

MARKETAXESS HOLDINGS INC

FORM 10-Q (Quarterly Report)

Filed 07/27/17 for the Period Ending 06/30/17

Address	299 PARK AVENUE, 10TH FLOOR NEW YORK, NY 10171
Telephone	212-831-6000
CIK	0001278021
Symbol	MKTX
SIC Code	6211 - Security Brokers, Dealers, and Flotation Companies
Industry	Financial & Commodity Market Operators
Sector	Financials
Fiscal Year	12/31

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2017

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 001-34091

MARKETAXESS HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

299 Park Avenue, 10th Floor New York, New York
(Address of principal executive offices)

52-2230784
(IRS Employer
Identification No.)

10171
(Zip Code)

(212) 813-6000

(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 and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an "emerging growth company". See definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

As of July 26, 2017, the number of shares of the Registrant's voting common stock outstanding was 37,537,075.

MARKETAXESS HOLDINGS INC.
FORM 10-Q FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2017
TABLE OF CONTENTS

	<u>Page</u>
<u>PART I— Financial Information</u>	
Item 1. <u>Financial Statements (Unaudited)</u>	3
<u>Consolidated Statements of Financial Condition as of June 30, 2017 and December 31, 2016</u>	3
<u>Consolidated Statements of Operations for the Three and Six Months Ended June 30, 2017 and 2016</u>	4
<u>Consolidated Statements of Comprehensive Income for the Three and Six Months Ended June 30, 2017 and 2016</u>	5
<u>Consolidated Statement of Changes in Stockholders' Equity for the Six Months Ended June 30, 2017</u>	6
<u>Consolidated Statements of Cash Flows for the Six Months Ended June 30, 2017 and 2016</u>	7
<u>Notes to Consolidated Financial Statements</u>	8
Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	20
Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	36
Item 4. <u>Controls and Procedures</u>	37
<u>PART II— Other Information</u>	
Item 1. <u>Legal Proceedings</u>	38
Item 1A. <u>Risk Factors</u>	38
Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	38
Item 3. <u>Defaults Upon Senior Securities</u>	38
Item 4. <u>Mine Safety Disclosures</u>	39
Item 5. <u>Other Information</u>	39
Item 6. <u>Exhibits</u>	39

PART I — Financial Information

Item 1. Financial Statements

**MARKETAXESS HOLDINGS INC.
CONSOLIDATED STATEMENTS OF FINANCIAL CONDITION
(Unaudited)**

	As of	
	June 30, 2017	December 31, 2016
(In thousands, except share and per share amounts)		
ASSETS		
Cash and cash equivalents	\$ 128,143	\$ 168,243
Investments, at fair value	237,361	194,404
Accounts receivable, net of allowance of \$84 and \$82 as of June 30, 2017 and December 31, 2016, respectively	55,215	50,668
Goodwill and intangible assets, net of accumulated amortization	63,251	63,443
Furniture, equipment, leasehold improvements and capitalized software, net of accumulated depreciation and amortization	34,643	31,104
Prepaid expenses and other assets	21,058	11,618
Deferred tax assets, net	7,370	8,562
Total assets	\$ 547,041	\$ 528,042
LIABILITIES AND STOCKHOLDERS' EQUITY		
Liabilities		
Accrued employee compensation	\$ 23,080	\$ 34,783
Income and other tax liabilities	4,686	7,582
Deferred revenue	3,076	2,515
Accounts payable, accrued expenses and other liabilities	14,971	15,149
Total liabilities	45,813	60,029
Commitments and Contingencies (Note 10)	—	—
Stockholders' equity		
Preferred stock, \$0.001 par value, 4,855,000 shares authorized, no shares issued and outstanding as of June 30, 2017 and December 31, 2016	—	—
Series A Preferred Stock, \$0.001 par value, 110,000 shares authorized, no shares issued and outstanding as of June 30, 2017 and December 31, 2016	—	—
Common stock voting, \$0.003 par value, 110,000,000 shares authorized, 40,242,102 shares and 40,106,360 shares issued and 37,554,123 shares and 37,543,775 shares outstanding as of June 30, 2017 and December 31, 2016, respectively	121	120
Common stock non-voting, \$0.003 par value, 10,000,000 shares authorized, no shares issued and outstanding as of June 30, 2017 and December 31, 2016	—	—
Additional paid-in capital	343,085	342,311
Treasury stock - Common stock voting, at cost, 2,687,979 and 2,562,585 shares as of June 30, 2017 and December 31, 2016, respectively	(141,477)	(117,330)
Retained earnings	310,777	255,140
Accumulated other comprehensive loss	(11,278)	(12,228)
Total stockholders' equity	501,228	468,013
Total liabilities and stockholders' equity	\$ 547,041	\$ 528,042

The accompanying notes are an integral part of these consolidated financial statements.

MARKETAXESS HOLDINGS INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
(In thousands, except share and per share amounts)				
Revenues				
Commissions	\$ 87,015	\$ 86,239	\$ 181,037	\$ 165,332
Information and post-trade services	8,272	8,586	16,088	16,365
Investment income	840	517	1,587	935
Other	1,187	1,297	2,493	2,580
Total revenues	<u>97,314</u>	<u>96,639</u>	<u>201,205</u>	<u>185,212</u>
Expenses				
Employee compensation and benefits	25,421	25,815	52,822	50,342
Depreciation and amortization	4,790	4,540	9,483	9,221
Technology and communications	4,822	4,277	9,407	8,581
Professional and consulting fees	4,086	4,245	8,365	8,107
Occupancy	1,422	1,225	2,826	2,386
Marketing and advertising	2,782	1,824	4,668	3,602
Clearing costs	1,517	1,953	2,844	3,719
General and administrative	2,901	2,209	5,610	4,333
Total expenses	<u>47,741</u>	<u>46,088</u>	<u>96,025</u>	<u>90,291</u>
Income before income taxes	49,573	50,551	105,180	94,921
Provision for income taxes	11,550	17,425	24,694	32,832
Net income	<u>\$ 38,023</u>	<u>\$ 33,126</u>	<u>\$ 80,486</u>	<u>\$ 62,089</u>
Net income per common share				
Basic	\$ 1.03	\$ 0.90	\$ 2.18	\$ 1.69
Diluted	\$ 1.00	\$ 0.88	\$ 2.11	\$ 1.65
Cash dividends declared per common share	\$ 0.33	\$ 0.26	\$ 0.66	\$ 0.52
Weighted average shares outstanding				
Basic	36,853	36,876	36,852	36,826
Diluted	38,077	37,748	38,095	37,710

The accompanying notes are an integral part of these consolidated financial statements.

