of the IPR decisions, and on May 1, 2015, CBOE filed notice of its appeal of the CBM decisions. The appeals are being handled by the United States Court of Appeals for the Federal Circuit. On March 25, 2016, the Court of Appeals affirmed the USPTO’s decisions that the QRM patents were directed to ineligible subject matter and dismissed ISE’s appeal and vacated the USPTO’s IPR decisions.

Lanier Litigation

On May 23, 2014, Harold R. Lanier sued 14 securities exchanges, including CBOE, in the United States District Court for the Southern District of New York on behalf of himself and a putative class consisting of all persons in the United States who entered into contracts to receive market data through certain data plans at any time since May 19, 2008 to the present. The complaint alleged that the market data provided under the CQ Plan and CTA Plans was inferior to the data that the exchanges provided to those that directly receive other data from the exchanges, which the plaintiffs alleged is a breach of their “subscriber contracts” and a violation of the exchanges’ obligations under the CQ and CTA Plans. The plaintiffs sought monetary and injunctive relief. On May 30, 2014, Mr. Lanier filed two additional suits in the same Court, alleging substantially the same claims and requesting the same types of relief against the exchanges who participate in the UTP and the OPRA data plans. CBOE was a defendant in each of these suits, while C2 was only a defendant in the suit regarding the OPRA Plan. On April 28, 2015, the Court dismissed Lanier’s complaint with prejudice because it was preempted by the federal regulatory scheme and because the claims were precluded by the terms of the applicable subscriber agreements. Mr. Lanier appealed the orders dismissing each of his three cases and, on September 2, 2015, he filed his opening appellate briefs in those cases. The defendants’ response briefs were filed

November 24, 2015 and briefing on the appeals has concluded. The oral arguments on the appeals were heard on March 3, 2016.

ISE -- '707

On November 22, 2006, ISE filed an action in the United States District Court for the Southern District of New York claiming that CBOE's Hybrid trading system infringes ISE's U.S. Patent No. 6,618,707 (the "'707 patent"). On January 31, 2007, CBOE filed an action in federal court in the Northern District of Illinois seeking a declaratory judgment that the '707 patent was not infringed, not valid and/or not enforceable against CBOE. The New York case was transferred to the federal court in the Northern District of Illinois on August 9, 2007.

On March 14, 2013, ISE conceded to an adverse judgment in this matter and asked that the federal court in the Northern District of Illinois enter judgment for CBOE. ISE appealed certain court rulings to the Federal Circuit Court of

Table of Contents

Appeals. The federal court in the Northern District of Illinois on January 14, 2014 issued an opinion and order awarding certain costs associated with the litigation to CBOE. On April 7, 2014, the Federal Circuit Court of Appeals issued a favorable opinion to CBOE. On March 31, 2016, the federal court in the Northern District of Illinois granted CBOE's motion for attorney fees and expenses and CBOE subsequently supplemented such request on April 7, 2016.

Table of Contents

CBOE HOLDINGS, INC. AND SUBSIDIARIES

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the accompanying unaudited condensed consolidated financial statements and the notes thereto, included in Item 1 in this Quarterly Report on Form 10-Q, and the audited consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2015, and as contained in that report, the information under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations." This discussion contains forward-looking information. Please see "Forward-Looking Statements" for a discussion of the uncertainties, risks and assumptions associated with these statements.

RESULTS OF OPERATIONS

Three months ended March 31, 2016 compared to the three months ended March 31, 2015

Overview

The following summarizes our financial performance for the three months ended March 31, 2016 compared to the same period in 2015.

	2016	2015	Inc./(Dec.)	Percent Change
	(in millions, except per share amounts)			
Total Operating Revenues	$162.3	$142.8	$ 19.5	13.6 %
Total Operating Expenses	82.8	73.3	9.5	13.0 %
Operating Income	79.5	69.5	10.0	14.4 %
Total Other Income/(Expense)	1.0	(0.3)	1.3	457.2 %
Income Before Income Taxes	80.5	69.2	11.3	16.3 %
Income tax provision	31.3	27.0	4.3	15.8 %
Net Income	$49.2	$42.2	$ 7.0	16.6 %
Net Income Allocated to Common Stockholders	$49.2	$42.1	$ 7.1	16.9 %
Operating Margin	49.0 %	48.7 %		
Net income percentage	30.3 %	29.6 %		
Diluted Net Income Per Share Allocated to Common Stockholders	$0.60	$0.50		

- Total operating revenues increased primarily due to higher transaction fees, exchange services and other fees partially offset by lower other revenue.

