Cboe Global Markets, Inc.
Form 10-Q
November 02, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10 Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2018

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 number: 001 34774

Cboe Global Markets, 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)

(312) 786 5600

(Registrant's telephone number, including area code)

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 No

Indicate by check mark whether the registrant has submitted electronically 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 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, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b 2 of the Exchange Act.

Large accelerated filer	Accelerated filer	Non-accelerated filer
Smaller reporting company	Emerging growth company	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b 2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date:

Class	October 26, 2018
Common Stock, par value $0.01	112,201,915 shares

Table of Contents

TABLE OF CONTENTS

Table of Contents

CERTAIN DEFINED TERMS

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

- "Cboe," "we," "us," "our" or "the Company" refers to Cboe Global Markets, Inc. and its subsidiaries.
- "ADV" means average daily volume.
- "ADNV" means average daily notional value.
- "Bats Global Markets" and "Bats" refer to our wholly-owned subsidiary Bats Global Markets, Inc., now known as Cboe Bats, LLC, and its subsidiaries.
- "BYX" refers to Cboe BYX Exchange, Inc., a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "BZX" refers to Cboe BZX Exchange, Inc., a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "C2" refers to Cboe C2 Exchange, Inc. a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "Cboe Chi-X Europe" refers to our broker-dealer entity, Cboe Chi-X Europe Limited, a wholly-owned subsidiary of Cboe Global Markets, Inc., operated in the United Kingdom.
- "Cboe Europe Equities" refers to Cboe Europe Limited, a wholly-owned subsidiary of Cboe Global Markets, Inc., the U.K. operator of our Multilateral Trading Facility ("MTF"), and our Regulated Market ("RM"), under its Recognized Investment Exchange ("RIE") status.
- "Cboe FX" refers to Cboe FX Holdings, LLC, a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "Cboe Options" refers to Cboe Exchange, Inc., a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "Cboe SEF" refers to Cboe SEF, LLC, our swap execution facility that is a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "Cboe Trading" refers to our broker-dealer entity, Cboe Trading, Inc., a wholly-owned subsidiary of Cboe Global Markets, Inc., operated in the United States.
- "CFE" refers to Cboe Futures Exchange, LLC, a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "CFTC" refers to the U.S. Commodity Futures Trading Commission.
- "EDGA" refers to Cboe EDGA Exchange, Inc., a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "EDGX" refers to Cboe EDGX Exchange, Inc., a wholly-owned subsidiary of Cboe Global Markets, Inc.
- "Exchanges" refers to Cboe Options, C2, BZX, BYX, EDGX, and EDGA.
- "FASB" refers to the Financial Accounting Standards Board.
- "FCA" refers to the U.K. Financial Conduct Authority.
- "GAAP" refers to Generally Accepted Accounting Principles in the United States.
- "Merger" refers to our acquisition of Bats Global Markets, completed on February 28, 2017.
- "OCC" refers to The Options Clearing Corporation.
- "OPRA" refers to Options Price Reporting Authority, LLC.
- "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

TRADEMARK AND OTHER INFORMATION

Cboe®, Bats®, BYX®, BZX®, Cboe Volatility Index®, CFE®, EDGA®, EDGX®, Silexx® and VIX® are registered trademarks, and Cboe Global MarketsSM, Cboe Futures ExchangeSM, C2SM and SPXSM and are service marks of Cboe Global Markets, Inc. and its subsidiaries. Standard & Poor's®, S&P®, S&P 100® and S&P 500® are registered trademarks of Standard & Poor's Financial Services LLC and have been licensed for use by Cboe Exchange, Inc. Dow Jones®, Dow Jones Industrial Average®, DJIA® and Dow Jones Indexes are registered trademarks or service marks of Dow Jones Trademark Holdings, LLC, used under license. MSCI, and the MSCI index names are service marks of MSCI Inc., used under license. Russell®, FTSE®, and other FTSE or Russell indexes are trademarks of the London Stock Exchange Group companies, used under license. All other trademarks and service marks are the property of their respective owners.

This Quarterly Report on Form 10-Q includes market share and industry data that we obtained from industry publications and surveys, reports of governmental agencies and internal company surveys. Industry publications and surveys generally state that the information they contain has been obtained from sources believed to be reliable, but we cannot assure you that this information is accurate or complete. We have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied upon therein. Statements as to our market position are based on the most currently available market data. While we are not aware of any misstatements regarding industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors. We refer you to the “Risk Factors” in Part II, Item 1A of this Quarterly Report on Form 10-Q and our other filings with the SEC.

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 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;
- price competition and consolidation in our industry;
- decreases in trading volumes, market data fees or a shift in the mix of products traded on our exchanges;
- legislative or regulatory changes;
- increasing competition by foreign and domestic entities;
- our dependence on and exposure to risk from third parties;
- our index providers’ ability to maintain the quality and integrity of their indexes and to perform under our agreements;
- our ability to operate our business without violating the intellectual property rights of others and the costs associated with protecting our intellectual property rights;
- our ability to attract and retain skilled management and other personnel, including those experienced with post-acquisition integration;
- our ability to accommodate trading volume and transaction traffic, including significant increases, without failure or degradation of performance of our systems;

Table of Contents

- our ability to protect our systems and communication networks from security risks, including cyber-attacks and unauthorized disclosure of confidential information;
- challenges to our use of open source software code;
- our ability to meet our compliance obligations, including managing potential conflicts between our regulatory responsibilities and our for-profit status;
- damage to our reputation;
  - the ability of our compliance and risk management methods to effectively monitor and manage our risks;
- our ability to manage our growth and strategic acquisitions or alliances effectively;
- unanticipated difficulties or expenditures relating to the Merger, including, without limitation, difficulties that result in the failure to realize expected synergies, accretion, efficiencies and cost savings from the Merger within the expected time period (if at all), whether in connection with integration, migrating trading platforms, broadening distribution of product offerings or otherwise;
- restrictions imposed by our debt obligations;
- our ability to maintain an investment grade credit rating;
- potential difficulties in our migration of trading platforms and our ability to retain employees as a result of the Merger; and
- the accuracy of our estimates and expectations.

For a detailed discussion of these and other factors that might affect our performance, see Part II, Item 1A of this Report. We do not undertake, and expressly disclaim, any duty to update any forward-looking statement whether as a result of new information, future events or otherwise, except as required by law. We caution you not to place undue reliance on the forward-looking statements, which speak only as of the date of this filing.

Table of Contents

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

Cboe Global Markets, Inc. and Subsidiaries

Condensed Consolidated Balance Sheets

(unaudited)

(in millions, except par value data and share amounts)

	September 30, 2018	December 31, 2017
Assets		
Current Assets:		
Cash and cash equivalents	$ 136.8	$ 143.5
Financial investments	0.9	47.3
Accounts receivables, net	221.9	217.3
Income taxes receivable	59.8	17.2
Other current assets	16.1	9.4
Total Current Assets	435.5	434.7
Investments	88.7	82.7
Land	4.9	4.9
Property and equipment, net	65.9	73.9
Goodwill	2,697.6	2,707.4
Intangible assets, net	1,768.2	1,902.6
Other assets, net	58.7	59.5
Total Assets	$ 5,119.5	$ 5,265.7
Liabilities, Redeemable Noncontrolling Interest and Stockholders’ Equity		
Current Liabilities:		
Accounts payable and accrued liabilities	$ 147.8	$ 153.8
Section 31 fees payable	15.1	105.6
Deferred revenue	13.4	15.4
Income taxes payable	—	2.6
Current portion of long-term debt	299.6	—
Contingent consideration liabilities	3.0	56.6
Total Current Liabilities	478.9	334.0
Long-term debt	915.1	1,237.9
Income tax liability	81.7	78.8
Deferred income taxes	475.4	488.2
Other non-current liabilities	7.1	6.8
Commitments and Contingencies		
Redeemable Noncontrolling Interest	9.4	9.4
Stockholders’ Equity:		

Preferred stock, $0.01 par value: 20,000,000 shares authorized, no shares issued and outstanding at September 30, 2018 and December 31, 2017	—	—
Common stock, $0.01 par value: 325,000,000 shares authorized, 125,052,178 and 111,626,297 shares issued and outstanding, respectively at September 30, 2018 and 124,705,786 and 112,741,217 shares issued and outstanding, respectively at December 31, 2017	1.2	1.2
Common stock in treasury, at cost, 13,425,881 shares at September 30, 2018 and 11,964,569 shares at December 31, 2017	(715.0)	(558.3)
Additional paid-in capital	2,654.5	2,623.7
Retained earnings	1,185.4	993.3
Accumulated other comprehensive income, net	25.8	50.7
Total Stockholders' Equity	3,151.9	3,110.6
Total Liabilities, Redeemable Noncontrolling Interest and Stockholders' Equity	$ 5,119.5	$ 5,265.7

See accompanying notes to condensed consolidated financial statements.

Table of Contents

Cboe Global Markets, Inc. and Subsidiaries

Condensed Consolidated Statements of Income

(unaudited)

(in millions, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenues:				
Transaction fees	$ 411.8	$ 423.3	$ 1,423.7	$ 1,133.6
Access fees	34.3	30.1	94.1	77.6
Exchange services and other fees	19.3	20.0	62.3	55.3
Market data fees	47.6	46.8	154.3	117.3
Regulatory fees	55.2	83.5	260.8	205.1
Other revenue	7.7	7.7	25.9	19.5
Total revenues	575.9	611.4	2,021.1	1,608.4
Cost of revenues:				
Liquidity payments	229.2	234.3	803.2	606.1
Routing and clearing	8.7	9.4	28.8	27.9
Section 31 fees	46.8	75.9	236.7	180.5
Royalty fees	20.7	22.1	69.9	63.9
Total cost of revenues	305.4	341.7	1,138.6	878.4
Revenues less cost of revenues	270.5	269.7	882.5	730.0
Operating expenses:				
Compensation and benefits	51.8	50.4	168.1	148.2
Depreciation and amortization	50.3	55.4	154.9	136.3
Technology support services	10.6	11.4	34.5	30.9
Professional fees and outside services	16.6	17.6	51.9	48.9
Travel and promotional expenses	2.6	4.5	9.8	12.0
Facilities costs	3.3	2.9	8.6	7.7
Acquisition-related costs	5.9	5.5	23.3	75.4
Other expenses	3.3	2.7	8.5	7.4
Total operating expenses	144.4	150.4	459.6	466.8
Operating income	126.1	119.3	422.9	263.2
Non-operating (expenses) income:				
Interest expense, net	(9.6)	(10.5)	(28.5)	(30.9)
Other (expense) income	(0.2)	(2.9)	1.1	(2.0)
Income before income tax provision	116.3	105.9	395.5	230.3
Income tax provision	30.6	45.6	108.7	86.8
Net income	85.7	60.3	286.8	143.5
Net loss attributable to redeemable noncontrolling interest	0.3	0.2	0.9	0.8
Net income excluding redeemable noncontrolling interest	86.0	60.5	287.7	144.3
Change in redemption value of redeemable noncontrolling interest	(0.3)	(0.2)	(0.9)	(0.8)
Net income allocated to participating securities	(0.7)	(0.6)	(2.1)	(1.4)

Net income allocated to common stockholders	$ 85.0	$ 59.7	$ 284.7	$ 142.1
Basic earnings per share	$ 0.76	$ 0.53	$ 2.54	$ 1.35
Diluted earnings per share	$ 0.76	$ 0.53	$ 2.53	$ 1.34
Basic weighted average shares outstanding	111.4	112.3	112.0	105.5
Diluted weighted average shares outstanding	111.8	112.6	112.4	105.8

See accompanying notes to condensed consolidated financial statements.

Table of Contents

Cboe Global Markets, Inc. and Subsidiaries

Condensed Consolidated Statements of Comprehensive Income

(unaudited)

(in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Net income	$ 85.7	$ 60.3	$ 286.8	$ 143.5
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(9.1)	20.5	(23.9)	50.7
Unrealized holding gains on financial investments	—	(0.1)	—	0.1
Post-retirement benefit obligations	—	—	(1.0)	—
Comprehensive income	76.6	80.7	261.9	194.3
Comprehensive loss attributable to redeemable noncontrolling interest	0.3	0.2	0.9	0.8
Comprehensive income excluding redeemable noncontrolling interest	76.9	80.9	262.8	195.1
Change in redemption value of redeemable noncontrolling interest	(0.3)	(0.2)	(0.9)	(0.8)
Comprehensive income allocated to participating securities	(0.7)	(0.3)	(2.1)	(1.4)
Comprehensive income allocated to common stockholders, net of tax	$ 75.9	$ 80.4	$ 259.8	$ 192.9

See accompanying notes to condensed consolidated financial statements.

Table of Contents

Cboe Global Markets, Inc. and Subsidiaries

Condensed Consolidated Statement of Changes in Stockholders' Equity

Nine months ended September 30, 2018

(unaudited)

(in millions, except per share amount)

	Preferred Stock	Common Stock	Treasury Stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income, net	Total stockholders' equity	Redeemable Noncontrolling Interest
Balance at December 31, 2017	$ —	$ 1.2	$ (558.3)	$ 2,623.7	$ 993.3	$ 50.7	$ 3,110.6	$ 9.4
Cash dividends on common stock of $0.85 per share	—	—	—	—	(95.6)	—	(95.6)	—
Stock-based compensation	—	—	—	29.4	—	—	29.4	—
Common stock repurchased from employee stock plans	—	—	(15.8)	1.4	—	—	(14.4)	—
Purchase of common stock	—	—	(140.9)	—	—	—	(140.9)	—
Net income excluding noncontrolling interest	—	—	—	—	287.7	—	287.7	—
Other comprehensive income	—	—	—	—	—	(24.9)	(24.9)	—
Net loss attributable to redeemable noncontrolling interest	—	—	—	—	0.9	—	0.9	(0.9)
Redemption value adjustment of redeemable noncontrolling interest	—	—	—	—	(0.9)	—	(0.9)	0.9
Balance at September 30,	$ —	$ 1.2	$ (715.0)	$ 2,654.5	$ 1,185.4	$ 25.8	$ 3,151.9	$ 9.4

2018

See accompanying notes to condensed consolidated financial statements.