MARKETAXESS HOLDINGS INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	(In thousands)			
Net income	\$ 38,023	\$ 33,126	\$ 80,486	\$ 62,089
Net cumulative translation adjustment and foreign currency exchange hedge, net of tax of \$(1,106), \$2,089, \$(1,634) and \$4,101, respectively	1,325	(1,804)	960	(4,041)
Net unrealized (loss) gain on securities available-for-sale, net of tax of \$(20), \$21, \$(6) and \$136, respectively	(33)	34	(10)	221
Comprehensive Income	\$ 39,315	\$ 31,356	\$ 81,436	\$ 58,269

The accompanying notes are an integral part of these consolidated financial statements.

MARKETAXESS HOLDINGS INC.
CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY
(Unaudited)

	Common Stock Voting	Additional Paid-In Capital	Treasury Stock - Common Stock Voting	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
(In thousands)						
Balance at December 31, 2016	\$ 120	\$ 342,311	\$ (117,330)	\$ 255,140	\$ (12,228)	\$ 468,013
Net income	—	—	—	80,486	—	80,486
Cumulative translation adjustment and foreign currency exchange hedge, net of tax	—	—	—	—	960	960
Unrealized net loss on securities available-for-sale, net of tax	—	—	—	—	(10)	(10)
Stock-based compensation	—	7,468	—	—	—	7,468
Exercise of stock options	1	1,337	—	—	—	1,338
Withholding tax payments on restricted stock vesting and stock option exercises	—	(8,111)	—	—	—	(8,111)
Repurchases of common stock	—	—	(24,147)	—	—	(24,147)
Cumulative effect of change in accounting for employee share-based payments	—	80	—	(51)	—	29
Cash dividend on common stock	—	—	—	(24,798)	—	(24,798)
Balance at June 30, 2017	<u>\$ 121</u>	<u>\$ 343,085</u>	<u>\$ (141,477)</u>	<u>\$ 310,777</u>	<u>\$ (11,278)</u>	<u>\$ 501,228</u>

The accompanying notes are an integral part of these consolidated financial statements.

MARKETAXESS HOLDINGS INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six Months Ended June 30,	
	2017	2016
	(in thousands)	
Cash flows from operating activities		
Net income	\$ 80,486	\$ 62,089
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	9,483	9,221
Stock-based compensation expense	7,468	6,937
Deferred taxes	1,399	307
Other	740	9,219
Changes in operating assets and liabilities:		
(Increase) in accounts receivable	(4,669)	(22,677)
(Increase) in prepaid expenses and other assets	(9,407)	(3,574)
(Increase) in corporate debt trading investments	(111)	(72,396)
(Increase) in mutual funds held in rabbi trust	(1,620)	(1,284)
(Decrease) in accrued employee compensation	(11,703)	(9,084)
(Decrease) in income and other tax liabilities	(3,068)	(1,856)
Increase in deferred revenue	561	294
(Decrease) increase in accounts payable, accrued expenses and other liabilities	(441)	2,708
Net cash provided by (used in) operating activities	69,118	(20,096)
Cash flows from investing activities		
Available-for-sale investments		
Proceeds from maturities and sales	101,354	20,000
Purchases	(143,214)	(8,065)
Purchases of furniture, equipment and leasehold improvements	(5,777)	(3,904)
Capitalization of software development costs	(6,667)	(6,142)
Other	(33)	99
Net cash (used in) provided by investing activities	(54,337)	1,988
Cash flows from financing activities		
Cash dividend on common stock	(24,535)	(19,313)
Exercise of stock options	1,338	2,138
Withholding tax payments on restricted stock vesting and stock option exercises	(8,111)	(5,585)
Repurchases of common stock	(24,147)	(5,400)
Net cash (used in) financing activities	(55,455)	(28,160)
Effect of exchange rate changes on cash and cash equivalents	574	(185)
Cash and cash equivalents		
Net (decrease) for the period	(40,100)	(46,453)
Beginning of period	168,243	199,728
End of period	\$ 128,143	\$ 153,275

The accompanying notes are an integral part of these consolidated financial statements.

MARKETAXESS HOLDINGS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Organization and Principal Business Activity

MarketAxess Holdings Inc. (the “Company” or “MarketAxess”) was incorporated in the State of Delaware on April 11, 2000. Through its subsidiaries, MarketAxess operates a leading electronic trading platform that enables fixed-income market participants to efficiently trade corporate bonds and other types of fixed-income instruments using MarketAxess' patented trading technology. Over 1,200 institutional investor and broker-dealer firms are active users of the MarketAxess trading platform, accessing global liquidity in U.S. high-grade corporate bonds, emerging markets and high-yield bonds, European bonds, U.S. agency bonds, municipal bonds, credit default swaps and other fixed-income securities. Through its Open Trading™ protocols, MarketAxess executes certain bond transactions between and among institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller in trades which then settle through a third-party clearing broker. MarketAxess also offers a number of trading-related products and services, including: market data to assist clients with trading decisions; connectivity solutions that facilitate straight-through processing; technology services to optimize trading environments; and execution services for exchange-traded fund managers and other clients. Through its Trax® division, MarketAxess also offers a range of pre- and post-trade services, including trade matching, regulatory transaction reporting and market and reference data, across a range of fixed-income and other products.

2. Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany transactions and balances have been eliminated. These consolidated financial statements are unaudited and should be read in conjunction with the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. The consolidated financial information as of December 31, 2016 has been derived from audited financial statements not included herein. These unaudited consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”) with respect to Form 10-Q and reflect all adjustments that, in the opinion of management, are normal and recurring, and that are necessary for a fair statement of the results for the interim periods presented. In accordance with such rules and regulations, certain disclosures that are normally included in annual financial statements have been omitted. Interim period operating results may not be indicative of the operating results for a full year.