- Total operating expenses increased primarily due to higher compensation and benefits, depreciation and amortization, professional fees and outside services and royalty fees.

Operating Revenues

Total operating revenues for the three months ended March 31, 2016 were $162.3 million, an increase of $19.5 million, or 13.6%, compared with the same period in 2015. The following summarizes changes in total operating revenues for the three months ended March 31, 2016 compared to the same period in 2015.

Table of Contents

	2016	2015	Inc./(Dec.)	Percent Change
		(in millions)		
Transaction fees	$118.0	$ 98.7	$ 19.3	19.5 %
Access fees	13.2	13.7	(0.5)	(3.2)%
Exchange services and other fees	11.4	9.7	1.7	17.1 %
Market data fees	8.0	8.0	—	— %
Regulatory fees	9.1	8.4	0.7	8.6 %
Other revenue	2.6	4.3	(1.7)	(39.3)%
Total Operating Revenues	$162.3	$ 142.8	$ 19.5	13.6 %

Transaction Fees

Transaction fees totaled $118.0 million for the three months ended March 31, 2016, compared with $98.7 million for the same period in 2015, an increase of $19.3 million, or 19.5%. The increase in transaction fees was primarily due to an increase in average revenue per contract of 19.3%. The increase in average revenue per contract resulted primarily from a shift in the mix of products traded and lower volume discounts and incentives. As a percent of total trading volume, index options and futures contracts, which generate our highest options and overall average revenue per contract, respectively, accounted for 42.4% of trading volume during the first quarter of 2016 up from 33.3% in the first quarter of 2015.

Average revenue per contract, discussed in more detail below, is impacted by our fee structure, which includes volume based incentive programs, mix of products traded, the account type (customer, firm, market-maker, etc.) and the manner in which a trade is executed. The implementation of fee changes, which may increase or decrease our average revenue per contract, is primarily to ensure that we are competitive in the options marketplace and to ultimately improve and continue to drive order flow to our exchanges. We cannot predict the trading patterns of exchange participants, which may be based on factors outside our control, but we can attempt to price our products at levels that are competitive in our market.

Trading volume is impacted by many factors, including: macroeconomic events, market volatility, regulatory actions or considerations, availability of capital, competition and pricing.

The following summarizes transaction fees by product category for the three months ended March 31, 2016 compared to the same period in 2015.

	2016	2015	Inc./(Dec.)	Percent Change
		(in millions)		
Equities	$7.5	$ 8.5	$ (1.0)	(12.1)%
Indexes	79.5	60.8	18.7	30.8 %
Exchange-traded products	9.3	9.9	(0.6)	(6.4)%
Total options transaction fees	96.3	79.2	17.1	21.6 %
Futures	21.7	19.5	2.2	11.3 %
Total transaction fees	$118.0	$ 98.7	$ 19.3	19.5 %

Trading Volume

Our average daily volume ("ADV") for the three months ended March 31, 2016 and 2015 was 4.77 million contracts. Total trading days for the three months ended March 31, 2016 and 2015 were sixty-one.

The following summarizes changes in total trading volume and ADV by product category for the three months ended March 31, 2016 compared to the same period in 2015.

Table of Contents

	2016		2015		Volume Percent Change	ADV Percent Change
	Volume	ADV	Volume	ADV		
	(in millions)					
Equities	88.4	1.45	110.3	1.81	(19.8)%	(19.8)%
Indexes	110.5	1.81	85.4	1.40	29.5 %	29.5 %
Exchange-traded products	79.2	1.30	83.6	1.37	(5.3)%	(5.3)%
Total options contracts	278.1	4.56	279.3	4.58	(0.4)%	(0.4)%
Futures	13.2	0.21	11.4	0.19	15.5 %	15.5 %
Total contracts	291.3	4.77	290.7	4.77	0.2 %	0.2 %

The following provides the percentage of volume by product category for the three months ended March 31, 2016 and 2015.

	2016	2015
Equities	30.4 %	37.9 %
Indexes	37.9 %	29.4 %
Exchange-traded products	27.2 %	28.8 %
Futures	4.5 %	3.9 %
Total	100.0%	100.0%

Average Revenue Per Contract

Average revenue per contract was $0.405 for the three months ended March 31, 2016, an increase of 19.3% compared with $0.340 for the same period in 2015. Average revenue per contract represents transaction fees divided by total contracts cleared.