Table of Contents

Cboe Global Markets, Inc. and Subsidiaries

Condensed Consolidated Statements of Cash Flows

(unaudited)

(in millions)

	Nine Months Ended September 30,	
	2018	2017
Cash Flows from Operating Activities:		
Net income	$ 286.8	$ 143.5
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	154.9	136.3
Amortization of debt issuance cost and debt discount	1.8	3.1
Change in fair value of contingent consideration	3.0	1.1
Realized gain on financial investments	(1.2)	(0.4)
Provision for uncollectible convertible notes receivable	—	3.8
Provision for deferred income taxes	(10.3)	(6.3)
Stock-based compensation expense	29.4	39.1
Loss on disposition of property	1.0	—
Impairment of data processing software	—	14.9
Equity in investments	(1.2)	(0.3)
Excess tax benefit from stock-based compensation	—	7.1
Changes in assets and liabilities:		
Accounts receivable	(3.8)	(2.1)
Income taxes receivable	(42.6)	24.1
Trading financial investments	—	(1.9)
Other prepaid expenses	—	(8.7)
Other current assets	(13.1)	—
Accounts payable and accrued liabilities	(3.8)	(1.1)
Section 31 fees payable	(90.5)	(122.7)
Deferred revenue	(2.0)	3.9
Income taxes payable	(3.7)	(50.2)
Income tax liability	2.9	(5.3)
Other liabilities	0.5	1.0
Net Cash Flows provided by Operating Activities	308.1	178.9
Cash Flows from Investing Activities:		
Acquisitions, net of cash acquired	—	(1,405.4)
Purchases of financial investments	(131.2)	(89.2)
Proceeds from maturities of financial investments	178.7	155.1
Investments	—	(4.0)
Other	(1.8)	—
Purchases of property and equipment	(27.8)	(26.1)
Net Cash Flows provided by (used in) Investing Activities	17.9	(1,369.6)

Cash Flows from Financing Activities:		
Proceeds from long-term debt	300.0	1,944.2
Principal payments of long term debt	(325.0)	(625.0)
Proceeds from credit facility	39.0	—
Payments of credit facility	(39.0)	—
Debt issuance costs	—	(1.3)
Dividends paid	(95.6)	(87.4)
Purchase of unrestricted stock from employees	(15.8)	(18.0)
Proceeds from exercise of stock-based compensation	1.6	1.8
Payment of contingent consideration from acquisition	(56.6)	—
Purchase of common stock under announced program	(140.9)	—
Net Cash Flows (used in) provided by Financing Activities	(332.3)	1,214.3
Effect of Foreign Currency Exchange Rate Changes on Cash and Cash equivalents	(0.4)	3.9
(Decrease) Increase in Cash and Cash Equivalents	(6.7)	27.5
Cash and Cash Equivalents:		
Beginning of Period	143.5	97.3
End of Period	$ 136.8	$ 124.8
Supplemental disclosure of cash transactions:		
Cash paid for income taxes	$ 161.7	$ 69.6
Interest paid	33.2	24.7
Supplemental disclosure of noncash transactions:		
Forfeiture of common stock for payment of exercise of stock options	—	2.3
Supplemental disclosure of noncash investing activities:		
Accounts receivable acquired	—	117.8
Financial investments acquired	—	66.0
Property and equipment acquired	—	21.8
Goodwill acquired	—	2,651.0
Intangible assets acquired	—	2,000.0
Other assets acquired	—	32.8
Accounts payable and accrued expenses assumed	—	(59.9)
Section 31 fees payable acquired	—	(143.6)
Deferred tax liability acquired	—	(720.3)
Other liabilities assumed	—	(135.5)
Issuance of common stock related to acquisition	—	(2,424.7)

See accompanying notes to condensed consolidated financial statements.

Table of Contents

Cboe Global Markets, Inc. and Subsidiaries

Notes to Condensed Consolidated Financial Statements (unaudited)

1. ORGANIZATION AND BASIS OF PRESENTATION

Cboe Global Markets, Inc. is one of the world's largest exchange holding companies, offering cutting-edge trading and investment solutions to investors around the world. The Company is committed to relentless innovation, connecting global markets with world-class technology, and providing seamless solutions that enhance the customer experience.

Cboe offers trading across a diverse range of products in multiple asset classes and geographies, including options, futures, U.S. and European equities, exchange-traded products (ETPs), global foreign exchange (FX) and multi-asset volatility products based on the VIX, the world's barometer for equity market volatility.

Cboe's trading venues include the largest options exchange in the U.S. by volume and the largest stock exchange by value traded in Europe. In addition, the Company is the second-largest stock exchange operator by volume in the U.S. and a leading market globally for ETP trading.

The Company is headquartered in Chicago with offices in Kansas City, New York, London, San Francisco, Singapore, Hong Kong, and Ecuador.

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, 2017.

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 interest 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 management believes 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.

For those consolidated subsidiaries in which the Company's ownership is less than 100% and for which the Company has control over the assets and liabilities and the management of the entity, the outside stockholders' interest are shown as noncontrolling interest.

Segment information

The Company reports five business segments: Options, U.S. Equities, Futures, European Equities, and Global FX, which is reflective of how the Company's chief operating decision-maker reviews and operates the business (Note 15).

Table of Contents

Recent Accounting Pronouncements - Adopted

In the first quarter of 2018, the Company adopted ASU 2017 09, Compensation - Stock Compensation (Topic 718). This ASU provides additional guidance around which changes to a share-based payment award require an entity to apply modification accounting. The Company's application of the pronouncement, on a prospective basis, did not result in a material impact to the consolidated financial statements.

In the first quarter of 2018, the Company adopted ASU 2017 07, Compensation - Retirement Benefits (Topic 715). This ASU requires an employer to report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. The Company applied the full retrospective application of the pronouncement, which did not result in a material impact to the consolidated financial statements.

In the first quarter of 2018, the Company adopted ASU 2016 15, Statement of Cash Flows (Topic 230) — Classification of Certain Cash Receipts and Cash Payments (a consensus of the FASB Emerging Issues Task Force). ASU No. 2016 15 addresses eight specific cash flow issues in an effort to reduce diversity in practice: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon bonds; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The Company's application of the pronouncement did not result in a material impact to the consolidated financial statements.

In the first quarter of 2018, the Company adopted ASU 2017 01, Business Combinations (Topic 805) - Clarifying the Definition of a Business. ASU No. 2017 01 clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. There are three elements of a business: inputs, processes, and outputs. While an integrated set of assets and activities (collectively, a "set") that is a business usually has outputs, outputs are not required to be present. Additionally, all of the inputs and processes that a seller uses in operating a set are not required if market participants can acquire the set and continue to produce outputs. ASU No. 2017 01 provides a screen to determine when a set is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. This screen reduces the number of transactions that need to be further evaluated. If, however, the screen is not met, then the amendments in this ASU (1) require that to be considered a business, a set must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output and (2) remove the evaluation of whether a market participant could replace missing elements. Finally, the amendments in this ASU narrow the definition of the term "output" so that it is consistent with the manner in which outputs are described in Topic 606 - Revenue from Contracts with Customers. The Company will apply the pronouncement, on a prospective basis, for any business combination.

In the first quarter of 2018, the Company adopted ASU 2016-01, Financial Instruments – Overall (Subtopic 825-10) – Recognition and Measurement of Financial Assets and Financial Liabilities. ASU No. 2016-01 addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. The changes primarily relate to equity investments, financial liabilities measured using the fair value option, and updated disclosure requirements. The Company applied the full retrospective application of the pronouncement, which did not result in a material impact to the consolidated financial statements.

In the first quarter of 2018, the Company adopted ASU 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220) - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. This update addresses the reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the tax reform legislation commonly referred to as the Tax Cuts and Jobs Act (“Jobs Act”). The guidance eliminates the stranded tax effects resulting from the Jobs Act as well as improves the usefulness of information reported to financial statement users by requiring certain disclosures about stranded tax effects. As the amendment only relates to reclassification of the income tax effects of the Jobs Act, the underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations is not affected. The Company’s application of the pronouncement did not result in a material impact to the consolidated financial statements.

Recent Accounting Pronouncements - Issued, not yet Adopted

In January 2017, the FASB issued ASU 2017 04, Intangibles-Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment. This ASU simplifies the manner in which an entity is required to test goodwill for impairment by eliminating Step 2 from the goodwill impairment test. Step 2 measures a goodwill impairment loss by comparing the implied fair value of a reporting unit’s goodwill with the carrying amount of that goodwill. In computing the implied fair value of goodwill under Step 2, an entity, prior to the amendments in ASU No. 2017 04, had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities, including unrecognized assets and liabilities, in accordance with the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. However, under this ASU, an entity should (1) perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and (2) recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value, with the understanding that the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. Additionally, ASU No. 2017 04 removes the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails such qualitative test, to perform Step 2 of the goodwill impairment test. For public entities, the update is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is in the process of evaluating this guidance and assessing the impact the ASU could have on the consolidated financial statements.

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 (“ROU”). 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. The Company will adopt the new ASU on January 1, 2019. Based on the Company’s preliminary evaluation of the guidance, the ASU is expected to have a material impact on the consolidated balance sheets, but is not expected to have a material impact on the consolidated income statements. The most significant impact is expected to be the recognition of ROU assets and lease liabilities for operating leases. The Company is in the process of analyzing its lease portfolio, and finalizing processes and accounting policies to comply with the ASU's adoption requirements.

In July 2018, the FASB issued ASU No. 2018-10, Codification Improvements to Topic 842, Leases to clarify the implementation guidance and ASU No. 2018-11, Leases (Topic 842) Targeted Improvements. This updated guidance provides an optional transition method, which allows for the initial application of the new accounting standard at the adoption date and the recognition of a cumulative-effect adjustment to the opening balance of retained earnings as of the beginning of the period of adoption. The Company will adopt the new ASUs on January 1, 2019. The Company is in the process of finalizing its assessment of the impact of these ASUs on its consolidated financial statements and is evaluating its processes and internal controls to identify any necessary changes.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820) - Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement. This ASU removes certain disclosure requirements related to the fair value hierarchy, modifies existing disclosure requirements related to measurement uncertainty and adds new disclosure requirements. The new disclosure requirements include disclosing the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For public entities, the update is effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019. Certain disclosures in the new guidance will need to be applied on a retrospective basis and others on a prospective basis. The Company is in the process of evaluating this guidance and assessing the impact the ASU could have on the consolidated financial statements.

Table of Contents

2. REVENUE RECOGNITION

As of January 1, 2017, the Company adopted ASU 2014 09 Revenue from Contracts with Customers - Topic 606 and all subsequent ASUs that modified ASC 606.

The main types of revenue contracts are:

- Transaction fees - Transaction fees represent fees charged by the Company for the performance obligation of executing a trade on its markets. These fees can be variable based on trade volume tiered discounts, however, as all tiered discounts are calculated monthly, the actual discount is recorded on a monthly basis. Transaction fees, as well as any tiered volume discounts, are calculated and billed monthly in accordance with the Company's published fee schedules. Transaction fees are recognized across all segments. The Company also pays liquidity payments to customers based on its published fee schedules. The Company uses these payments to improve the liquidity on its markets and therefore recognizes those payments as a cost of revenue.
- Access fees - Access fees represent fees assessed for the opportunity to trade, including fees for trading-related functionality across all segments. These fees are billed monthly in accordance with the Company's published fee schedules and recognized on a monthly basis when the performance obligation is met. There is no remaining performance obligation after revenue is recognized.
- Exchange services and other fees - To facilitate trading, the Company offers technology services, terminal and other equipment rights, maintenance services, trading floor space and telecommunications services. Trading floor and equipment rights are generally on a month-to-month basis. Facilities, systems services and other fees are generally monthly fee-based, although certain services are influenced by trading volume or other defined metrics, while others are based solely on demand. All fees associated with the trading floor are recognized in the Options segment.
- Market data fees - Market data fees represent the fees received by the Company from the U.S. tape plans and fees charged to customers for proprietary market data. Fees from the U.S. tape plans are collected monthly based on published fee schedules and distributed quarterly to the U.S. exchanges based on a known formula. A contract for proprietary market data is entered into and charged on a monthly basis in accordance with the Company's published fee schedules as the service is provided. Both types of market data are satisfied over time, and revenue is recognized on a monthly basis as the customer receives and consumes the benefit as the Company provides the data. U.S. tape plan market data is recognized in the U.S. Equities and Options segments. Proprietary market data fees are recognized across all segments.
- Regulatory fees - There are two types of regulatory fees that the Company recognizes. The first type represents fees collected by the Company to cover the Section 31 fees charged to the Exchanges by the SEC. The fees charged to customers are based on the fee set by the SEC per notional value of the transaction executed on the Company's U.S. securities markets. These fees are calculated and billed monthly and are recognized in the U.S. Equities and Options segments. As the Exchanges are responsible for the ultimate payment to the SEC, the exchanges are considered the principal in these transactions. Regulatory fees also includes the options regulatory fee (ORF) which supports the Company's regulatory oversight function in the Options segment and other miscellaneous regulatory fees.
- Other revenue - Other revenue primarily includes revenue from various licensing agreements, all fees related to the trade reporting facility operated in the European Equities segment, and revenue associated with advertisements through the Company's website.