Accounting Pronouncements, Recently Adopted

Effective January 1, 2017, the Company adopted ASU 2016-09, “Improvements to Employee Share-Based Payment Accounting” (“ASU 2016-09”). ASU 2016-09 simplifies several aspects related to the accounting for share-based payment transactions, including the accounting for income taxes, statutory tax withholding requirements and classification on the statement of cash flows. Beginning January 1, 2017, the tax effects related to share-based payments are recorded through the income tax provision and the Company has elected to account for forfeitures as they occur. The adoption of ASU 2016-09 will cause volatility in the Company's net income, effective tax rate and diluted earnings per share. The volatility in future periods will depend on the Company's stock price at the vest date for restricted stock awards or exercise date for stock options and the number of awards that vest or are exercised in each period. Under the new guidance, excess tax benefits from share-based compensation are included as an operating activity in the Company's Consolidated Statements of Cash Flows. Prior period cash flows have been adjusted to conform to the new presentation.

Accounting Pronouncements, Not Yet Adopted

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-09, “Revenue from Contracts with Customers” (“ASU 2014-09”) requiring an entity to recognize revenue for the transfer of goods or services equal to the amount that it expects to be entitled to receive for those goods or services. The standard can be implemented using either a retrospective or a modified retrospective method. In August 2015, the FASB deferred the effective date of the new revenue standard for periods beginning after December 15, 2016 to December 15, 2017, with early adoption permitted but not earlier than the original effective date. The ASU will be effective for the Company beginning January 1, 2018. The Company's implementation efforts include the identification of revenue streams within the scope of the guidance, the evaluation of certain revenue contracts underlying the revenue streams, discussions with our advisory consultants, and periodic discussions with our audit committee. The Company's evaluation of the impact of this accounting guidance is ongoing though we do not expect this guidance to have a material effect on the Company's Consolidated Financial Statements or disclosures.

In February 2016, the FASB issued ASU 2016-02, “Leases” (“ASU 2016-02”) requiring lessees to recognize lease assets and lease liabilities on the balance sheet for those leases previously classified as operating leases. ASU 2016-02 will be effective for the Company beginning January 1, 2019 and early adoption is permitted and should be applied prospectively. The Company is currently evaluating the potential adoption impact and expects to recognize lease assets and lease liabilities in its Consolidated Statements of Financial Condition. The Company does not expect material changes to the recognition of operating lease expense in its Consolidated Statements of Operations.

In January 2017, the FASB issued ASU 2017-04, “Intangibles-Goodwill and Other” (“ASU 2017-04”). ASU 2017-04 simplifies the testing for goodwill impairment. The guidance will be effective for the Company beginning January 1, 2020 and early adoption is permitted and should be applied prospectively. The Company is currently in the process of assessing the impact of ASU 2017-04 on the Company’s Consolidated Financial Statements.

Cash and Cash Equivalents

Cash and cash equivalents includes cash and money market instruments that are primarily maintained at one major global bank. Given this concentration, the Company is exposed to certain credit risk in relation to its deposits at this bank. The Company defines cash equivalents as short-term interest-bearing investments with maturities at the time of purchase of three months or less.

Investments

The Company determines the appropriate classification of securities at the time of purchase which are recorded in the Consolidated Statements of Financial Condition on the trade date. Securities are classified as available-for-sale or trading. The Company’s available-for-sale investments are comprised of municipal bonds and investment grade corporate debt securities. Available-for-sale investments are carried at fair value with the unrealized gains or losses reported in accumulated other comprehensive loss in the Consolidated Statements of Financial Condition. Trading investments primarily include investment grade corporate debt securities and are carried at fair value, with realized and unrealized gains or losses included in other income in the Consolidated Statements of Operations.

The Company assesses whether an other-than-temporary impairment loss on the available-for-sale investments has occurred due to declines in fair value or other market conditions. The portion of an other-than-temporary impairment related to credit loss is recorded as a charge in the Consolidated Statements of Operations. The remainder is recognized in accumulated other comprehensive loss if the Company does not intend to sell the security and it is more likely than not that the Company will not be required to sell the security prior to recovery. No charges for other-than-temporary losses were recorded during the six months ended June 30, 2017 and 2016.

Fair Value Financial Instruments

Fair value is defined as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” A three-tiered hierarchy for determining fair value has been established that prioritizes inputs to valuation techniques used in fair value calculations. The three levels of inputs are defined as Level 1 (unadjusted quoted prices for identical assets or liabilities in active markets), Level 2 (inputs that are observable in the marketplace other than those inputs classified in Level 1) and Level 3 (inputs that are unobservable in the marketplace). The Company’s financial assets and liabilities measured at fair value on a recurring basis consist of its money market funds, securities available-for-sale, trading securities and foreign currency forward contracts. All other financial instruments are short-term in nature and the carrying amount is reported on the Consolidated Statements of Financial Condition at approximate fair value.

Allowance for Doubtful Accounts

All accounts receivable have contractual maturities of less than one year and are derived from trading-related fees and commissions and revenues from products and services. The Company continually monitors collections and payments from its customers and maintains an allowance for doubtful accounts. The allowance for doubtful accounts is based upon the historical collection experience and specific collection issues that have been identified. Additions to the allowance for doubtful accounts are charged to bad debt expense, which is included in general and administrative expense in the Company’s Consolidated Statements of Operations.

Depreciation and Amortization

Fixed assets are carried at cost less accumulated depreciation. The Company uses the straight-line method of depreciation over three to seven years. The Company amortizes leasehold improvements on a straight-line basis over the lesser of the life of the improvement or the remaining term of the lease.

Software Development Costs

The Company capitalizes certain costs associated with the development of internal use software, including among other items, employee compensation and related benefits and third party consulting costs at the point at which the conceptual formulation, design and testing of possible software project alternatives have been completed. Once the product is ready for its intended use, such costs are amortized on a straight-line basis over three years. The Company reviews the amounts capitalized for impairment whenever events or changes in circumstances indicate that the carrying amounts of the assets may not be recoverable.

Cash Provided as Collateral

Cash is provided as collateral for broker-dealer clearing accounts. Cash provided as collateral is included in prepaid expenses and other assets in the Consolidated Statements of Financial Condition.

Foreign Currency Translation and Forward Contracts

Assets and liabilities denominated in foreign currencies are translated using exchange rates at the end of the period; revenues and expenses are translated at average monthly rates. Gains and losses on foreign currency translation are a component of accumulated other comprehensive loss in the Consolidated Statements of Financial Condition. Transaction gains and losses are recorded in general and administrative expense in the Consolidated Statements of Operations.

The Company enters into foreign currency forward contracts to hedge its net investment in its U.K. subsidiaries. Gains and losses on these transactions are included in accumulated other comprehensive loss in the Consolidated Statements of Financial Condition.