The following summarizes average revenue per contract by product category for the three months ended March 31, 2016 compared to the same period in 2015.

	2016	2015	Percent Change
Equities	$0.085	$0.077	9.6 %
Indexes	0.720	0.712	1.1 %
Exchange-traded products	0.117	0.118	(1.1)%
Total options average revenue per contract	0.346	0.284	22.1 %
Futures	1.643	1.705	(3.6)%
Total average revenue per contract	$0.405	$0.340	19.3 %

Factors contributing to the change in total average revenue per contract for the three months ended March 31, 2016 compared to the same period in 2015 include:

- Volume Mix — We experienced a shift in overall volume mix. As a percentage of total volume, index options and futures contracts accounted for 42.4% of total trading volume, up from 33.3% in the prior year period. Index options and futures contracts represent our highest options average revenue per contract and highest average revenue per contract, respectively.

- Rate structure — Our rate structure includes sliding scales, volume discounts, volume incentive programs and caps on fees as part of our effort to increase liquidity and trading volume. The increase in average revenue per contract across all product categories was primarily a result of lower volume discounts and incentives.

Table of Contents

Exchange Services and Other Fees

Exchange services and other fees for the three months ended March 31, 2016 increased $1.7 million to $11.4 million from $9.7 million for the same period in 2015. The increase was primarily a result of higher fees for technology services and revenue generated from Livevol technology services, which was acquired on August 7, 2015.

Market Data Fees

Market data fees for the three months ended March 31, 2016 and 2015 were $8.0 million. For the three months ended March 31, 2016 and 2015, income derived from our market data services, which provide current and historical options and futures data, totaled $4.3 million and $4.2 million, respectively, and OPRA income totaled $3.7 million and $3.8 million, respectively. Income derived from OPRA is allocated based on each exchanges' share of total cleared options transactions. The Company’s share of total cleared options transactions decreased to 22.1% from 25.3% for the same period in 2015. This decrease was offset by an increase in total OPRA distributable income for the three months ended March 31, 2016, resulting from a membership fee from a new exchange that joined OPRA and fee increases implemented by OPRA, resulting in comparable revenue period over period.

Other Revenue

Other revenue for the three months ended March 31, 2016 and 2015 were $2.6 million and $4.3 million, respectively. The decrease in other revenue was primarily due to lower revenue from fines assessed for rule violations.

Concentration of Revenue

All contracts traded on our exchanges must be cleared through clearing members of OCC. At March 31, 2016, there were one hundred seven Trading Permit Holders that are clearing members of the OCC. Two clearing members accounted for 45% of transaction and other fees collected through the OCC for the three months ended March 31, 2016. The next largest clearing member accounted for approximately 13% of transaction and other fees collected through the OCC. No one Trading Permit Holder using the services of the top two clearing members represented more than 23% of transaction and other fees collected through the OCC, for the respective clearing member, in the three months ended March 31, 2016. Should a clearing member withdraw from CBOE, we believe the Trading Permit Holder portion of that clearing member's trading activity would likely transfer to another clearing member.

The two largest clearing members mentioned above clear the majority of the market-maker sides of transactions at CBOE, C2 and at all of the U.S. options exchanges. If either of these clearing members were to withdraw from the business of market-maker clearing and market-makers were unable to transfer to another clearing member, this could create significant disruption to the U.S. options markets, including ours.

Operating Expenses

Total operating expenses increased $9.5 million, or 13.0%, to $82.8 million for the three months ended March 31, 2016 from $73.3 million for the same period in 2015. This increase was primarily due to higher compensation and benefits, depreciation and amortization, professional fees and outside services and royalty fees.

Table of Contents

The following summarizes changes in operating expenses for the three months ended March 31, 2016 compared to the same period in 2015.