Table of Contents

All revenue recognized in the income statement is considered to be revenue from contracts with customers. The following table depicts the disaggregation of revenue according to product line and segment (in millions):

	Options	U.S. Equities	Futures	European Equities	Global FX	Corporate items and eliminations	Total
Three Months Ended September 30, 2018							
Transaction fees	$ 175.2	$ 176.7	$ 25.7	$ 22.4	$ 11.8	$ —	$ 411.8
Access fees	16.8	12.1	2.2	2.2	1.0	—	34.3
Exchange services and other fees	8.3	7.4	1.6	1.4	0.6	—	19.3
Market data fees	10.6	32.0	1.7	3.1	0.2	—	47.6
Regulatory fees	12.6	42.6	—	—	—	—	55.2
Other revenue	5.1	1.1	—	1.5	—	—	7.7
	$ 228.6	$ 271.9	$ 31.2	$ 30.6	$ 13.6	$ —	$ 575.9
Timing of revenue recognition							
Services transferred at a point in time	$ 192.9	$ 220.4	$ 25.7	$ 23.9	$ 11.8	$ —	$ 474.7
Services transferred over time	35.7	51.5	5.5	6.7	1.8	—	101.2
	$ 228.6	$ 271.9	$ 31.2	$ 30.6	$ 13.6	$ —	$ 575.9
Three Months Ended September 30, 2017							
Transaction fees	$ 172.3	$ 185.5	$ 36.6	$ 19.0	$ 9.9	$ —	$ 423.3
Access fees	14.4	12.5	0.4	2.0	0.8	—	30.1
Exchange services and other fees	10.0	5.7	2.5	1.3	0.5	—	20.0
Market data fees	10.0	33.1	0.8	2.8	0.1	—	46.8
Regulatory fees	13.7	69.8	—	—	—	—	83.5
Other revenue	4.4	1.9	—	1.2	—	0.2	7.7
	$ 224.8	$ 308.5	$ 40.3	$ 26.3	$ 11.3	$ 0.2	$ 611.4
Timing of revenue recognition							
Services transferred at a point in time	$ 190.4	$ 257.2	$ 36.6	$ 20.2	$ 9.9	$ 0.2	$ 514.5
Services transferred over time	34.4	51.3	3.7	6.1	1.4	—	96.9
	$ 224.8	$ 308.5	$ 40.3	$ 26.3	$ 11.3	$ 0.2	$ 611.4

	Options	U.S. Equities	Futures	European Equities	Global FX	Corporate Item and Eliminations	Total
Nine Months Ended September 30, 2018							
Transaction fees	$ 600.0	$ 622.4	$ 91.4	$ 72.3	$ 37.6	$ —	$ 1,423.7
Access fees	44.8	35.2	4.6	6.6	2.9	—	94.1
Exchange services and other fees	28.3	21.1	6.7	4.4	1.8	—	62.3
Market data fees	32.0	107.1	4.9	9.9	0.4	—	154.3
Regulatory fees	45.9	214.8	0.1	—	—	—	260.8
Other revenue	15.8	5.0	—	4.7	—	0.4	25.9
	$ 766.8	$ 1,005.6	$ 107.7	$ 97.9	$ 42.7	$ 0.4	$ 2,021.1
Timing of revenue recognition							
Services transferred at a point in time	$ 661.7	$ 842.2	$ 91.5	$ 77.0	$ 37.6	$ 0.4	$ 1,710.4
Services transferred over time	105.1	163.4	16.2	20.9	5.1	—	310.7
	$ 766.8	$ 1,005.6	$ 107.7	$ 97.9	$ 42.7	$ 0.4	$ 2,021.1
Nine Months Ended September 30, 2017							
Transaction fees	$ 493.7	$ 470.5	$ 99.3	$ 47.0	$ 23.1	$ —	$ 1,133.6
Access fees	40.6	29.4	1.4	4.4	1.8	—	77.6
Exchange services and other fees	33.0	13.6	4.7	2.9	1.1	—	55.3
Market data fees	30.9	78.1	1.6	6.5	0.2	—	117.3
Regulatory fees	41.1	164.0	—	—	—	—	205.1
Other revenue	11.7	4.2	0.7	2.4	—	0.5	19.5
	$ 651.0	$ 759.8	$ 107.7	$ 63.2	$ 26.2	$ 0.5	$ 1,608.4
Timing of revenue recognition							
Services transferred at a point in time	$ 546.5	$ 638.7	$ 100.0	$ 49.4	$ 23.1	$ 0.5	$ 1,358.2
Services transferred over time	104.5	121.1	7.7	13.8	3.1	—	250.2
	$ 651.0	$ 759.8	$ 107.7	$ 63.2	$ 26.2	$ 0.5	$ 1,608.4

Contract liabilities for the nine months ended September 30, 2018 primarily represent prepayments of transaction fees and certain access and market data fees to the Exchanges. The revenue recognized from contract liabilities and the remaining balance is shown below (in millions):

Balance at

	Balance at January 1, 2018	Cash Additions	Revenue Recognition	September 30, 2018
Liquidity provider sliding scale (1)	$ 4.8	$ 4.8	$ (7.2)	$ 2.4
Other, net	10.6	11.2	(10.8)	11.0
Total deferred revenue	$ 15.4	$ 16.0	$ (18.0)	$ 13.4

(1) Liquidity providers are eligible to participate in the sliding scale program, which involves prepayment of transaction fees, and to receive reduced fees based on the achievement of certain volume thresholds within a calendar month. These transaction fees are amortized and recorded ratably as the transactions occur over the period.

3. ACQUISITIONS

Bats Global Markets, Inc.

On February 28, 2017, pursuant to the Agreement and Plan of Merger, dated as of September 25, 2016 (the “Merger Agreement”), by and among Cboe, Bats, CBOE Corporation, a Delaware corporation and a wholly-owned subsidiary of Cboe (“Merger Sub”), and Cboe Bats, LLC (formerly CBOE V, LLC), a Delaware limited liability company and a wholly-owned subsidiary of Cboe (“Merger LLC”), Cboe completed the merger of Merger Sub with and into Bats and the subsequent merger of Bats with and into Merger LLC. As a result of the Merger, Bats became a wholly-owned subsidiary of Cboe.

Table of Contents

The acquisition-date fair value of the consideration transferred totaled $4.0 billion, which consisted of the following (in millions):

Cash consideration for Bats outstanding common stock	$ 955.5
Common stock issued	2,387.3
Equity awards issued	37.4
	3,380.2
Debt extinguished	580.0
Total consideration	$ 3,960.2

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the acquisition date (in millions):

Cash and cash equivalents	$ 130.1
Accounts receivable	117.8
Financial investments	66.0
Property and equipment	21.8
Other assets	32.8
Goodwill	2,653.3
Intangibles	2,000.0
Accounts payable	(33.7)
Accrued expenses	(26.2)
Section 31 fees	(143.6)
Income tax payable	(52.9)
Deferred tax liability	(722.6)
Other liabilities	(82.6)
	$ 3,960.2

For tax purposes, no tax deductible goodwill was generated as a result of this acquisition. Goodwill was assigned to the Options, U.S. Equities, European Equities, and Global FX segments as further described in Note 9 and is attributable to the expansion of asset classes, broadening of geographic reach, and expected synergies of the combined workforce, products and technologies of the Company and Bats. The intangible assets were assigned to the Options, U.S. Equities, European Equities, and Global FX segments in the following manner and will be amortized over the following useful lives:

	Options	U.S. Equities	European Equities	Global FX	Useful life
Trading registrations and licenses	$ 95.5	$ 572.7	$ 171.8	$ —	indefinite
Customer relationships	37.1	222.9	160.0	140.0	20 years
Market data customer relationships	53.6	322.0	60.0	64.4	15 years
Technology	22.5	22.5	22.5	22.5	7 years
Trademarks and tradenames	1.0	6.0	1.8	1.2	2 years
Goodwill	226.4	1,738.1	419.3	267.2	

$ 436.1	$ 2,884.2	$ 835.4	$ 495.3

There were no goodwill or intangible assets assigned to the Futures segment as a result of this transaction as Bats did not operate a Futures business and no synergies are attributable to this segment.

The fair value of accounts receivable acquired was $117.8 million. The gross amount of accounts receivable was $118.0 million of which $0.2 million was deemed uncollectable.

Table of Contents

The Company expensed $5.9 million of acquisition-related costs during the three months ended September 30, 2018 that included $4.8 million of compensation-related costs and $0.9 million of professional fees. These expenses are included in acquisition-related costs in the condensed consolidated statements of income.

The Company expensed $23.3 million of acquisition-related costs during the nine months ended September 30, 2018 that included $17.6 million of compensation-related costs, $2.7 million of stock-based compensation, $2.2 million of professional fees, and $0.6 million of general and administrative expenses. These expenses are included in acquisition-related costs in the condensed consolidated statements of income.

The Company expensed $5.5 million of acquisition-related costs during the three months ended September 30, 2017 that included $3.4 million of compensation-related costs and $2.1 million of professional fees. These costs are included in acquisition-related costs in the condensed consolidated statements of income.

The Company expensed $75.4 million of acquisition-related costs during the nine months ended September 30, 2017 that included $36.9 million of compensation-related costs, $22.7 million of professional fees, $14.9 million of an impairment of capitalized data processing software, and $0.9 million of facilities expenses. These costs are included in acquisition-related costs in the condensed consolidated statements of income.

The amounts of revenue, operating income and net income of Bats are included in the Company's condensed consolidated statements of income after the acquisition date of February 28, 2017 and are as follows (in millions):

	Three Months Ended September 30, 2018	Three Months Ended September 30, 2017	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Revenue	$ 388.5	$ 411.6	$ 1,385.1	$ 1,017.4
Revenue less cost of revenues	121.7	112.6	381.9	266.7
Operating income	28.9	27.1	131.4	53.7
Net income	26.3	15.7	122.5	33.7

The financial information in the table below summarizes the combined results of operations of the Company and Bats, on a pro forma basis, as though the companies had been combined as of January 1, 2017. The pro forma financial information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved if the acquisition had taken place at the beginning of the period presented. Such pro forma financial information is based on the historical financial statements of the Company and Bats. This pro forma financial information is based on estimates and assumptions that have been made solely for purposes of developing such pro forma information, including, without limitation, preliminary purchase accounting adjustments. The pro forma financial information does not reflect any synergies or operating cost reductions that may be achieved from the combined operations. The pro forma financial information combines the historical results for the Company and Bats for the nine months ended September 30, 2017 in the following table (in millions, except per share amounts):

	Nine Months Ended September 30, 2017
Revenue	$ 1,881.3
Revenue less cost of revenues	801.8
Operating income	354.2
Net income	201.3
Earnings per share:	
Basic	$ 1.79
Diluted	1.79

The supplemental 2017 pro forma amounts have been calculated after applying the Company's accounting policies and adjusting the results to reflect the additional amortization that would have been charged assuming the

Table of Contents

adjusted fair values of acquired intangible assets had been applied on January 1, 2017. The supplemental 2017 pro forma financial information includes pro forma adjustments of $61.7 million for acquisition-related costs, such as fees to investment bankers, attorneys, accountants and other professional advisors, as well as severance to employees.

4. SEVERANCE

Subsequent to the Bats acquisition, the Company determined that certain employees' positions were redundant. As such, the Company communicated employee termination benefits to these employees.

The following is a summary of the employee termination benefits recognized within acquisition costs in the Corporate Items and Eliminations unit in the condensed consolidated statements of income (in millions):

	Employee Termination Benefits
Balance at December 31, 2017	$ 4.8
Termination benefits accrued	11.9
Termination payments made	(13.5)
Balance at September 30, 2018	$ 3.2

5. INVESTMENTS

As of September 30, 2018 and December 31, 2017, the Company's investments were comprised of the following (in millions):

	September 30, 2018	December 31, 2017
Equity Method:		
Investment in Signal Trading Systems, LLC	$ 13.3	$ 12.5
Investment in EuroCCP	10.4	9.6
Total equity method investments	23.7	22.1
Other Equity Investments:		
Investment in OCC	30.3	30.3
Investment in Eris Exchange Holdings, LLC	20.0	20.0
Investment in American Financial Exchange, LLC	5.9	5.9
Other	8.8	4.4
Total other equity investments	65.0	60.6
Total investments	$ 88.7	$ 82.7

Equity Method

Equity method investments include investments in Signal Trading Systems, LLC ("Signal"), a joint venture with FlexTrade System, Inc. to develop and market a multi-asset front-end order entry system, and EuroCCP, a Dutch domiciled clearing house. EuroCCP is one of three interoperable central counterparties, or CCPs, used to clear trades conducted on Cboe Europe Equities' markets. Cboe Europe Equities owns 20% of EuroCCP and can exercise significant influence over the entity as an equal shareholder with four other investors.

Other Equity Investments

The carrying amount of other equity investments totaled $65.0 million as of September 30, 2018 and $60.6 million as of December 31, 2017, and is included in investments in the condensed consolidated balance sheets. The Company accounts for these investments using the measurement alternative primarily as a result of the Company's

Table of Contents

inability to exercise significant influence as the Company is a smaller shareholder of these investments and the lack of readily determinable fair values. As of September 30, 2018, other equity investments primarily reflect a 20% investment in OCC and minority investments in American Financial Exchange, CurveGlobal and Eris Exchange Holdings, LLC.