Revenue Recognition

The majority of the Company's revenues are derived from commissions for trades executed on its platform and distribution fees that are billed to its broker-dealer clients on a monthly basis. The Company also derives revenues from information and post-trade services, technology products and services, investment income and other income.

Commission revenue. Commissions are generally calculated as a percentage of the notional dollar volume of bonds traded on the platform and vary based on the type, size, yield and maturity of the bond traded. Under the Company's transaction fee plans, bonds that are more actively traded or that have shorter maturities are generally charged lower commissions, while bonds that are less actively traded or that have longer maturities generally command higher commissions. For trades that the Company executes between and among institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller, the Company earns the commission through the difference in price between the two matched principal trades. Fee programs for certain products include distribution fees which are recognized monthly.

Information and post-trade services. The Company generates revenue from information services provided to our broker-dealer clients, institutional investor clients and data-only subscribers. Information services are invoiced monthly, quarterly or annually. When billed in advance, revenues are deferred and recognized monthly on a straight-line basis. The Company also generates revenue from regulatory transaction reporting and trade matching services. Revenue is recognized in the period the services are provided.

Technology products and services. The Company generates revenues from professional consulting services, technology software licenses and maintenance and support services. Revenue from professional consulting services is recognized as services are performed and software license subscription revenue and maintenance and support services are recognized ratably over the contract period. Technology products and services revenue is reported in other income in the Consolidated Statements of Operations.

Stock-Based Compensation

The Company measures and recognizes compensation expense for all share-based payment awards based on their estimated fair values measured as of the grant date. These costs are recognized as an expense in the Consolidated Statements of Operations over the requisite service period, which is typically the vesting period, with an offsetting increase to additional paid-in capital. Effective upon the Company's adoption of ASU 2016-09, the Company accounts for forfeitures as they occur. Prior to the adoption of ASU 2016-09, expected forfeitures were included in determining share-based compensation expense.

Income Taxes

Income taxes are accounted for using the asset and liability method. Deferred income taxes reflect the net tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when such differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recognized against deferred tax assets if it is more likely than not that such assets will not be realized in future years. The Company recognizes interest and penalties related to unrecognized tax benefits in general and administrative expenses in the Consolidated Statements of Operations. Effective upon the Company's adoption of ASU 2016-09, all tax effects related to share-based payments are recorded through tax expense in the periods during which the awards are exercised or vest.

Business Combinations, Goodwill and Intangible Assets

Business combinations are accounted for under the purchase method of accounting. The total cost of an acquisition is allocated to the underlying net assets based on their respective estimated fair values. The excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill. Determining the fair value of certain assets acquired and liabilities assumed is judgmental in nature and often involves the use of significant estimates and assumptions, including assumptions with respect to future cash flows, discount rates, growth rates and asset lives.

The Company operates as a single reporting unit. Subsequent to an acquisition, goodwill no longer retains its identification with a particular acquisition, but instead becomes identifiable with the entire reporting unit. As a result, all of the fair value of the Company is available to support the value of goodwill. An impairment review of goodwill is performed on an annual basis, at year-end, or more frequently if circumstances change. Intangible assets with definite lives, including purchased technologies, customer relationships and other intangible assets, are amortized on a straight-line basis over their estimated useful lives, ranging from three to 15 years. Intangible assets are assessed for impairment when events or circumstances indicate the existence of a possible impairment.

Earnings Per Share

Basic earnings per share is computed by dividing the net income attributable to common stock by the weighted-average number of shares of common stock outstanding during the period. For purposes of computing diluted earnings per share, the weighted-average shares outstanding of common stock reflects the dilutive effect that could occur if convertible securities or other contracts to issue common stock were converted into or exercised for common stock.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Out-of-Period Adjustments

During the first quarter of 2016, the Company determined that it had incorrectly recorded deferred taxes for the cumulative translation adjustment ("CTA") that arises from converting the local currency financial statements into U.S. dollars. Upon making a permanent reinvestment assertion on unremitted earnings from foreign subsidiaries effective January 1, 2013, the Company should have eliminated any deferred tax balances derived from the CTA balance. The Company also determined that gains and losses on the foreign currency forward contracts used to hedge the net investment in certain foreign subsidiaries were not appropriately considered as taxable income or expense in the consolidated tax returns. The Company assessed these errors and determined that they were not material to previous reporting periods. Therefore, the Company recorded these items as out-of-period adjustments in the three months ended March 31, 2016 by decreasing deferred tax assets by \$3.1 million, decreasing other comprehensive income by \$2.1 million and increasing prepaid expenses and other assets by \$1.0 million in the Consolidated Statements of Financial Condition.

Reclassifications

Certain reclassifications have been made to the prior period's Consolidated Financial Statements in order to conform to the current year presentation. Such reclassifications had no effect on previously reported net income.

3. Net Capital Requirements

Certain U.S. subsidiaries of the Company are registered as a broker-dealer or swap execution facility and therefore are subject to the applicable rules and regulations of the SEC and the Commodity Futures Trading Commission. These rules contain minimum net capital requirements, as defined in the applicable regulations, and also may require a significant part of the registrants' assets be kept in relatively liquid form. Certain of the Company's foreign subsidiaries are regulated by the Financial Conduct Authority in the U.K. or Ontario Securities Commission in Canada and must maintain financial resources, as defined in the applicable regulations, in excess of the applicable financial resources requirement. As of June 30, 2017, each of the Company's subsidiaries that are subject to these regulations had net capital or financial resources in excess of their minimum requirements. As of June 30, 2017, the Company's subsidiaries maintained aggregate net capital and financial resources that was \$136.0 million in excess of the required levels of \$10.5 million.

Each of the Company's U.S. and foreign regulated subsidiaries are subject to local regulations which generally prohibit repayment of borrowings from the Company or affiliates, paying cash dividends, making loans to the Company or affiliates or otherwise entering into transactions that result in a significant reduction in regulatory net capital or financial resources without prior notification to or approval from such regulated entity's principal regulator.

4. Fair Value Measurements

The following table summarizes the valuation of the Company's assets and liabilities measured at fair value as categorized based on the hierarchy described in Note 2.