	2016	2015	Inc./(Dec.)	Percent Change
		(in millions)		
Compensation and benefits	$27.1	$ 25.4	$ 1.7	6.6 %
Depreciation and amortization	11.9	10.4	1.5	13.9 %
Technology support services	5.7	5.3	0.4	6.6 %
Professional fees and outside services	13.6	12.0	1.6	14.1 %
Royalty fees	19.1	14.2	4.9	35.1 %
Order routing	0.1	0.8	(0.7)	(86.8)%
Travel and promotional expenses	2.5	2.5	—	— %
Facilities costs	1.5	1.4	0.1	10.4 %
Other expenses	1.3	1.3	—	— %
Total Operating Expenses	$82.8	$ 73.3	$ 9.5	13.0 %

Compensation and Benefits

For the three months ended March 31, 2016, compensation and benefits were $27.1 million, or 16.7% of total operating revenues, compared with $25.4 million, or 17.8% of total operating revenues, for the same period in 2015. This represented an increase of $1.7 million, or 6.6%, from the prior period, which primarily resulted from increased staffing levels, higher stock-based compensation and annual incentive compensation, which is aligned with our financial performance relative to our targets.

Depreciation and Amortization

For the three months ended March 31, 2016, depreciation and amortization costs were $11.9 million compared with $10.4 million for the same period in 2015. This represented an increase of $1.5 million, which primarily resulted from increased capital spending for systems and the acceleration of depreciation for certain assets that have a shorter than expected useful life.

Professional Fees and Outside Services

Professional fees and outside services for the three months ended March 31, 2016 were $13.6 million compared with $12.0 million for the same period in 2015, an increase of $1.6 million, which primarily resulted from higher legal fees, including acquisition related costs, and other professional fees.

Royalty Fees

Royalty fees for the three months ended March 31, 2016 were $19.1 million compared with $14.2 million for the same period in 2015. This represented an increase of $4.9 million, which primarily resulted from higher trading volume in licensed products.

Operating Income

As a result of the items above, operating income for the three months ended March 31, 2016 was $79.5 million compared to $69.5 million for the same period in 2015, an increase of $10.0 million.

Table of Contents

Other Income/(Expense)

Other income/(expense) reflected income of $1.0 million for the three months ended March 31, 2016 compared with a loss of $0.3 million for the same period in 2015. The income primarily included the Company's share of equity earnings of Signal and dividend income in excess of the amount originally declared by the OCC in December 2015. The expense primarily included the impairment of our investment in IPXI.

Income before Income Taxes

Income before income taxes for the three months ended March 31, 2016 was $80.5 million compared to $69.2 million for the same period in 2015, an increase of $11.3 million.

Income Tax Provision

For the three months ended March 31, 2016, the income tax provision was $31.3 million compared to $27.0 million for the same period in 2015. The effective tax rate was 38.9% and 39.0% for the three months ended March 31, 2016 and 2015, respectively.

Net Income

As a result of the items above, net income allocated to common stockholders for the three months ended March 31, 2016 was $49.2 million compared to $42.1 million for the same period in 2015, an increase of $7.1 million. Basic and diluted net income per share allocated to common stockholders were $0.60 and $0.50 for the three months ended March 31, 2016 and 2015, respectively.

LIQUIDITY AND CAPITAL RESOURCES

As of March 31, 2016, the Company had $107.5 million of cash and cash equivalents, an increase from $102.3 million as of December 31, 2015. Historically, we have financed our operations, capital expenditures and other cash needs through cash generated from operations. Cash requirements principally consist of funding operating expenses, capital expenditures, actual and anticipated quarterly and, based on availability of cash, common stock repurchases under the announced program. We expect our cash on hand at March 31, 2016 and funds generated from operations to be sufficient to continue to meet our 2016 cash requirements. From time to time, we consider the possibility of acquisitions, dispositions and strategic alliances that we believe would strengthen our business in the long-term; however, if consummated these transactions may negatively impact our liquidity in the short-term.

Cash Flows

Operating Activities

Net cash flows provided by operating activities totaled $97.4 million and $78.5 million for the three months ended March 31, 2016 and 2015, respectively. The increase in net cash flows provided by operating activities was primarily due to higher net income.

Investing Activities

Net cash flows used in investing activities totaled $27.9 million and $37.8 million for the three months ended March 31, 2016 and 2015, respectively. The net cash flows used in investing activities primarily represented our

majority investment in Vest Financial Group Inc. which totaled $14.3 million and other investments totaling $4.7 million. Expenditures for capital and other assets totaled $8.9 million and $7.5 million for the three months ended March 31, 2016 and 2015, respectively, primarily representing costs associated with systems hardware and software development.

Financing Activities

Net cash flows used in financing activities totaled $64.3 million and $51.1 million for the three months ended March 31, 2016 and 2015, respectively. The $13.2 million increase in net cash flows used in financing activities was primarily due to greater stock repurchases.