In December 2014, OCC announced a newly-formed capital plan. The OCC capital plan was designed to strengthen OCC’s capital base and facilitate its compliance with proposed SEC regulations for Systemically Important Financial Market Utilities ("SIFMUs") as well as international standards applicable to financial market infrastructures. On February 26, 2015, the SEC issued a notice of no objection to OCC’s advance notice filing regarding the capital plan, and OCC and OCC’s existing exchange stockholders, which include Cboe Options, subsequently executed agreements effecting the capital plan. Under the plan, each of OCC’s existing exchange stockholders agreed to contribute its pro-rata share, based on ownership percentage, of $150 million in equity capital, which would increase OCC’s shareholders’ equity, and to provide its pro rata share in replenishment capital, up to a maximum of $40 million per exchange stockholder, if certain capital thresholds are breached. OCC also adopted policies under the plan with respect to fees, customer refunds, and stockholder dividends, which envision an annual dividend payment to the exchange stockholders equal to the portion of OCC’s after-tax income that exceeds OCC’s capital requirements after payment of refunds to OCC’s clearing members (with such customer refunds generally to constitute 50% of the portion of OCC’s pre-tax income that exceeds OCC’s capital requirements). On March 3, 2015, in accordance with the plan, Cboe Options contributed $30 million to OCC. That contribution has been recorded under investments in the condensed consolidated balance sheets as of September 30, 2018 and December 31, 2017, respectively.

On March 6, 2015, OCC informed Cboe Options that the SEC, acting through delegated authority, had approved OCC's proposed rule filing for the capital plan. Following petitions to review the approval based on delegated authority, the SEC conducted its own review and then approved the proposed rule change implementing OCC's capital plan. 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. On August 8, 2017, the Court held that the SEC’s approval order lacked reasoned decision-making sufficient to support the SEC’s conclusion that the OCC capital plan complied with applicable statutory requirements. The Court declined to vacate the SEC’s approval order or to require the unwinding of actions taken under the OCC capital plan, but instead remanded the matter to the SEC for further proceedings concerning whether that capital plan complies with those statutory requirements. Petitioners requested a stay of dividend payments to the exchange stockholders until the SEC made a final decision about the OCC capital plan, but the SEC denied that request on September 14, 2017. The SEC allowed for and received information from interested parties for the SEC’s consideration in connection with its review of the OCC capital plan on remand from the Court. The SEC’s review of the OCC capital plan on remand from the Court remains pending.

6. FINANCIAL INVESTMENTS

The Company’s financial investments with original or acquired maturities longer than three months, but that mature in less than one year from the condensed consolidated balance sheet date and any money market funds that are considered cash and cash equivalents are classified as current assets and are summarized as follows (in millions):

	September 30, 2018			
	Cost basis	Unrealized gains	Unrealized losses	Fair value
U.S. Treasury securities	$ 0.9	$ —	$ —	$ 0.9
Total financial investments	$ 0.9	$ —	$ —	$ 0.9

	December 31, 2017			
	Cost basis	Unrealized gains	Unrealized losses	Fair value
U.S. Treasury securities	$ 47.3	$ —	$ —	$ 47.3
Money market funds	2.5	—	—	2.5
Total financial investments	$ 49.8	$ —	$ —	$ 49.8

Table of Contents

7. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consisted of the following as of September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018	December 31, 2017
Construction in progress	$ 0.2	$ 5.9
Building	81.4	77.4
Furniture and Equipment	155.3	139.7
Total property and equipment	236.9	223.0
Less accumulated depreciation	(171.0)	(149.1)
Property and equipment, net	$ 65.9	$ 73.9

Depreciation expense using the straight-line method was $6.2 million and $7.9 million for the three months ended September 30, 2018 and 2017, respectively, and $19.2 million and $23.2 million for the nine months ended September 30, 2018 and 2017, respectively.

8. OTHER ASSETS, NET

Other assets, net consisted of the following as of September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018	December 31, 2017
Software development work in progress	$ 7.6	$ 10.2
Data processing software	216.4	220.0
Less accumulated depreciation and amortization	(190.0)	(189.6)
Data processing software, net	34.0	40.6
Other assets (1)	24.7	18.9
Other assets, net	$ 58.7	$ 59.5

(1) At December 31, 2017 and September 30, 2018, the majority of the balance included long-term prepaid assets and notes receivable.

Amortization expense related to data processing software was $5.3 million and $4.9 million for the three months ended September 30, 2018 and 2017, respectively, and $15.1 million and $13.2 million for the nine months ended September 30, 2018 and 2017, respectively.

9. GOODWILL AND INTANGIBLE ASSETS, NET

The following table presents the details of goodwill by segment (in millions):

	Options	U.S. Equities	European Equities	Global FX	Corporate and Other	Total

Balance as of December 31, 2017	$ 239.4	$ 1,740.4	$ 441.6	$ 267.2	$ 18.8	$ 2,707.4
Additions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Changes in foreign currency exchange rates	—	—	(9.8)	—	—	(9.8)
Balance as of September 30, 2018	$ 239.4	$ 1,740.4	$ 431.8	$ 267.2	$ 18.8	$ 2,697.6

Goodwill has been allocated to specific reporting units for purposes of impairment testing - Options, U.S. Equities, European Equities and Global FX. No goodwill has been allocated to Futures. Goodwill impairment testing is performed annually in the fiscal fourth quarter or more frequently if conditions exist that indicate that the asset may be

Table of Contents

impaired. The allocation of the new goodwill did not impact the existing goodwill assignment to reporting units and there are no aggregate impairments of goodwill.

The following table presents the details of the intangible assets (in millions):

	Options	U.S. Equities	European Equities	Global FX	Corporate and Other	Total
Balance as of December 31, 2017	$ 198.7	$ 1,071.8	$ 427.0	$ 199.6	$ 5.5	$ 1,902.6
Additions	—	—	—	—	—	—
Dispositions	—	—	—	—	—	—
Amortization	(12.8)	(61.5)	(20.8)	(24.6)	(0.9)	(120.6)
Changes in foreign currency exchange rates	—	—	(13.8)	—	—	(13.8)
Balance as of September 30, 2018	$ 185.9	$ 1,010.3	$ 392.4	$ 175.0	$ 4.6	$ 1,768.2

For the three months ended September 30, 2018 and 2017, amortization expense was $38.8 million and $42.8 million, respectively. For the nine months ended September 30, 2018 and 2017, amortization expense was $120.6 million and $99.9 million, respectively. The estimated future amortization expense is $39.3 million for the remainder of 2018, $137.5 million for 2019, $121.0 million for 2020, $105.7 million for 2021, $93.5 million for 2022 and $82.6 million for 2023.

The following tables present the categories of intangible assets as of September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018					
	Options	U.S. Equities	European Equities	Global FX	Corporate and Other	Weighted Average Amortization Period (in years)
Trading registrations and licenses	$ 95.5	$ 572.7	$ 180.0	$ —	$ —	Indefinite
Customer relationships	38.8	222.9	167.7	140.0	3.0	18
Market data customer relationships	53.6	322.0	62.9	64.4	—	13
Technology	24.6	22.5	23.6	22.5	4.0	5
Trademarks and tradenames	1.7	6.0	1.9	1.2	1.0	1
Other	0.2	—	—	—	—	1
Accumulated amortization	(28.5)	(135.8)	(43.7)	(53.1)	(3.4)	
	$ 185.9	$ 1,010.3	$ 392.4	$ 175.0	$ 4.6	

	December 31, 2017					
	Options	U.S. Equities	European Equities	Global FX	Corporate and Other	Weighted Average Amortization Period (in years)
Trading registrations and licenses	$ 95.5	$ 572.7	$ 186.5	$ —	$ —	Indefinite

Customer relationships	38.8	222.9	173.7	140.0	3.0	19
Market data customer relationships	53.6	322.0	65.1	64.4	—	14
Technology	24.6	22.5	24.4	22.5	4.0	6
Trademarks and tradenames	1.7	6.0	2.0	1.2	1.0	2
Other	0.2	—	—	—	—	2
Accumulated amortization	(15.7)	(74.3)	(24.7)	(28.5)	(2.5)	
	$ 198.7	$ 1,071.8	$ 427.0	$ 199.6	$ 5.5	

Table of Contents

10. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities consisted of the following as of September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018	December 31, 2017
Compensation and benefit-related liabilities	$ 33.4	$ 18.0
Termination benefits	3.2	4.8
Royalties	18.1	20.3
Accrued liabilities	77.4	59.1
Marketing fee payable	9.4	8.4
Accounts payable	6.3	43.2
Total accounts payable and accrued liabilities	$ 147.8	$ 153.8

11. DEBT

The Company’s debt consisted of the following as of September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018	December 31, 2017
Term Loan Agreement	$ 270.7	$ —
Prior Term Loan Agreement	—	294.9
3.650% Senior Notes	644.4	643.8
1.950% Senior Notes	299.6	299.2
Revolving Credit Agreement	—	—
Total debt	$ 1,214.7	$ 1,237.9

In connection with the Merger, on December 15, 2016, the Company entered into the Prior Term Loan Agreement (as defined below) providing for a $1.0 billion senior unsecured delayed draw term loan facility and on January 12, 2017, the Company issued $650 million aggregate principal amount of 3.650% Senior Notes due 2027 ("3.650% Senior Notes"). The proceeds from the Prior Term Loan Agreement and issuance of our 3.650% Senior Notes, in addition to using cash on hand at Cboe and Bats, were used to finance a portion of the cash component of the Merger consideration, to refinance existing indebtedness of Bats and its subsidiaries and to pay related fees and expenses. In addition, on December 15, 2016, the Company entered into a $150 million revolving credit facility to be used for working capital and other general corporate purposes.

On June 29, 2017, Cboe refinanced approximately $300 million of the amounts outstanding under the Prior Term Loan Agreement through the issuance of $300 million in aggregate principal amount of 1.950% Senior Notes due 2019 ("1.950% Senior Notes" and, together with the 3.650% Senior Notes, the "Notes").

On March 22, 2018, the Company repaid $300 million of outstanding indebtedness under the Prior Term Loan Agreement by using the proceeds from a new Term Loan Agreement (as defined below) providing for a $300 million senior unsecured term loan facility.

Term Loan Agreement

On March 22, 2018, the Company, as borrower, entered into a new Term Loan Credit Agreement (the “Term Loan Agreement”) with Bank of America, N.A. (“Bank of America”), as administrative agent and initial lender, and the several banks and other financial institutions from time to time party thereto as lenders. Bank of America also acted as sole lead arranger and sole bookrunner with respect to the Term Loan Agreement. The Term Loan Agreement provides for a senior unsecured term loan facility in an aggregate principal amount of $300 million. The proceeds of the loan under the Term Loan Agreement were used to repay the $300 million of outstanding indebtedness under the Prior Term Loan Agreement.

Table of Contents

Loans under the Term Loan Agreement bear interest, at our option, at either (i) the London Interbank Offered Rate ("LIBOR") periodically fixed for an interest period (as selected by us) of one, two, three or six months plus a margin (based on our public debt ratings) ranging from 1.00 percent per annum to 1.50 percent per annum or (ii) a daily floating rate based on the agent's prime rate (subject to certain minimums based upon the federal funds effective rate or LIBOR) plus a margin (based on our public debt ratings) ranging from zero percent per annum to 0.50 percent per annum. The Company was required to pay an up-front fee of 0.05 percent to the agent for the entry into the Term Loan Agreement.

The Term Loan Agreement, which matures on December 15, 2021, contains customary representations, warranties and affirmative and negative covenants for facilities of its type, including financial covenants, events of default and indemnification provisions in favor of the lenders thereunder. The negative covenants include restrictions regarding the incurrence of liens, the incurrence of indebtedness by our subsidiaries and fundamental changes, subject to certain exceptions in each case. The financial covenants require us to meet a quarterly financial test with respect to a minimum consolidated interest coverage ratio of not less than 4.00 to 1.00 and a maximum consolidated leverage ratio of not greater than 3.50 to 1.00. At September 30, 2018, the Company was in compliance with these covenants.

Prior Term Loan Agreement

On December 15, 2016, the Company, as borrower, entered into a Term Loan Credit Agreement (the "Prior Term Loan Agreement") with Bank of America, as administrative agent, certain lenders named therein (the "Prior Term Lenders"), Merrill Lynch, Pierce, Fenner & Smith Incorporated, as sole lead arranger and sole bookrunner, Morgan Stanley MUFG Loan Partners, LLC, as syndication agent, and Citibank, N.A., PNC Bank, National Association and JPMorgan Chase Bank, N.A., as co-documentation agents. The Prior Term Loan Agreement provided for a senior unsecured delayed draw term loan facility (the "Prior Term Loan Facility") in an aggregate principal amount of $1.0 billion.

The commercial terms of the Prior Term Loan Agreement are substantially similar to the Term Loan Agreement, other than interest rates and the maturity date.

Loans under the Prior Term Loan Agreement, which was to mature on February 28, 2022, bore interest, at our option, at either (i) LIBOR periodically fixed for an interest period (as selected by us) of one, two, three or six months plus a margin (based on our public debt ratings) ranging from 1.00 percent per annum to 1.75 percent per annum or (ii) a daily floating rate based on the agent's prime rate (subject to certain minimums based upon the federal funds effective rate or LIBOR) plus a margin (based on our public debt ratings) ranging from zero percent per annum to 0.75 percent per annum. The Company was required to pay a ticking fee to the agent for the account of the Prior Term Lenders which initially accrued at a rate (based on our public debt ratings) ranging from 0.10 percent per annum to 0.30 percent per annum multiplied by the undrawn aggregate commitments of the Prior Term Lenders in respect of the Prior Term Loan Facility, accruing during the period commencing on December 15, 2016 and ending on the earliest of the dates on which the loans are drawn.