	Level 1	Level 2	Level 3	Total
	(In thousands)			
As of June 30, 2017				
Money market funds	\$ 11,087	\$ —	\$ —	\$ 11,087
Securities available-for-sale				
Corporate debt	—	160,080	—	160,080
Trading securities				
Corporate debt	—	74,332	—	74,332
Mutual funds held in rabbi trust	—	2,949	—	2,949
Foreign currency forward position	—	(2,346)	—	(2,346)
Total	<u>\$ 11,087</u>	<u>\$ 235,015</u>	<u>\$ —</u>	<u>\$ 246,102</u>
As of December 31, 2016				
Money market funds	\$ 58,573	\$ —	\$ —	\$ 58,573
Securities available-for-sale				
Corporate debt	—	118,870	—	118,870
Trading securities				
Corporate debt	—	74,207	—	74,207
Mutual funds held in rabbi trust	—	1,327	—	1,327
Foreign currency forward position	—	(266)	—	(266)
Total	<u>\$ 58,573</u>	<u>\$ 194,138</u>	<u>\$ —</u>	<u>\$ 252,711</u>

Securities classified within Level 2 were valued using a market approach utilizing prices and other relevant information generated by market transactions involving comparable assets. The foreign currency forward contracts are classified within Level 2 as the valuation inputs are based on quoted market prices. The mutual funds held in a rabbi trust represent investments associated with the deferred cash incentive plan (see Note 14). There were no financial assets classified within Level 3 during the six months ended June 30, 2017 and 2016.

The Company enters into foreign currency forward contracts to hedge the net investment in the Company's U.K. subsidiaries. The Company designates each foreign currency forward contract as a hedge and assesses the risk management objective and strategy, including identification of the hedging instrument, the hedged item and the risk exposure and how effectiveness is to be assessed prospectively and retrospectively. These hedges are for a one-month period and are used to limit exposure to foreign currency exchange rate fluctuations. The fair value of the asset is included in prepaid expenses and other assets and the fair value of the liability is included in accounts payable, accrued expenses and other liabilities in the Consolidated Statements of Financial Condition. Gains or losses on foreign currency forward contracts designated as hedges are included in accumulated other comprehensive loss in the Consolidated Statements of Financial Condition. A summary of the Company's foreign currency forward position is as follows:

	As of	
	June 30, 2017	December 31, 2016
	(In thousands)	
Notional value	\$ 77,079	\$ 66,972
Fair value of notional	79,425	67,238
Fair value of the liability	\$ (2,346)	\$ (266)

The following is a summary of the Company's investments:

	Amortized cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
	(In thousands)			
As of June 30, 2017				
Securities available-for-sale				
Corporate debt	\$ 160,299	\$ 11	\$ (230)	\$ 160,080
Trading securities				
Corporate debt	74,424	78	(170)	74,332
Mutual funds held in rabbi trust	2,729	220	—	2,949
Total trading securities	77,153	298	(170)	77,281
Total investments	\$ 237,452	\$ 309	\$ (400)	\$ 237,361
As of December 31, 2016				
Securities available-for-sale				
Corporate debt	\$ 119,073	\$ 13	\$ (216)	\$ 118,870
Trading securities				
Corporate debt	74,394	47	(234)	74,207
Mutual funds held in rabbi trust	1,212	115	—	1,327
Total trading securities	75,606	162	(234)	75,534
Total investments	\$ 194,679	\$ 175	\$ (450)	\$ 194,404

The following table summarizes the fair value of the investments based upon the contractual maturities:

	As of	
	June 30, 2017	December 31, 2016
	(In thousands)	
Less than one year	\$ 138,491	\$ 117,904
Due in 1 - 5 years	98,870	76,500
Total	<u>\$ 237,361</u>	<u>\$ 194,404</u>

Proceeds from the sales and maturities of investments during the six months ended June 30, 2017 and 2016 were \$116.9 million and \$29.6 million, respectively.

The following table provides fair values and unrealized losses on investments and by the aging of the securities' continuous unrealized loss position as of June 30, 2017 and December 31, 2016:

	Less than Twelve Months		Twelve Months or More		Total	
	Estimated fair value	Gross unrealized losses	Estimated fair value	Gross unrealized losses	Estimated fair value	Gross unrealized losses
	(In thousands)					
As of June 30, 2017						
Corporate debt	\$ 177,728	\$ (400)	\$ —	\$ —	\$ 177,728	\$ (400)
As of December 31, 2016						
Corporate debt	\$ 136,667	\$ (449)	\$ 2,000	\$ (1)	\$ 138,667	\$ (450)

5. Goodwill and Intangible Assets

Goodwill and intangible assets with indefinite lives was \$59.7 million as of both June 30, 2017 and December 31, 2016. Intangible assets that are subject to amortization, including the related accumulated amortization, are comprised of the following:

	June 30, 2017			December 31, 2016		
	Cost	Accumulated amortization	Net carrying amount	Cost	Accumulated amortization	Net carrying amount
	(In thousands)					
Technology	\$ 5,770	\$ (5,770)	\$ —	\$ 5,770	\$ (5,770)	\$ —
Customer relationships	5,639	(2,100)	3,539	5,628	(1,897)	3,731
Non-competition agreements	380	(380)	—	380	(380)	—
Tradenames	370	(370)	—	370	(370)	—
Total	<u>\$ 12,159</u>	<u>\$ (8,620)</u>	<u>\$ 3,539</u>	<u>\$ 12,148</u>	<u>\$ (8,417)</u>	<u>\$ 3,731</u>

Amortization expense associated with identifiable intangible assets was \$0.2 million and \$0.5 million for the six months ended June 30, 2017 and 2016, respectively. Estimated total amortization expense is \$0.4 million for each year from 2017 through 2021.

6. Income Taxes

The provision for income taxes consists of the following:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
(In thousands)				
Current:				
Federal	\$ 9,030	\$ 10,546	\$ 17,345	\$ 17,624
State and local	1,470	1,871	2,928	3,160
Foreign	1,498	1,750	3,043	2,885
Total current provision	<u>11,998</u>	<u>14,167</u>	<u>23,316</u>	<u>23,669</u>
Deferred:				
Federal	(479)	2,836	1,060	7,813
State and local	(72)	406	94	1,119
Foreign	103	16	224	231
Total deferred provision	<u>(448)</u>	<u>3,258</u>	<u>1,378</u>	<u>9,163</u>
Provision for income taxes	<u>\$ 11,550</u>	<u>\$ 17,425</u>	<u>\$ 24,694</u>	<u>\$ 32,832</u>

The Company recognized excess tax benefits on share-based payments of \$5.3 million and \$11.0 million through the provision for income taxes, for the three and six months ended June 30, 2017, respectively.