Table of Contents

Dividends

The Company's expectation is to continue to pay dividends. The decision to pay a dividend, however, remains within the discretion of our board of directors and may be affected by various factors, including our earnings, financial condition, capital requirements, level of indebtedness and other considerations our board of directors deems relevant. Future debt obligations and statutory provisions, among other things, may limit, or in some cases prohibit, our ability to pay dividends.

Share Repurchase Program

In 2011, the board of directors approved an initial authorization for the Company to repurchase shares of its outstanding common stock of $100 million and approved additional authorizations of $100 million in each of 2012, 2013, 2014, 2015, and February 2016 for a total authorization of $600 million. The program permits the Company to purchase shares through a variety of methods, including in the open market or through privately negotiated transactions, in accordance with applicable securities laws. It does not obligate the Company to make any repurchases at any specific time or situation.

Under the program, for the three months ended March 31, 2016, the Company repurchased 666,886 shares of common stock at an average cost per share of $63.60, totaling $42.4 million.

Since inception of the program through March 31, 2016, the Company has repurchased 10,666,501 shares of common stock at an average cost per share of $45.46, totaling $484.9 million.

As of March 31, 2016, the Company had $115.1 million of availability remaining under its existing share repurchase authorizations.

Contractual Obligations

As of March 31, 2016, there have been no material changes to our lease and contractual obligations presented in our Annual Report on Form 10-K for the year ended December 31, 2015.

Table of Contents

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are subject to certain market risks, including changes in interest rates and inflation. There have been no material changes in our market risk from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

The Company's management, with the participation of its Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934 (the “Exchange Act”)) as of the end of the period covered by this report. Based upon that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures are effective.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company’s internal control over financial reporting that occurred during the three months ended March 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The following information updates the legal proceedings disclosures in our Annual Report on Form 10-K for the year ended December 31, 2015.

ISE -- QRM

On November 12, 2012, CBOE brought suit against International Securities Exchange, LLC ("ISE") in the United States District Court for the Northern District of Illinois alleging that ISE infringed three of its patents (United States Patent Nos. 7,356,498; 7,980,457; and 8,266,044 (the "QRM patents")) related to quote risk monitor ("QRM") technology. CBOE had requested injunctive relief and monetary damages. On February 20, 2013, the court ruled that the case be transferred to the United States District Court for the Southern District of New York, and on October 31, 2013, the Court stayed the litigation pending resolution of Covered Business Method ("CBM") Patent Reviews at the United States Patent and Trademark Office ("USPTO"), which ISE requested. On March 4, 2014, the USPTO instituted CBM Patent Reviews on CBOE's three QRM patents. On May 22, 2014, the USPTO instituted Inter Parties Review ("IPR") Proceedings, which ISE requested, on some but not all claims of two of CBOE's QRM patents (United States Patent Nos. 7,356,498 and 7,980,457). On March 2, 2015, the USPTO ruled in the CBM proceedings, finding that the subject matter of the patents is not eligible for patent protection, and in the IPR proceedings, finding for CBOE that the claims were not invalidated by the asserted prior art. On April 30, 2015, ISE filed notice of its appeal of the IPR decisions, and on May 1, 2015, CBOE filed notice of its appeal of the CBM decisions. The appeals are being handled by the United States Court of Appeals for the Federal Circuit. On March 25, 2016, the Court of Appeals affirmed the USPTO's decisions that the QRM patents were directed to ineligible subject matter and dismissed ISE's appeal and vacated the USPTO's IPR decisions.

Lanier Litigation

On May 23, 2014, Harold R. Lanier sued 14 securities exchanges, including CBOE, in the United States District Court for the Southern District of New York on behalf of himself and a putative class consisting of all persons in the United States who entered into contracts to receive market data through certain data plans at any time since May 19, 2008 to the present. The complaint alleged that the market data provided under the CQ Plan and CTA Plans was inferior to the data that the exchanges provided to those that directly receive other data from the exchanges, which the plaintiffs alleged is a breach of their "subscriber contracts" and a violation of the exchanges' obligations under the CQ and CTA Plans. The plaintiffs sought monetary and injunctive relief. On May 30, 2014, Mr. Lanier filed two additional suits in the same Court, alleging substantially the same claims and requesting the same types of relief against the exchanges who participate in the UTP and the OPRA data plans. CBOE was a defendant in each of these suits, while C2 was only a defendant in the suit regarding the OPRA Plan. On April 28, 2015, the Court dismissed Lanier's complaint with prejudice because it was preempted by the federal regulatory scheme and because the claims were precluded by the terms of the applicable subscriber agreements. Mr. Lanier appealed the orders dismissing each of his three cases and, on September 2, 2015, he filed his opening appellate briefs in those cases. The defendants' response briefs were filed November 24, 2015 and briefing on the appeals has concluded. The oral arguments on the appeals were heard on March 3, 2016.