On February 28, 2017, Cboe made a draw under the Prior Term Loan Agreement in the amount of $1.0 billion. Cboe used the proceeds to finance a portion of the cash component of the aggregate consideration for the Merger, repaid certain existing indebtedness of Bats, paid fees and expenses incurred in connection with the transactions contemplated by the Merger Agreement, funded working capital needs, and for other general corporate purposes.

1.950% Senior Notes due 2019

On June 29, 2017, the Company issued $300 million aggregate principal amount of 1.950% Senior Notes. The form and terms of the 1.950% Senior Notes were established pursuant to an Officer's Certificate, dated as of June 29, 2017, supplementing the Indenture (as defined below). Underwriter fees of $0.8 million were also capitalized and netted against current portion of long-term debt in the consolidated balance sheet, while other issuance fees of $0.9 million were expensed and are included in debt issuance costs on the consolidated statement of income for the nine months ended September 30, 2018.

Table of Contents

The Company used the net proceeds from the 1.950% Senior Notes to repay amounts under the Term Loan Agreement. The 1.950% Senior Notes mature on June 28, 2019 and bear interest at the rate of 1.950% per annum, payable semi-annually in arrears on June 28 and December 28 of each year, commencing December 28, 2017. The 1.950% Senior Notes are unsecured obligations of the Company and rank equally with all of the Company's other existing and future unsecured, senior indebtedness, but are effectively junior to the Company's secured indebtedness, to the extent of the value of the assets securing such indebtedness, and will be structurally subordinated to the secured and unsecured indebtedness of the Company's subsidiaries.

The Company has the option to redeem some or all of the 1.950% Senior Notes, at any time in whole or from time to time in part, at the redemption prices set forth in the Officer's Certificate. The Company may also be required to offer to repurchase the 1.950% Senior Notes upon the occurrence of a Change of Control Triggering Event (as such term is defined in the Officer's Certificate) at a repurchase price equal to 101% of the aggregate principal amount of 1.950% Senior Notes to be repurchased.

3.650% Senior Notes due 2027

On January 12, 2017, the Company entered into an indenture (the "Indenture"), by and between the Company and Wells Fargo Bank, National Association, as trustee, in connection with the issuance of $650 million aggregate principal amount of the Company's 3.650% Senior Notes. The form and terms of the 3.650% Senior Notes were established pursuant to an Officer's Certificate, dated as of January 12, 2017, supplementing the Indenture.

The Company used a portion of the net proceeds from the 3.650% Senior Notes to fund, in part, the Merger, including the payment of related fees and expenses and the repayment of Bats' existing indebtedness, and the remainder for general corporate purposes. The 3.650% Senior Notes mature on January 12, 2027 and bear interest at the rate of 3.650% per annum, payable semi-annually in arrears on January 12 and July 12 of each year, commencing July 12, 2017. The 3.650% Senior Notes are unsecured obligations of the Company and rank equally with all of the Company's other existing and future unsecured, senior indebtedness, but are effectively junior to the Company's secured indebtedness, to the extent of the value of the assets securing such indebtedness, and will be structurally subordinated to the secured and unsecured indebtedness of the Company's subsidiaries.

The Company has the option to redeem some or all of the 3.650% Senior Notes, at any time in whole or from time to time in part, at the redemption prices set forth in the Officer's Certificate. The Company may also be required to offer to repurchase the 3.650% Senior Notes upon the occurrence of a Change of Control Triggering Event (as such term is defined in the Officer's Certificate) at a repurchase price equal to 101% of the aggregate principal amount of 3.650% Senior Notes to be repurchased.

Indenture

Under the Indenture, the Company may issue debt securities, which includes the Notes, at any time and from time to time, in one or more series without limitation on the aggregate principal amount. The Indenture governing the Notes contains customary restrictions, including a limitation that restricts our ability and the ability of certain of our subsidiaries to create or incur secured debt. Such Indenture also limits certain sale and leaseback transactions and contains customary events of default. At September 30, 2018, the Company was in compliance with these covenants.

Revolving Credit Agreement

On December 15, 2016, the Company, as borrower, entered into a Credit Agreement (the "Revolving Credit Agreement") with Bank of America, as administrative agent and as swing line lender, certain lenders named therein (the "Revolving Lenders"), Merrill Lynch, Pierce, Fenner & Smith Incorporated, as sole lead arranger and sole bookrunner, Morgan Stanley MUFG Loan Partners, LLC, as syndication agent, and Citibank, N.A., PNC Bank, National Association and JPMorgan Chase Bank, N.A., as co-documentation agents.

The Revolving Credit Agreement provides for a senior unsecured $150 million five-year revolving credit facility (the "Revolving Credit Facility") that includes a $25 million swing line sub-facility. The Company may also,

Table of Contents

subject to the agreement of the applicable lenders, increase the commitments under the Revolving Credit Facility by up to $100 million, for a total of $250 million. Subject to specified conditions, the Company may designate one or more of its subsidiaries as additional borrowers under the Revolving Credit Agreement provided that the Company guarantees all borrowings and other obligations of any such subsidiaries. As of September 30, 2018, no subsidiaries were designated as additional borrowers.

Funds borrowed under the Revolving Credit Agreement may be used to fund working capital and for other general corporate purposes. As of September 30, 2018, no borrowings were outstanding under the Revolving Credit Agreement. Accordingly, at September 30, 2018, $150 million of borrowing capacity was available for the purposes permitted by the Revolving Credit Agreement.

Loans under the Revolving Credit Agreement will bear interest, at our option, at either (i) LIBOR periodically fixed for an interest period (as selected by us) of one, two, three or six months plus a margin (based on our public debt ratings) ranging from 1.00 percent per annum to 1.75 percent per annum or (ii) a daily floating rate based on our prime rate (subject to certain minimums based upon the federal funds effective rate or LIBOR) plus a margin (based on our public debt ratings) ranging from zero percent per annum to 0.75 percent per annum.

Subject to certain conditions stated in the Revolving Credit Agreement, the Company may borrow, prepay and reborrow amounts under the Revolving Credit Facility at any time during the term of the Revolving Credit Agreement. The Revolving Credit Agreement will terminate and all amounts owing thereunder will be due and payable on December 15, 2021, unless the commitments are terminated earlier, either at our request or, if an event of default occurs, by the Revolving Lenders (or automatically in the case of certain bankruptcy-related events). The Revolving Credit Agreement contains customary representations, warranties and affirmative and negative covenants for facilities of its type, including financial covenants, events of default and indemnification provisions in favor of the Revolving Lenders. The negative covenants include restrictions regarding the incurrence of liens, the incurrence of indebtedness by our subsidiaries and fundamental changes, subject to certain exceptions in each case. The financial covenants require us to meet a quarterly financial test with respect to a minimum consolidated interest coverage ratio of not less than 4.00 to 1.00 and a maximum consolidated leverage ratio of not greater than 3.50 to 1.00. At September 30, 2018, the Company was in compliance with these covenants.

Loan and Notes Payments and Contractual Interest

The future expected loan repayments related to the Term Loan Agreement and the Notes as of September 30, 2018 are as follows (in millions):

2018	$ —
2019	300.0
2020	—
2021	275.0
2022	—
Thereafter	650.0
Principal amounts repayable	1,225.0
Debt issuance cost	(5.4)
Unamortized discounts on notes	(4.9)
Total debt outstanding	$ 1,214.7

Table of Contents

Interest expense recognized on the Term Loan Agreement and the Notes is included in interest expense, net in the condensed consolidated statements of income, for the three months and nine months ended September 30, 2018 and 2017 is as follows (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Components of interest expense:				
Contractual interest	$ 10.0	$ 10.5	$ 29.1	$ 29.0
Amortization of debt discount	0.5	0.3	1.3	0.6
Amortization of debt issuance cost	0.2	0.2	0.5	2.5
Interest expense	$ 10.7	$ 11.0	30.9	32.1
Interest income	(1.1)	(0.5)	(2.4)	(1.2)
Interest expense, net	$ 9.6	$ 10.5	$ 28.5	$ 30.9

12. ACCUMULATED OTHER COMPREHENSIVE INCOME, NET

The following represents the changes in accumulated other comprehensive income by component (in millions):

	Foreign Currency Translation Adjustment	Unrealized Investment Gain/Loss	Post-Retirement Benefits	Total Accumulated Other Comprehensive Income
Balance at December 31, 2017	$ 51.3	$ 0.2	$ (0.8)	$ 50.7
Other comprehensive loss	(23.9)	—	(1.0)	(24.9)
Balance at September 30, 2018	$ 27.4	$ 0.2	$ (1.8)	$ 25.8

13. FAIR VALUE MEASURMENTS

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 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 Financial Accounting Standards Board 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 nonfinancial 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 and liabilities that are measured at fair value on a recurring basis in the condensed consolidated balance sheet as of September 30, 2018 and December 31, 2017.

Table of Contents

Instruments Measured at Fair Value on a Recurring Basis

The following tables present the Company's fair value hierarchy for those assets measured at fair value on a recurring basis as of September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018			
	Total	Level 1	Level 2	Level 3
Assets:				
U.S. Treasury securities	$ 0.9	$ 0.9	$ —	$ —
Total assets	$ 0.9	$ 0.9	$ —	$ —
Liabilities:				
Contingent consideration liabilities	$ 3.0	$ —	$ —	$ 3.0
Total Liabilities	$ 3.0	$ —	$ —	$ 3.0

	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Assets:				
U.S. Treasury securities	$ 47.3	$ 47.3	$ —	$ —
Money market funds	2.5	2.5	—	—
Total assets	$ 49.8	$ 49.8	$ —	$ —
Liabilities:				
Contingent consideration liabilities	$ 56.6	$ —	$ —	$ 56.6
Total Liabilities	$ 56.6	$ —	$ —	$ 56.6

The following is a description of the Company's valuation methodologies used for instruments measured at fair value on a recurring basis:

Financial investments

Financial investments consist of highly liquid U.S. Treasury securities. These securities are valued by obtaining feeds from a number of live data sources, including active market makers and inter dealer brokers and therefore categorized as Level 1.

Contingent consideration liabilities

In connection with the acquisition of the assets of Silexx Financial Systems, LLC ("Silexx"), the Company acquired contingent consideration arrangements with the former owners of Silexx. The total fair value of the liabilities at September 30, 2018 was $3.0 million. The fair values are based on estimates of discounted future cash payments, a significant unobservable input, and are considered a Level 3 measurement.

Table of Contents

Fair Value of Financial Instruments

The following table presents the Company's fair value hierarchy for those financial instruments held by the Company as of September 30, 2018 and December 31, 2017 (in millions):

	September 30, 2018			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	$ 136.8	$ 136.8	$ —	$ —
Financial investments	0.9	0.9	—	—
Accounts receivable	221.9	221.9	—	—
Income tax receivable	59.8	59.8	—	—
Total assets	$ 419.4	$ 419.4	$ —	$ —
Liabilities:				
Accounts payable	$ 6.3	$ —	$ 6.3	$ —
Section 31 fees payable	15.1	—	15.1	—
Contingent consideration liabilities	3.0	—	—	3.0
Debt	1,214.7	—	1,214.7	—
Total liabilities	$ 1,239.1	$ —	$ 1,236.1	$ 3.0

	December 31, 2017			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash and cash equivalents	$ 143.5	$ 143.5	$ —	$ —
Financial investments	47.3	47.3	—	—
Accounts receivable	217.3	217.3	—	—
Income tax receivable	17.2	17.2	—	—
Total assets	$ 425.3	$ 425.3	$ —	$ —
Liabilities:				
Accounts payable	$ 43.2	$ —	$ 43.2	$ —
Section 31 fees payable	105.6	—	105.6	—
Contingent consideration liabilities	56.6	—	—	56.6
Debt	1,237.9	—	1,237.9	—
Total liabilities	$ 1,443.3	$ —	$ 1,386.7	$ 56.6

The carrying amounts of cash and cash equivalents, accounts receivable, income tax receivable, accounts payable and Section 31 fees payable approximate fair value due to their liquid or short-term nature.

Debt

The carrying amount of debt approximates its fair value based on quoted LIBOR at September 30, 2018 and is considered a Level 2 measurement.

Table of Contents

Information on Level 3 Financial Liabilities

The following table sets forth a summary of changes in the fair value of the Company's Level 3 financial liabilities during the nine months ended September 30, 2018.

	Level 3 Financial Liabilities for the Nine Months Ended September 30, 2018				
	Balance at Beginning of Period	Realized (gains) losses during period	Additions	Settlements	Balance at End of Period
Liabilities					
Contingent consideration liabilities	$ 56.6	$ 3.0	$ —	$ (56.6)	$ 3.0
Total Liabilities	$ 56.6	$ 3.0	$ —	$ (56.6)	$ 3.0

14. REDEEMABLE NONCONTROLLING INTEREST

Redeemable noncontrolling interest are reported on the consolidated balance sheets in mezzanine equity in Redeemable Noncontrolling Interest. The Company recognizes changes to the redemption value of redeemable noncontrolling interest 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 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 nine months ended September 30, 2018, the following reflects changes in our redeemable noncontrolling interest (in millions):

	Redeemable Noncontrolling Interest
Balance as of December 31, 2017	$ 9.4
Net loss attributable to redeemable noncontrolling interest	(0.9)
Redemption value adjustment of redeemable noncontrolling interest	0.9
Balance as of September 30, 2018	$ 9.4

15. SEGMENT REPORTING

The Company reports five business segments: Options, U.S. Equities, Futures, European Equities, and Global FX, which is reflective of how the Company's chief operating decision-maker reviews and operates the business (Note 1).