The Company or one of its subsidiaries files U.S. federal, state and foreign income tax returns. Income tax returns for U.S. Federal (through 2013), New York City (through 2003) and state (through 2009) and Connecticut state (through 2003) have been audited. An examination of the Company's New York State income tax returns for 2010 through 2012 is currently underway. The Company cannot estimate when the examination will conclude or the impact such examination will have on the Company's Consolidated Financial Statements, if any.

The Company has determined that unremitted earnings of the Company's foreign subsidiaries are considered indefinitely reinvested outside of the United States.

7. Stock-Based Compensation Plans

Stock-based compensation expense for the three and six months ended June 30, 2017 and 2016 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
(In thousands)				
Employees	\$ 3,292	\$ 3,299	\$ 6,993	\$ 6,575
Non-employee directors	232	144	475	362
Total stock-based compensation	<u>\$ 3,524</u>	<u>\$ 3,443</u>	<u>\$ 7,468</u>	<u>\$ 6,937</u>

The Company records stock-based compensation expense for employees in employee compensation and benefits and for non-employee directors in general and administrative expenses in the Consolidated Statements of Operations.

During the six months ended June 30, 2017, the Company granted to employees and directors a total of 57,257 shares of restricted stock or restricted stock units, performance-based shares with an expected pay-out at target of 22,338 shares of common stock and 54,838 options to purchase shares of common stock. The fair value of the restricted stock and performance-based share awards was based on a weighted-average fair value per share at the grant date of \$150.58 and \$169.70, respectively. Based on the Black-Scholes option pricing model, the weighted-average fair value for each option granted was \$40.08 per share.

As of June 30, 2017, the total unrecognized compensation cost related to all non-vested awards was \$29.4 million. That cost is expected to be recognized over a weighted-average period of 2.3 years.

8. Earnings Per Share

The following table sets forth the computation of basic and diluted earnings per common share:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	(In thousands, except per share amounts)			
Net income	\$ 38,023	\$ 33,126	\$ 80,486	\$ 62,089
Basic weighted average shares outstanding	36,853	36,876	36,852	36,826
Dilutive effect of stock options and restricted stock	1,224	872	1,243	884
Diluted weighted average shares outstanding	38,077	37,748	38,095	37,710
Basic earnings per share	\$ 1.03	\$ 0.90	\$ 2.18	\$ 1.69
Diluted earnings per share	\$ 1.00	\$ 0.88	\$ 2.11	\$ 1.65

Stock options and restricted stock totaling 50,817 shares and 91,308 shares for the six months ended June 30, 2017 and 2016, respectively, were excluded from the computation of diluted earnings per share because their effect would have been antidilutive. The computation of diluted shares can vary among periods due, in part, to the change in the average price of the Company's common stock.

9. Credit Agreement

In January 2013, the Company entered into a three-year credit agreement that provided for revolving loans and letters of credit up to an aggregate of \$50.0 million. In October 2015, the Company entered into an amended and restated credit agreement (the "Credit Agreement") that increased the borrowing capacity to an aggregate of \$100.0 million, including a \$5.0 million sub-limit for standby letters of credit. The Credit Agreement will mature in October 2017. As of June 30, 2017, the Company had \$1.0 million in letters of credit outstanding and \$99.0 million in available borrowing capacity under the Credit Agreement. Subject to satisfaction of certain specified conditions, the Company is permitted to upsize the borrowing capacity under the Credit Agreement by an additional \$50.0 million.

Borrowings under the Credit Agreement will bear interest at a rate per annum equal to either of the following, as designated by the Company for each borrowing: (A) the sum of (i) the greatest of (a) the prime rate, as defined, (b) the federal funds effective rate plus 0.50% and (c) one month adjusted LIBOR plus 1.00% plus (ii) 0.50% or (B) the sum of (i) adjusted LIBOR plus (ii) 1.50%. Default interest is 2.00% per annum in excess of the rate otherwise applicable in the case of any overdue principal or any other overdue amount. The Company is also required to pay a commitment fee to the lenders under the Credit Agreement in respect of unutilized revolving loan commitments at a rate of 0.40% per annum.

The Company's existing and future domestic subsidiaries (other than any regulated subsidiary) have guaranteed the Company's obligations under the Credit Agreement. Subject to customary exceptions and exclusions, the Company's borrowings under the Credit Agreement are collateralized by first priority pledges (subject to permitted liens) of substantially all of the Company's personal property assets and the personal property assets of the Company's domestic subsidiaries that have guaranteed the Credit Agreement, including the equity interests of the Company's domestic subsidiaries and the equity interests of certain of the Company's foreign subsidiaries (limited, in the case of the voting equity interests of the foreign subsidiaries, to a pledge of 65% of those equity interests).

The Credit Agreement requires that the Company's consolidated total leverage ratio tested on the last day of each fiscal quarter not exceed 2.5 to 1.0 and a consolidated interest coverage ratio tested on the last day of each fiscal quarter not be less than 3.5 to 1.0. The Credit Agreement also requires that the Company's trailing twelve month adjusted EBITDA tested on the last day of each fiscal quarter not be less than \$80 million. The Company was in compliance with all applicable covenants at June 30, 2017 and December 31, 2016.

If an event of default occurs, including failure to pay principal or interest due on the loan balance, a voluntary or involuntary proceeding seeking liquidation, change in control of the Company, or one or more material judgments against the Company in excess of \$10.0 million, the lenders would be entitled to accelerate the borrowings under the Credit Agreement and take various other actions, including all actions permitted to be taken by a secured creditor. If certain bankruptcy events of default occur, the borrowings under the Credit Agreement will automatically accelerate.

10. Commitments and Contingencies

Lease Commitments

The Company leases office space under non-cancelable lease agreements expiring at various dates through 2033. Office space leases are subject to escalation based on certain costs incurred by the landlord. Minimum rental commitments as of June 30, 2017 under such operating leases were as follows (in thousands):

2017	\$	2,304
2018		4,349
2019		9,258
2020		10,545
2021		10,109
2022 and thereafter		108,081
	\$	<u>144,646</u>

Rental expense was \$2.5 million and \$2.1 million for the six months ended June 30, 2017 and 2016, respectively, and is included in occupancy expense in the Consolidated Statements of Operations. Rental expense has been recorded based on the total minimum lease payments after giving effect to rent abatement and concessions, which are being amortized on a straight-line basis over the life of the lease. The Company is contingently obligated for standby letters of credit amounting to \$1.0 million that were issued to landlords for office space.