ISE -- '707

On November 22, 2006, ISE filed an action in the United States District Court for the Southern District of New York claiming that CBOE's Hybrid trading system infringes ISE's U.S. Patent No. 6,618,707 (the "'707 patent"). On January 31, 2007, CBOE filed an action in federal court in the Northern District of Illinois seeking a declaratory judgment that

the '707 patent was not infringed, not valid and/or not enforceable against CBOE. The New York case was transferred to the federal court in the Northern District of Illinois on August 9, 2007.

On March 14, 2013, ISE conceded to an adverse judgment in this matter and asked that the federal court in the Northern District of Illinois enter judgment for CBOE. ISE appealed certain court rulings to the Federal Circuit Court of Appeals. The federal court in the Northern District of Illinois on January 14, 2014 issued an opinion and order awarding certain costs associated with the litigation to CBOE. On April 7, 2014, the Federal Circuit Court of Appeals issued a favorable opinion to CBOE. On March 31, 2016, the federal court in the Northern District of Illinois granted CBOE’s motion for attorney fees and expenses and CBOE subsequently supplemented such request on April 7, 2016.

Table of Contents

Item 1A. Risk Factors

There have been no material changes from the risk factors disclosed in our Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(c) The table below shows the purchases of equity securities by the Company in the three months ended March 31, 2016, reflecting the purchase of common stock under the Company's share repurchase program:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (1)
January 1, 2016 – January 31, 2016	210,181	$ 63.60	210,181	$44,113,644
February 1, 2016 – February 29, 2016	240,400	62.57	240,400	129,071,732
March 1, 2016 – March 31, 2016	216,305	64.74	216,305	115,068,511
Totals	666,886	$ 63.60	666,886	

(1) In 2011, the board of directors approved an initial authorization for the Company to repurchase shares of its outstanding common stock of $100 million and approved additional authorizations of $100 million in each of 2012, 2013, 2014, 2015, and February 2016 for a total authorization of $600 million. The program permits the Company to purchase shares through a variety of methods, including in the open market or through privately negotiated transactions, in accordance with applicable securities laws. It does not obligate the Company to make any repurchases at any specific time or situation.

(d) The table below reflects the purchase of common stock by the Company in the three months ended March 31, 2016 to satisfy employees' tax obligations upon the vesting of restricted stock:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
January 1, 2016 – January 31, 2016	—	$ —	—	—
February 1, 2016 – February 29, 2016	66,718	61.74	—	—
March 1, 2016 – March 31, 2016	—	—	—	—
Totals	66,718	$ 61.74	—	—

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

None.

Item 6. Exhibits

The exhibits to this Report are listed in the Exhibit Index included elsewhere herein.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CBOE HOLDINGS, INC.
Registrant

By: /s/ Edward T. Tilly
Edward T. Tilly
Chief Executive Officer (Principal Executive Officer)
Date: May 3, 2016

By: /s/ Alan J. Dean
Alan J. Dean
Executive Vice President and Chief Financial Officer (Principal Financial Officer)
Date: May 3, 2016

Table of Contents

CBOE Holdings, Inc.
Form 10-Q
Exhibit Index

Exhibit No.	Description
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14 (Filed herewith).
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14 (Filed herewith).
32.1	Certificate of Chief Executive Officer pursuant to Rule 13a-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (Filed herewith).
32.2	Certificate of Chief Financial Officer pursuant to Rule 13a-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (Filed herewith).
101.INS	XBRL Instance Document (Filed herewith).
101.SCH	XBRL Taxonomy Extension Schema Document (Filed herewith).
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document (Filed herewith).
101.DEF	XBRL Taxonomy Extension Definition Linkbase (Filed herewith).
101.LAB	XBRL Taxonomy Extension Label Linkbase Document (Filed herewith).
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (Filed herewith).