Segment performance is primarily based on operating income (loss). The Company has aggregated all of its corporate costs, acquisition-related costs, as well as other business ventures, within the Corporate Items and Eliminations unit based on the decision that those activities should not be used to evaluate the segment's operating performance; however, operating expenses that relate to activities of a specific segment have been allocated to that segment.

The Options segment includes the options exchange business, which lists for trading options on market indexes (index options), mostly on an exclusive basis, 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) that occur on Cboe Options, C2, BZX and EDGX. It also includes the listed equity and ETP options routed transaction services that occur on Cboe Trading.

The U.S. Equities segment includes listed cash equities and ETP transaction services that occur on BZX, BYX, EDGX and EDGA. It also includes market data revenue generated from the U.S. tape plans as well as revenues generated from the sale of proprietary market data ETP listing, listed cash equities and ETPs routed transaction services, connectivity fees, and advertising activity from ETF.com.

Table of Contents

The Futures segment includes the business of our futures exchange, CFE, which includes offering for trading futures on the VIX Index and bitcoin and other futures products.

The European Equities segment includes the pan European listed cash equities transaction services, ETPs, exchange traded commodities, and international depository receipts that occur on the RIE, operated by Cboe Europe Equities. It also includes the listed cash equities and ETPs routed transaction services that occur on Cboe Chi-X Europe, as well as the listings business where ETPs can be listed on Cboe Europe Equities.

The Global FX segment includes institutional FX trading services that occur on the Cboe FX platform, as well as non-deliverable forward FX transactions executed on Cboe SEF.

Summarized financial data of reportable segments was as follows (in millions):

	Options	U.S. Equities	Futures	European Equities	Global FX	Corporate items and eliminations	Total
Three Months Ended September 30, 2018							
Revenues	$ 228.6	$ 271.9	$ 31.2	$ 30.6	$ 13.6	$ —	$ 575.9
Operating income (loss)	82.1	30.6	20.6	5.4	(1.9)	(10.7)	126.1
Three Months Ended September 30, 2017							
Revenues	$ 224.8	$ 308.5	$ 40.3	$ 26.3	$ 11.3	$ 0.2	$ 611.4
Operating income (loss)	64.3	29.9	35.4	2.7	(3.5)	(9.5)	119.3

	Options	U.S. Equities	Futures	European Equities	Global FX	Corporate items and elimination	Total
Nine Months Ended September 30, 2018							
Revenues	$ 766.8	$ 1,005.6	$ 107.7	$ 97.9	$ 42.7	$ 0.4	$ 2,021.1
Operating income (loss)	273.8	101.9	63.1	18.1	(6.6)	(27.4)	422.9
Nine Months Ended September 30, 2017							
Revenues	$ 651.0	$ 759.8	$ 107.7	$ 63.2	$ 26.2	$ 0.5	$ 1,608.4
Operating income (loss)	190.5	75.4	94.7	7.8	(8.8)	(96.4)	263.2

16. EMPLOYEE BENEFITS

Employees are eligible to participate in the Cboe Options 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. Effective January 1, 2017, the Executive Retirement Plan is closed to new executive officers and employees. Each plan is a defined contribution plan that is non-qualified under Internal Revenue Code. The Company contributed $2.7 million and $1.3 million to the defined contribution plans for the three months ended September 30, 2018 and 2017, respectively, and $6.7 million and $5.1 million to the defined contribution plans for the nine months ended September 30, 2018 and 2017, respectively.

The Company also assumed the Cboe Europe Equities employee selected stakeholder contribution plan upon completion of the Merger. The Company's contribution amounted to $0.3 million and $0.1 million for the three months ended September 30, 2018 and 2017, respectively, and $0.6 million and $0.3 million for the nine months ended September 30, 2018 and 2017. This expense is included in compensation and benefits in the condensed consolidated statements of income.

Table of Contents

17. REGULATORY CAPITAL

As a broker dealer registered with the SEC, Cboe Trading is subject to the SEC's Uniform Net Capital Rule (Rule 15c3 1), which requires the maintenance of minimum net capital, as defined therein. The SEC's requirement also provides that equity capital may not be withdrawn or a cash dividend paid if certain minimum net capital requirements are not met. Cboe Trading computes the net capital requirements under the basic method provided for in Rule 15c3 1.

As of September 30, 2018, Cboe Trading is required to maintain net capital equal to the greater of 6.67% of aggregate indebtedness items, as defined, or $0.1 million. At September 30, 2018, Cboe Trading had net capital of $7.0 million, which was $6.6 million in excess of its required net capital of $0.3 million.

As entities regulated by the FCA, Cboe Europe Equities is subject to the Financial Resource Requirement ("FRR") and Cboe Chi-X Europe is subject to the Capital Resources Requirement ("CRR"). As a RIE, Cboe Europe Equities computes its FRR in accordance with its Financial Risk Assessment, as agreed by the FCA. This FRR was $21.9 million at September 30, 2018. At September 30, 2018, Cboe Europe Equities had capital in excess of its required FRR of $30.0 million.

As a Banks, Investment firms, PRUdential (BIPRU) 50k firm, as defined by the Markets in Financial Instruments Directive of the FCA, Cboe Chi X Europe computes its CRR as the greater of the base requirement of $0.1 million at September 30, 2018, or the summation of the credit risk, market risk and fixed overheads requirements, as defined. At September 30, 2018, Cboe Chi X Europe had capital in excess of its required CRR of $0.5 million.

As a swap execution facility regulated by the CFTC, Cboe SEF is required to meet two capital adequacy tests: (i) its financial resources must be equal to at least twelve months of its projected operating costs and (ii) its unencumbered, liquid financial assets must be equal to at least six months of its projected operating costs. As of September 30, 2018, Cboe SEF had annual operating expenses of $0.8 million and had financial resources that exceeded this amount. Additionally, as of September 30, 2018, Cboe SEF had projected operating expenses for six months of $0.4 million and had unencumbered, liquid financial assets that exceeded this amount.

As a designated contract market regulated by the CFTC, CFE is required to meet two capital adequacy tests: (i) its financial resources must be equal to at least twelve months of its projected operating costs and (ii) its unencumbered, liquid financial assets must be equal to at least six months of its projected operating costs. As of September 30, 2018, CFE had annual projected operating expenses of $61.2 million and had financial resources that exceeded this amount. Additionally, as of September 30, 2018, CFE had projected operating expenses for six months of $30.6 million and had unencumbered, liquid financial assets that exceeded this amount.

18. 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 actual 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, 2018, the Company granted 147,017 restricted stock units ("RSUs"), each of which entitles the holder to one share of common stock upon vesting, to certain officers and employees at a fair value of $111.45 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, 2018, the Company granted 41,868 RSUs, contingent on the achievement of performance conditions including 20,934 RSUs, at a fair value of $115.90 per RSU, related to earnings per share during the performance period and 20,934 RSUs, at a fair value of $122.00 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 (2.36)%, three-year volatility (19.2)% and three year correlation with S&P 500 Index (0.30). 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 the 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.

On May 15, 2018, the Company granted 92 RSUs, each of which entitles the holder to one share of common stock upon vesting, to certain officers and employees at a fair value of $108.11 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.

On May 17, 2018, the Company granted 13,296 shares of stock, at a fair value of $108.38 per share, to non-employee members of the board of directors. The shares have a one-year vesting period and vesting accelerates upon the occurrence of a change in control of the Company. Unvested portions of the stock will be forfeited if the director leaves the Company prior to the applicable vesting date.

On May 17, 2018, the Company granted 1,107 RSUs, each of which entitles the holder to one share of common stock upon vesting, to certain officers and employees at a fair value of $108.38 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.

On May 17, 2018, the Company granted 6,459 RSUs, each of which entitles the holder to one share of common stock upon vesting, to certain officers and employees at a fair value of $108.38 per share. The RSUs vest on either February 19, 2021 or the third 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.

On August 15, 2018, the Company granted 990 RSUs, each of which entitles the holder to one share of common stock upon vesting, to certain officers and employees at a fair value of $94.65 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.

The Company recognized stock-based compensation expense of $8.5 million and $9.1 million for the three months ended September 30, 2018 and 2017, respectively, and $29.4 million and $39.1 million for the nine months ended September 30, 2018 and 2017, respectively. Stock-based compensation expense is included in compensation and benefits and acquisition-related costs in the condensed consolidated statements of income.

Table of Contents

The activity in the Company's stock options, restricted stock and restricted stock units for the nine months ended September 30, 2018 was as follows:

Stock Options

Summary stock option activity is presented below:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in millions)
Outstanding, December 31, 2017	442,042	$ 25.36	1.0	$ 17.5
Granted	—	—	—	—
Exercised	(52,853)	19.79		
Outstanding and expected to vest at September 30, 2018	389,189	$ 26.12	4.9	$ 27.2
Exercisable at September 30, 2018	348,654	$ 25.88	4.7	$ 24.4

Summary of the status of nonvested options is presented below:

Nonvested options	Options	Weighted Average Grant-Date Fair Value
January 1, 2018 — Nonvested	81,068	$ 49.17
Granted	—	—
Vested	(40,533)	49.17
Forfeited	—	—
September 30, 2018 — Nonvested	40,535	$ 49.17

In the nine months ended September 30, 2018, to satisfy employee's tax obligations and cash exercise payment due upon the election to exercise 52,853 stock options, the Company purchased 7,528 shares at a cost of $0.8 million.

As of September 30, 2018, there were $0.3 million in total unrecognized compensation costs related to stock options. These costs are expected to be recognized over a weighted average period of 0.25 years as the stock options vest.

Restricted Stock and Restricted Stock Units

Summary restricted stock activity is presented below:

	Number of	Weighted average grant

	shares	date fair value
Nonvested stock at December 31, 2017	1,068,392	$ 77.19
Granted	210,830	112.56
Vested	(364,991)	74.50
Forfeited	(2,828)	91.13
Nonvested stock at September 30, 2018	911,403	$ 86.40

In the nine months ended September 30, 2018, to satisfy employees' tax obligations upon the vesting of restricted stock, the Company purchased 142,819 shares totaling $16.9 million as the result of the vesting of 364,991 shares of restricted stock.

Table of Contents

As of September 30, 2018, there were $40.6 million in total unrecognized compensation costs related to restricted stock and restricted stock units. These costs are expected to be recognized over a weighted average period of 1.5 years.

19. INCOME TAXES

The Company records income tax expense during interim periods based on the best estimate of the full year's tax rate as adjusted for discrete items, if any, that are taken into account in the relevant interim period. Each quarter, the Company updates its estimate of the annual effective tax rate and any change in the estimated rate is recorded on a cumulative basis.

The effective tax rate from continuing operations was 26.3% and 43.1% for the three months ended September 30, 2018 and 2017, respectively, and 27.4% and 37.3% for the nine months ended September 30, 2018 and 2017, respectively. The decrease in the effective tax rate for the three and nine months ended September 30, 2018 against the comparable period in the prior year was primarily due to a lower corporate income tax rate in 2018.

On December 22, 2017, the U.S. enacted the Jobs Act. The Jobs Act significantly changes U.S. corporate income tax laws by, among other things, reducing the U.S. corporate income tax rate to 21% starting in 2018 and creating a territorial tax system with a one-time mandatory tax on previously deferred foreign earnings of U.S. subsidiaries. The change in the effective tax rate was due to the tax benefit associated with re-measuring net deferred tax liabilities as a result of the Jobs Act. Due to the timing of the enactment and the complexity involved in applying the provisions of the Jobs Act, we made reasonable estimates of the effects and recorded provisional amounts in our financial statements as of December 31, 2017. As we collect and prepare necessary data and interpret the Jobs Act and any additional guidance issued by the U.S. Treasury Department, the Internal Revenue Service, and other standard-setting bodies, we may make adjustments to the provisional amounts.

We recorded a $191.3 million net tax benefit in 2017 associated with the impact of the Jobs Act primarily due to the tax benefit associated with re-measuring net deferred tax liabilities. At September 30, 2018, we have not completed our accounting for the tax effects of the Jobs Act. Although the $191.3 million net benefit represents what Cboe continues to believe is a reasonable estimate of the impact of the income tax effects of the Jobs Act on Cboe's condensed consolidated financial statements as of September 30, 2018, it should be considered provisional. Once Cboe finalizes certain tax positions and files its 2017 U.S. tax return, it will be able to conclude whether any further adjustments are required to its net deferred tax liability as well as to the liability associated with the one-time mandatory deemed repatriation tax. Any adjustments to these provisional amounts will be reported as a component of tax expense (benefit) in the reporting period in which any such adjustments are determined, which will be no later than the fourth quarter of 2018.

20. 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.

Additionally, the change in the redemption value for the noncontrolling interest reduces net income allocated to common stockholders.