During 2016, the Company entered into non-cancelable lease agreements for approximately 108,000 square feet of office space with commencement dates on or after December 1, 2016 that expire through December 31, 2033. The aggregate minimum rental commitment remaining under such leases is \$126.8 million.

The Company has assigned a lease agreement on a leased property to a third party and is contingently liable should the assignee default on future lease obligations through the November 2020 lease termination date. The aggregate amount of the future lease obligation under this arrangement is \$0.9 million as of June 30, 2017.

Legal

In the normal course of business, the Company and its subsidiaries included in the consolidated financial statements may be involved in various lawsuits, proceedings and regulatory examinations. The Company assesses its liabilities and contingencies in connection with outstanding legal proceedings, if any, utilizing the latest information available. For matters where it is probable that the Company will incur a material loss and the amount can be reasonably estimated, the Company will establish an accrual for the loss. Once established, the accrual will be adjusted to reflect any relevant developments. When a loss contingency is not both probable and estimable, the Company does not establish an accrual.

Based on currently available information, the outcome of the Company's outstanding matters is not expected to have a material adverse impact on the Company's financial position. It is not presently possible to determine the ultimate exposure to these matters and there is no assurance that the resolution of the outstanding matters will not significantly exceed any reserves accrued by the Company.

Other

The Company, through two regulated subsidiaries, executes certain bond transactions between and among institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller in trades which settle through third-party clearing brokers. Settlement typically occurs within one to three trading days after the trade date. Cash settlement of the transaction occurs upon receipt or delivery of the underlying instrument that was traded. For the six months ended June 30, 2017 and 2016, revenues from matched principal trading were approximately \$23.2 million and \$16.4 million, respectively. Under securities clearing agreements with third party clearing brokers, the Company maintains collateral deposits with each clearing broker in the form of cash. As of June 30, 2017 and 2016, the amount of the collateral deposits included in prepaid expenses and other assets in the Consolidated Statements of Financial Condition was \$1.1 million and \$1.4 million, respectively. For the six months ended June 30, 2017 and 2016, clearing expenses associated with matched principal transactions were \$2.8 million and \$3.7 million, respectively, and are classified under clearing costs on the Consolidated Statements of Operations. The Company is exposed to credit risk in the event a counterparty does not fulfill its obligation to complete a transaction or if there is a miscommunication or other error in

executing a matched principal transaction. Pursuant to the terms of the securities clearing agreements, each third-party clearing broker has the right to charge the Company for any losses they suffer resulting from a counterparty's failure on any of the Company's trades. The Company did not record any liabilities or losses with regard to this right for the six months ended June 30, 2017 and 2016.

In the normal course of business, the Company enters into contracts that contain a variety of representations, warranties and general indemnifications. The Company's maximum exposure under these arrangements is unknown, as this would involve future claims that may be made against the Company that have not yet occurred. However, based on experience, the Company expects the risk of loss to be remote.

11. Customer Concentration

During both the six months ended June 30, 2017 and 2016, no single client accounted for more than 10% of total revenue. One institutional investor client accounted for 13.2% and 15.3% of trading volumes during the six months ended June 30, 2017 and 2016, respectively.

12. Share Repurchase Program

In January 2016, the Board of Directors authorized a two-year share repurchase program for up to \$25.0 million of the Company's common stock, which commenced on March 1, 2016. In October 2016, the Board of Directors approved a \$50.0 million increase in the size of the repurchase program. For the six months ended June 30, 2017, the Company repurchased 127,894 shares of common stock at a cost of \$24.1 million. A total of 283,762 shares have been repurchased under this program. As of June 30, 2017, approximately \$27.0 million was available for future repurchase. Shares repurchased under the program will be held in treasury for future use.

13. Segment and Geographic Information

The Company operates an electronic multi-party platform for the trading of fixed-income securities and provides related data, analytics, compliance tools and post-trade services. The Company considers its operations to constitute a single business segment because of the highly integrated nature of these product and services, of the financial markets in which the Company competes and of the Company's worldwide business activities. The Company believes that results by geographic region or client sector are not necessarily meaningful in understanding its business.

For the three and six months ended June 30, 2017 and 2016, the U.K. was the only individual foreign country in which the Company had a subsidiary that accounted for 10% or more of the total revenues or total long-lived assets of the Company. Revenues and long-lived assets are attributed to a geographic area based on the location of the particular subsidiary. Long-lived assets are defined as furniture, equipment, leasehold improvements and capitalized software. Information regarding revenue for the three and six months ended June 30, 2017 and 2016 and long-lived assets as of June 30, 2017 and December 31, 2016 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	(In thousands)			
Revenues				
United States	\$ 82,654	\$ 82,136	\$ 170,409	\$ 157,507
United Kingdom	14,268	14,027	30,027	26,732
Other	392	476	769	973
Total	<u>\$ 97,314</u>	<u>\$ 96,639</u>	<u>\$ 201,205</u>	<u>\$ 185,212</u>

	As of	
	June 30, 2017	December 31, 2016
	(in thousands)	
Long-lived assets, as defined		
United States	\$ 25,694	\$ 23,370
United Kingdom	8,931	7,713
Other	18	21
Total	<u>\$ 34,643</u>	<u>\$ 31,104</u>

14. Retirement and Deferred Compensation Plans

The Company offers a non-qualified deferred cash incentive plan to certain officers and other employees. Under the plan, eligible employees may defer up to 100% of their annual cash incentive pay. The Company has elected to fund its deferred compensation obligations through a rabbi trust. The rabbi trust is subject to creditor claims in the event of insolvency but such assets are not available for general corporate purposes. Assets held in the rabbi trust are invested in mutual funds, as selected by the participants, which are designated as trading securities and carried at fair value. As of June 30, 2017 and 2016, the fair value of the mutual fund investments and deferred compensation obligations were \$2.9 million and \$1.3 million, respectively. Changes in the fair value of securities held in the rabbi trust are recognized as trading gains and losses and included in other revenues and offsetting increases or decreases in the deferred compensation obligation will be recorded in employee compensation and benefits. For the six months ended June 30, 2017 and 2016, the trading gains and compensation expense were \$0.2 million and \$0.1 million, respectively.