Table of Contents

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 and nine months ended September 30, 2018 and 2017:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(in millions, except per share amounts)	2018	2017	2018	2017
Basic EPS Numerator:				
Net Income	$ 85.7	$ 60.3	$ 286.8	$ 143.5
Loss attributable to noncontrolling interest	0.3	0.2	0.9	0.8
Net Income excluding noncontrolling interest	86.0	60.5	287.7	144.3
Change in redemption value of noncontrolling interest	(0.3)	(0.2)	(0.9)	(0.8)
Earnings allocated to participating securities	(0.7)	(0.6)	(2.1)	(1.4)
Net Income allocated to common stockholders	$ 85.0	$ 59.7	$ 284.7	$ 142.1
Basic EPS Denominator:				
Weighted average shares outstanding	111.4	112.3	112.0	105.5
Basic Net Income Per Common Share	$ 0.76	$ 0.53	$ 2.54	$ 1.35
Diluted EPS Numerator:				
Net Income	$ 85.7	$ 60.3	$ 286.8	$ 143.5
Loss attributable to noncontrolling interest	0.3	0.2	0.9	0.8
Net Income excluding noncontrolling interest	86.0	60.5	287.7	144.3
Change in redemption value of noncontrolling interest	(0.3)	(0.2)	(0.9)	(0.8)
Earnings allocated to participating securities	(0.7)	(0.6)	(2.1)	(1.4)
Net Income allocated to common stockholders	$ 85.0	$ 59.7	$ 284.7	$ 142.1
Diluted EPS Denominator:				
Weighted average shares outstanding	111.4	112.3	112.0	105.5
Dilutive common shares issued under stock program	0.4	0.3	0.4	0.3
Total dilutive weighted average shares	111.8	112.6	112.4	105.8
Diluted Net Income Per Common Share	$ 0.76	$ 0.53	$ 2.53	$ 1.34

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

21. COMMITMENTS AND CONTINGENCIES

Legal Proceedings

As of September 30, 2018, the Company was subject to the various legal proceedings and claims discussed below, 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.

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. The Company establishes accruals for those contingencies where the incurrence of a loss is probable and can be reasonably estimated, and the Company discloses 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 September 30, 2018, 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.

Except as set forth herein, there have been no material changes during the period covered by this Form 10 Q from the legal proceedings disclosures in our Annual Report on Form 10 K for the year ended December 31, 2017.

SIFMA

Securities Industry Financial Markets Association ("SIFMA") has filed a number of denial of access applications with the SEC to set aside proposed rule changes to establish or modify fees for Cboe Options, C2, BZX, BYX, EDGX and EDGA (the "Exchanges") market data products and related services (the "Challenged Fees"). The Challenged Fees were held in abeyance pending a decision, which was issued on October 16, 2018, on a separate SIFMA denial of access application held before an SEC's administrative law judge regarding fees proposed by NASDAQ and the NYSE for their respective market data products. On October 16, 2018, the SEC issued an order (the "Order") that remanded the stayed Challenged Fees and ordered the Exchanges to: (i) within six months of the Order, provide notice to the SEC of developed or identified fair procedures for assessing the Challenged Fees (the "Procedures") and (ii) within one year of the Order, apply the Procedures to the Challenged Fees and submit to the SEC a record explaining the Exchanges' conclusions. On October 26, 2018, the Exchanges filed a motion to reconsider the Order with the SEC. An adverse ruling in that matter or a subsequent appeal could adversely affect exchange market data fees. However, the Company believes that the claims are without merit and intends to litigate the matter vigorously.

VIX Litigation

On March 20, 2018, a putative class action complaint captioned Tomasulo v. Cboe Exchange, Inc., et al., No. 18-cv-02025 was filed in federal district court for the Northern District of Illinois alleging that the Company intentionally designed its products, operated its platforms, and formulated the method for calculating VIX and the Special Opening Quotation, (i.e., the special VIX value designed by the Company and calculated on the settlement date of VIX derivatives prior to the opening of trading), in a manner that could be collusively manipulated by a group of entities named as John Doe defendants. A number of similar putative class actions, some of which do not name the Company as a party, were filed in federal court in Illinois and New York on behalf of investors in certain volatility-related products. On June 14, 2018, the Judicial Panel on Multidistrict Litigation centralized the putative class actions in the federal district court for the Northern District of Illinois. On September 28, 2018, plaintiffs filed a master, consolidated complaint that is a putative class action alleging various claims against the Company and John Doe defendants in the federal district court for the Northern District of Illinois. The claims asserted against the Company consist of a Securities Exchange Act fraud claim, three Commodity Exchange Act claims and a state law negligence claim. Plaintiffs request a judgement awarding class damages in an unspecified amount, as well as punitive or exemplary damages in an unspecified amount, prejudgment interest, costs including attorneys' and experts' fees and expenses and such other relief as the court may deem just and proper. Given the preliminary nature of the proceedings, the Company is still evaluating the facts underlying the complaints, however, the Company currently believes that the claims are without merit and intends to litigate the matter vigorously. The Company is unable to estimate what, if any, liability may result from this litigation.

Contractual Obligations

The Company currently leases office space, data centers and remote network operations centers, with lease terms remaining ranging from three months to one hundred months as of September 30, 2018. Total rent expense related to these lease obligations, reflected in technology support services and facilities costs line items on the condensed

Table of Contents

consolidated statements of income, for the three months ended September 30, 2018 and 2017 were $2.5 million and $2.2 million, respectively, and $6.9 million and $5.7 million for the nine months ended September 30, 2018 and 2017.

22. SUBSEQUENT EVENTS

On October 30, 2018, the Company announced that its board of directors declared a quarterly cash dividend of $0.31 per share. The dividend is payable December 14, 2018 to stockholders of record at the close of business on November 30, 2018.

There have been no additional subsequent events that would require disclosure in, or adjustment to, the condensed consolidated financial statements as of and for the nine months ended September 30, 2018.

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, 2017, 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.

Overview

Cboe Global Markets, Inc. is one of the world’s largest exchange holding companies, offering cutting-edge trading and investment solutions to investors around the world. The Company is committed to relentless innovation, connecting global markets with world-class technology, and providing seamless solutions that enhance the customer experience.

Cboe offers trading across a diverse range of products in multiple asset classes and geographies, including options, futures, U.S. and European equities, exchange-traded products (ETPs), global foreign exchange (FX) and multi-asset volatility products based on the VIX, the world’s barometer for equity market volatility.

Cboe’s trading venues include the largest options exchange in the U.S. by volume and the largest stock exchange by value traded in Europe. In addition, the Company is the second-largest stock exchange operator in the U.S. by volume and a leading market globally for ETP trading.

The Company is headquartered in Chicago with offices in Kansas City, New York, London, San Francisco, Singapore, Hong Kong, and Ecuador.

Components of Revenues

Transaction Fees

Transaction fees represent fees charged by the Company for the performance obligation of executing a trade on its markets. These fees can be variable based on trade volume tiered discounts, however as all tiered discounts are calculated monthly, the actual discount is recorded on a monthly basis. Transaction fees, as well as any tiered volume discounts, are calculated and billed monthly in accordance with the Company's published fee schedules. Transaction fees are recognized across all segments. The Company also pays liquidity payments to customers based on its published fee schedules. The Company uses these payments to improve the liquidity on its markets and therefore recognizes those payments as a cost of revenue.

Table of Contents

Access Fees

Access fees represent fees assessed for the opportunity to trade, including fees for trading-related functionality across all segments. They are billed monthly in accordance with the Company's published fee schedules and recognized on a monthly basis when the performance obligation is met. There is no remaining performance obligation after revenue is recognized.

Exchange Services and Other Fees

To facilitate trading, the Company offers technology services, terminal and other equipment rights, maintenance services, trading floor space and telecommunications services. Trading floor and equipment rights are generally on a month-to-month basis. Facilities, systems services and other fees are generally monthly fee-based, although certain services are influenced by trading volume or other defined metrics, others are based solely on demand. All fees associated with the trading floor are recognized in the Options segment.

Market Data Fees

Market data fees represent the fees from the U.S. tape plans and fees from customers for proprietary market data. Fees from the U.S. tape plans are collected monthly based on published fee schedules and distributed quarterly to the U.S. exchanges based on a known formula using trading and/or quoting activity. A contract for proprietary market data is entered into and charged on a monthly basis in accordance with the Company's published fee schedules as the service is provided. Both types of market data are satisfied over time, and revenue is recognized on a monthly basis as the customer receives and consumes the benefit as the Company provides the data. U.S. tape plan market data is recognized in the U.S. Equities and Options segments. Proprietary market data fees are recognized across all segments.

Regulatory Fees

Regulatory fees primarily represent fees collected by the Company to cover the Section 31 fees charged to the Exchanges under the authority of the SEC (Cboe Options, C2, BZX, BYX, EDGX, and EDGA) and are charged by the SEC. Consistent with industry practice, the fees charged to customers are based on the fee set by the SEC per notional value of the transaction executed on the Company's markets and calculated and billed monthly. These fees are recognized in the U.S. Equities and Options segments and as the exchanges are responsible for the ultimate payment to the SEC, the exchanges are considered the principals in these transactions. Regulatory fees also include the options regulatory fee (ORF) charged to customers which supports the Company's regulatory oversight function in the Options segment.

Other Revenue

Other revenue primarily includes among other items, revenue from various licensing agreements, all fees related to the trade reporting facility operated in the European Equities segment, and revenue associated with advertisements through the Company's website.

Components of Cost of Revenues

Liquidity Payments

Liquidity payments are directly correlated to the volume of securities traded on our markets. As stated above, we record the liquidity rebates paid to market participants providing liquidity, in the case of C2, BZX, EDGX and Cboe

Europe Equities, as cost of revenue. BYX and EDGA offer a pricing model pursuant to which we rebate liquidity takers for executing against an order resting on our book, which is also recorded as a cost of revenue.

Table of Contents

Routing and clearing

Various rules require that U.S. options and cash equities trade executions occur at the National Best Bid/Offer (NBBO) displayed by any exchange. Linkage order routing consists of the cost incurred to provide a service whereby Cboe equity and options exchanges deliver orders to other execution venues when there is a potential for obtaining a better execution price or when instructed to directly route an order to another venue by the order provider. The service affords exchange order flow providers an opportunity to obtain the best available execution price and may also result in cost benefits to those clients. Such an offering improves our competitive position and provides an opportunity to attract orders which would otherwise bypass our exchanges. We utilize third-party brokers or our broker-dealer, Cboe Trading, to facilitate such delivery.

Section 31 Fees

Exchanges under the authority of the SEC (Cboe Options, C2, BZX, BYX, EDGX and EDGA) are assessed fees pursuant to the Exchange Act designed to recover the costs to the U.S. government of supervision and regulation of securities markets and securities professionals. We treat these fees as a pass-through charge to customers executing eligible listed cash equities and listed equity options trades. Accordingly, we recognize the amount that we are charged under Section 31 as a cost of revenues and the corresponding amount that we charge our customers as regulatory transaction fees revenue. Since the regulatory transaction fees recorded in revenues are equal to the Section 31 fees recorded in cost of revenues, there is no impact on our operating income. CFE, Cboe Europe Equities and Cboe FX are not U.S. national securities exchanges, and accordingly are not charged Section 31 fees.

Royalty Fees

Royalty fees primarily consist of license fees paid by us for the use of underlying indexes in our proprietary products usually based on contracts traded. The Company has licenses with the owners of the S&P 500 Index, S&P 100 Index and certain other S&P indexes, the FTSE Russell, DJIA, MSCI indexes, and certain other index products. This category also includes fees related to the dissemination of market data related to S&P indexes.

Components of Operating Expenses

Compensation and Benefits

Compensation and benefits represent our largest expense category and tend to be driven by both our staffing requirements and the general dynamics of the employment market. Stock-based compensation is a non-cash expense related to equity awards. Stock-based compensation can vary depending on the quantity and fair value of the award on the date of grant and the related service period.

Depreciation and Amortization

Depreciation and amortization expense results from the depreciation of long-lived assets purchased and the amortization of purchased and internally developed software, and the amortization of intangible assets.

Technology Support Services

Technology support services expense consists primarily of costs related to the maintenance of computer equipment supporting our system architecture, circuits supporting our wide area network, support for production software, fees paid to information vendors for displaying data and off-site system hosting fees.

Professional Fees and Outside Services

Professional fees and outside services consist primarily of consulting services, which include: the supplementation of staff for activities primarily related to systems development and maintenance, legal, regulatory and audit, and tax advisory services.

Travel and Promotional Expenses

Travel and promotional expenses primarily consist of advertising, costs for special events, sponsorship of industry conferences, options education seminars and travel-related expenses.

Facilities Costs

Facilities costs primarily consist of expenses related to owned and leased properties including rent, maintenance, utilities, real estate taxes and telecommunications costs.

Acquisition-Related Costs

Acquisition-related costs relate to acquisitions and other strategic opportunities, including the Merger. The acquisition-related transaction costs include fees for investment banking advisors, lawyers, accountants, tax advisors, public relations firms, severance, write-offs of obsolete systems and other external costs directly related to mergers and acquisitions.

Other Expenses

Other expenses represent costs necessary to support our operations that are not already included in the above categories.

Other Income (Expense)

Income and expenses incurred through activities outside of our core operations are considered non-operating and are classified as other income (expense). These activities primarily include interest earned on the investing of excess cash, interest expense related to outstanding debt facilities, dividend income and equity earnings or losses from our investments in other business ventures.

Business Segments

The Company reports five business segments: Options, U.S. Equities, Futures, European Equities, and Global FX. Segment performance is primarily based on operating income (loss). The Company has aggregated all of its corporate costs and eliminations, as well as other business ventures, within Corporate Items and Eliminations; however, operating expenses that relate to activities of a specific segment have been allocated to that segment. Our management allocates resources, assesses performance and manages our business according to these segments:

Options. Our Options segment includes the options exchange business, which lists for trading options on market indexes (index options), mostly on an exclusive basis, 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) that occur on Cboe Options, C2, BZX and EDGX. It also includes the listed equity and ETP options routed transaction services that occur on Cboe Trading.

U.S. Equities. Our U.S. Equities segment includes listed cash equities and ETP transaction services that occur on BZX, BYX, EDGX and EDGA. It also includes market data revenue generated from the U.S. tape plans as well as revenues generated from the sale of proprietary market data, ETP listing, listed cash equities and ETPs routed transaction services, connectivity fees, and advertising activity from ETF.com.

Futures. Our Futures segment includes the business of our futures exchange, CFE, which includes offering for trading futures on the VIX Index and bitcoin and other futures products.

European Equities. Our European Equities segment includes pan European listed cash equities transaction services, ETPs, exchange traded commodities, and international depository receipts that occur on the RIE, operated by

Cboe Europe Equities. It also includes the listed cash equities and ETPs routed transaction services that occur on Cboe Chi-X Europe, as well as the listings business where ETPs can be listed on Cboe Europe Equities.

Global FX. Our Global FX segment includes institutional FX trading services that occur on the Cboe FX platform, as well as non-deliverable forward FX transactions executed on Cboe SEF.

General Factors Affecting Results of Operations

In broad terms, our business performance is impacted by a number of drivers, including macroeconomic events affecting the risk and return of financial assets, investor sentiment, the regulatory environment for capital markets, geopolitical events, central bank policies and changing technology, particularly in the financial services industry. Our future revenues and net income will continue to be influenced by a number of domestic and international economic trends, including:

- trading volumes on our proprietary products such as the VIX options and futures and SPX options;
- trading volumes in listed cash equity securities and ETPs in both the U.S. and Europe, volumes in listed equity options, and volumes in institutional FX trading, all of which are driven primarily by overall macroeconomic conditions;
- the demand for the U.S. tape plan market data distributed by the Securities Information Processors (SIPs), which determines the pool size of the industry market data revenue we receive based on our market share;
- the demand for information about, or access to, our markets, which is dependent on the products we trade, our importance as a liquidity center and the quality and pricing of our data and access services;
- continuing pressure in transaction fee pricing due to intense competition in the United States and Europe; and
- regulatory changes relating to market structure, increased capital requirements or affecting certain types of instruments, transactions, pricing structures, capital market participants or reporting or compliance requirements, including any changes resulting from Brexit.

A number of significant structural, political and monetary issues continue to confront the global economy, and instability could return at any time, resulting in an increased level of market volatility, increased trading volumes and greater uncertainty. In contrast, many of the largest customers of our transactional businesses continue to adapt their business models as they address the implementation of regulatory changes initiated following the global financial crisis.

Financial Summary

The comparability of our results of operations between reported periods is impacted by the acquisition of Bats on February 28, 2017. Operating results and other financial metrics for U.S. Equities, European Equities and Global FX represent activity for the three and nine months ended September 30, 2018, and three and seven months ended September 30, 2017 as a result of the Bats acquisition on February 28, 2017. The following summarizes changes in financial performance for the three and nine months ended September 30, 2018 and 2017 and certain non-GAAP financial measures. These non-GAAP financials measures assist management in comparing our performance on a consistent basis for purposes of business decision making by removing the impact of certain items management believes

Table of Contents

do not reflect our underlying operations. Please see the footnotes below for additional information and reconciliations from our condensed consolidated financial statements.

	Three Months Ended September 30,		Increase/	Percent		Nine Months Ended September 30,		Increase/	Percent	
	2018	2017	(Decrease)	Change		2018	2017	(Decrease)	Change	
	(in millions, except percentages, earnings per share, and as noted below)					(in millions, except percentages, earnings per share, and as noted below)				
Total revenues	$ 575.9	$ 611.4	$ (35.5)	(5.8)	%	$ 2,021.1	$ 1,608.4	$ 412.7	25.7	%
Total cost of revenues	305.4	341.7	(36.3)	(10.6)	%	1,138.6	878.4	260.2	29.6	%
Revenues less cost of revenues	270.5	269.7	0.8	0.3	%	882.5	730.0	152.5	20.9	%
Total operating expenses	144.4	150.4	(6.0)	(4.0)	%	459.6	466.8	(7.2)	(1.5)	%
Operating income	126.1	119.3	6.8	5.7	%	422.9	263.2	159.7	60.7	%
Income before income tax provision	116.3	105.9	10.4	9.8	%	395.5	230.3	165.2	71.7	%
Income tax provision	30.6	45.6	(15.0)	(32.9)	%	108.7	86.8	21.9	25.2	%
Net income	$ 85.7	$ 60.3	$ 25.4	42.1	%	$ 286.8	$ 143.5	$ 143.3	99.9	%
Basic earnings per share	$ 0.76	$ 0.53	$ 0.23	43.4	%	$ 2.54	$ 1.35	$ 1.19	88.1	%
Diluted earnings per share	0.76	0.53	0.23	43.4	%	2.53	1.34	1.19	88.8	%
EBITDA(1)	175.5	171.2	4.3	2.5	%	576.8	396.1	180.7	45.6	%
EBITDA margin(2)	64.9 %	63.5 %	1.4 %		*	65.4 %	54.3 %	11.1 %		*
Adjusted EBITDA(1)	$ 181.4	$ 180.9	$ 0.5	0.3	%	$ 600.1	$ 485.5	$ 114.6	23.6	%
Adjusted EBITDA margin(3)	67.1 %	67.1 %	(0.0) %		*	68.0 %	66.5 %	1.5 %		*
Adjusted earnings(4)	$ 118.3	$ 100.1	$ 18.2	18.2	%	$ 391.7	$ 270.3	$ 121.4	44.9	%
Diluted weighted average shares outstanding	111.8	112.6	(0.8)	(0.7)	%	112.4	105.8	6.6	6.2	%

Diluted Adjusted earnings per share(5)	$ 1.06	$ 0.89	$ 0.17	19.1 %	$ 3.48	$ 2.55	$ 0.93	37.0 %

	Three Months Ended September 30, 2018	2017	Increase/ (Decrease)	Percent Change	Nine Months Ended September 30, 2018	2017	Increase/ (Decrease)	Percent Change
	(in millions, except percentages, trading days, and as noted below)				(in millions, except percentages, trading days, and as noted below)			
Options:								
Average daily volume (ADV) (in millions of contracts):								
Total touched contracts	6.7	6.8	(0.1)	(1.5) %	7.6	6.9	0.7	10.1 %
Market ADV	18.3	16.2	2.1	13.0 %	19.8	16.5	3.3	20.0 %
Index contract ADV	1.8	2.1	(0.3)	(14.3) %	2.1	2.0	0.1	5.0 %
Number of trading days	63	63	—	— %	188	188	—	— %
Total Options revenue per contract (RPC)	$ 0.244	$ 0.247	$ (0.003)	(1.2) %	$ 0.250	$ 0.245	$ 0.005	2.0 %
Multiply Listed Options RPC	0.068	0.061	0.007	11.5 %	0.064	0.060	0.004	6.7 %
Index Options RPC	0.737	0.669	0.068	10.2 %	0.730	0.690	0.040	5.8 %
Market share	36.8 %	41.7 %	(4.9) %	*	38.5 %	40.3 %	(1.8) %	*
U.S. Equities:								
ADV:								
Total touched shares (in billions)	1.16	1.23	(0.07)	(5.7) %	1.35	1.32	0.03	2.3 %
Market ADV (in	6.35	6.06	0.29	4.8 %	6.94	6.52	0.42	6.4 %

billions)								
Trading days	63	63	—	0.0 %	188	149	39	26.2 %
Market share	17.5 %	19.2 %	(1.7) %	*	18.6 %	19.2 %	(0.6) %	*
U.S. Equities (net capture per one hundred touched shares)(6)	$ 0.026	0.022	0.004	18.2 %	$ 0.024	$ 0.023	0.0	4.3 %
U.S. ETPs: launches (number of launches)	14	23	(9)	(39.1) %	50	64	(14)	(21.9) %
U.S. ETPs: listings (number of listings)	271	234	37	15.8 %	271	234	37	15.8 %
Futures:								
ADV (in thousands)	238.8	331.1	(92.3)	(27.9) %	287.2	311.1	(23.9)	(7.7) %
Trading days	63	63	—	— %	188	188	—	— %
Revenue per contract	$ 1.704	$ 1.752	$ (0.048)	(2.7) %	$ 1.692	$ 1.759	$ (0.067)	(3.8) %
European Equities:								
ADNV:								
Matched and touched ADNV (in billions)	€ 9.6	€ 8.7	€ 0.9	10.3 %	€ 10.3	9.6	0.7	7.3 %
Market ADNV (in billions)	41.4	41.1	0.3	0.7 %	46.5	45.2	1.3	2.9 %
Trading days	65	65	—	— %	192	151	41	27.2 %
Market share	23.1 %	21.1 %	2.0 %	*	22.1 %	21.2 %	0.9 %	*
European Equities (net capture per matched notional value in basis points)(7)	0.195	0.168	0.027	16.1 %	0.189	0.164	0.025	15.2 %
Average Euro/British pound exchange rate	£ 0.891	£ 0.898	£ (0.007)	(0.8) %	£ 0.883	£ 0.873	£ 0.010	1.1 %
Global FX:								
ADNV (in billions)	$ 34.6	$ 29.0	$ 5.6	19.3 %	$ 38.2	28.7	9.5	33.1 %

Trading days	65	65	—	—	%	194	153	41	26.8	%
Global FX (net capture per one million dollars traded)(8)	2.63	2.63	—	—	%	2.54	2.63	(0.09)	(3.4)	%
Average British pound/U.S. dollar exchange rate	$ 1.303	$ 1.309	$ (0.006)	(0.5)	%	$ 1.352	$ 1.274	$ 0.078	6.1	%

*Not meaningful

(1) EBITDA is defined as income before interest, income taxes, depreciation and amortization. Adjusted EBITDA is defined as EBITDA before acquisition-related costs and accelerated stock-based compensation. EBITDA and

Table of Contents

adjusted EBITDA do not represent, and should not be considered as, alternatives to net income or cash flows from operations, each as determined in accordance with GAAP. We have presented EBITDA and adjusted EBITDA because we consider them important supplemental measures of our performance and believe that they are frequently used by analysts, investors and other interested parties in the evaluation of companies. In addition, we use adjusted EBITDA as a measure of operating performance for preparation of our forecasts, evaluating our leverage ratio for the debt to earnings covenant included in our outstanding credit facility. Other companies may calculate EBITDA and adjusted EBITDA differently than we do. EBITDA and adjusted EBITDA have limitations as analytical tools, and you should not consider them in isolation or as substitutes for analysis of our results as reported under GAAP.
The following tables are reconciliations of net income allocated to common stockholders to EBITDA and adjusted EBITDA (in millions):

	Three Months Ended September 30, 2018						
	Options	U.S. Equities	Futures	European Equities	Global FX	Corporate	Total
	(in millions)						
Net income (loss) allocated to common stockholders	$ 81.3	$ 30.0	$ 20.5	$ 3.2	$ (1.9)	$ (48.1)	$ 85.0
Interest	—	—	—	(0.1)	—	9.7	9.6
Income tax provision	—	0.4	—	2.3	—	27.9	30.6
Depreciation and amortization	12.0	21.2	0.4	7.6	8.4	0.7	50.3
EBITDA	93.3	51.6	20.9	13.0	6.5	(9.8)	175.5
Acquisition-related costs	1.0	—	—	0.4	0.1	4.4	5.9
Adjusted EBITDA	$ 94.3	$ 51.6	$ 20.9	$ 13.4	$ 6.6	$ (5.4)	$ 181.4

	Three Months Ended September 30, 2017						
	Options	U.S. Equities	Futures	European Equities	Global FX	Corporate	Total
	(in millions)						
Net income (loss) allocated to common stockholders	$ 60.6	$ 29.6	$ 35.1	$ 2.9	$ (3.5)	$ (65.0)	$ 59.7
Interest	—	—	—	—	—	10.5	10.5
Income tax provision	—	—	—	—	—	45.6	45.6
Depreciation and amortization	14.0	23.9	0.4	7.7	9.1	0.3	55.4
EBITDA	74.6	53.5	35.5	10.6	5.6	(8.6)	171.2
Acquisition-related costs	—	—	—	—	—	5.5	5.5
Change in contingent consideration	—	—	—	—	0.4	—	0.4
Provision for uncollectable convertible notes receivable	3.8	—	—	—	—	—	3.8
Adjusted EBITDA	$ 78.4	$ 53.5	$ 35.5	$ 10.6	$ 6.0	$ (3.1)	$ 180.9

Table of Contents

	Nine Months Ended September 30, 2018						
	Options	U.S. Equities	Futures	European Equities	Global FX	Corporate	Total
	(in millions)						
Net income (loss) allocated to common stockholders	$ 272.7	$ 100.0	$ 62.8	$ 10.5	$ (6.7)	$ (154.6)	$ 284.7
Interest	—	—	—	(0.1)	—	28.6	28.5
Income tax provision (benefit)	0.8	1.5	—	7.7	0.1	98.6	108.7
Depreciation and amortization	35.5	66.1	1.8	23.7	26.4	1.4	154.9
EBITDA	309.0	167.6	64.6	41.8	19.8	(26.0)	576.8
Acquisition-related costs	14.3	—	—	1.2	0.1	7.7	23.3
Adjusted EBITDA							