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

Forward-Looking Statements

This report contains certain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by words such as "expects," "intends," "anticipates," "plans," "believes," "seeks," "estimates," "will," or words of similar meaning and include, but are not limited to, statements regarding the outlook for our future business and financial performance. Forward-looking statements are based on management's current expectations and assumptions, which are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. It is routine for our internal projections and expectations to change as the year or each quarter in the year progresses, and therefore it should be clearly understood that the internal projections and beliefs upon which we base our expectations may change prior to the end of each quarter or the year. Although these expectations may change, we are under no obligation to revise or update any forward-looking statements contained in this report. Our company policy is generally to provide our expectations only once per quarter, and not to update that information until the next quarter. Actual future events or results may differ, perhaps materially from those contained in the projections or forward-looking statements. Factors that could cause or contribute to such differences include those discussed below and elsewhere in this report, particularly in the section captioned Part II, Item 1A, "Risk Factors."

Executive Overview

MarketAxess operates a leading electronic trading platform that enables fixed-income market participants to efficiently trade corporate bonds and other types of fixed-income instruments using our patented trading technology. Over 1,200 institutional investor and broker-dealer firms are active users of our trading platform, accessing global liquidity in U.S. high-grade corporate bonds, emerging markets and high-yield bonds, European bonds, U.S. agency bonds, municipal bonds, credit default swaps and other fixed-income securities. Through our Open Trading™ protocols, we execute trades in certain bonds between and among institutional investor and broker-dealer clients in an all-to-all trading environment on a matched principal basis. We also offer a number of trading-related products and services, including: market data to assist clients with trading decisions; connectivity solutions that facilitate straight-through processing; technology services to optimize trading environments; and execution services for exchange-traded fund managers and other clients. Through our Trax® division, we also offer a range of pre- and post-trade services, including trade matching, regulatory transaction reporting, and market and reference data across a range of fixed-income and other products.

Our platform's innovative technology solutions are designed to increase the number of potential trading counterparties on our electronic trading platform and create a menu of solutions to address different trade sizes and bond liquidity characteristics. Our traditional request-for-quote model allows our institutional investor clients to simultaneously request competing, executable bids or offers from our broker-dealer clients and execute trades with the broker-dealer of their choice from among those that choose to respond. Our Open Trading™ protocols complement our request-for-quote model by increasing the number of potential counterparties and improving liquidity by allowing all participants to interact anonymously in an all-to-all trading environment. Our platform also provides our broker-dealer clients a solution that enables them to efficiently reach our institutional investor clients for the distribution and trading of bonds.

The majority of our revenues are derived from commissions for trades executed on our platform and distribution fees that are billed to our broker-dealer clients on a monthly basis. We also derive revenues from information and post-trade services, technology products and services, investment income and other income. Our expenses consist of employee compensation and benefits, depreciation and amortization, technology and communication expenses, professional and consulting fees, occupancy, marketing and advertising and other general and administrative expenses.

Our objective is to provide the leading global electronic trading platform for fixed-income securities, connecting broker-dealers and institutional investors more easily and efficiently, while offering a broad array of information, trading and technology services to market participants across the trading cycle. The key elements of our strategy are:

- to innovate and efficiently add new functionality and product offerings to the MarketAxess platform that we believe will help to increase our market share with existing clients, as well as to expand our client base;
- to leverage our existing client network and technology to increase the number of potential counterparties and improve liquidity by developing and deploying a wide range of electronic trading protocols to complement our traditional request-for-quote model and allowing broker-dealers and institutional investors to interact in our all-to-all Open Trading™ environment;
- to leverage our existing technology and client relationships to deploy our electronic trading platform into additional product segments within the fixed-income securities markets and deliver fixed-income securities-related technical services and products;

- to continue building our existing service offerings so that our electronic trading platform is more fully integrated into the workflow of our broker-dealer and institutional investor clients and to continue to add functionality to allow our clients to achieve a fully automated end-to-end straight-through processing solution (automation from trade initiation to settlement);
- to add new content and analytical capabilities to BondTicker™ and expand Axess All™, the first intra-day trade tape for the European fixed-income market, and the other data service offerings provided by Trax® to improve the value of the information we provide to our clients; and
- to continue to increase and supplement our internal growth by entering into strategic alliances, or acquiring businesses or technologies that will enable us to enter new markets, provide new products or services, or otherwise enhance the value of our platform to our clients. For example, the acquisition of Xtrakter Limited (“Xtrakter”) in February 2013 provided us with an expanded set of technology solutions ahead of incoming pre-and post-trade transparency mandates from MiFID II in Europe. In recent years, we entered into, and expanded, a strategic alliance with BlackRock, Inc. (“BlackRock”) to combine BlackRock’s order flow with our Open Trading™ solution to improve the range of trading connections available to global credit market participants. In 2016, we entered into an agreement with S&P Dow Jones Indices to jointly develop indices that will track the most liquid segments of the U.S. corporate bond market.

Critical Factors Affecting Our Industry and Our Company

Economic, Political and Market Factors

The global fixed-income securities industry is risky and volatile and is directly affected by a number of economic, political and market factors that may result in declining trading volume. These factors could have a material adverse effect on our business, financial condition and results of operations. These factors include, among others, credit market conditions, the current interest rate environment, including the volatility of interest rates and investors’ forecasts of future interest rates, economic and political conditions in the United States, Europe and elsewhere, and the consolidation or contraction of our broker-dealer clients.

Competitive Landscape

The global fixed-income securities industry generally, and the electronic financial services markets in which we engage in particular, are highly competitive, and we expect competition to intensify in the future. Sources of competition for us will continue to include, among others, bond trading conducted directly between broker-dealers and their institutional investor clients over the telephone or electronically and other multi-dealer or all-to-all trading platforms. Competitors, including companies in which some of our broker-dealer clients have invested, have developed or acquired electronic trading platforms or have announced their intention to explore the development of electronic platforms or information networks that may compete with us.

In general, we compete on the basis of a number of key factors, including, among others, the liquidity provided on our platform, the level of commissions charged for trades executed on our platform, the magnitude and frequency of price improvement enabled by our platform and the quality and speed of execution. We believe that our ability to grow volumes and revenues will largely depend on our performance with respect to these factors.

Our competitive position is also enhanced by the familiarity and integration of our broker-dealer and institutional investor clients with our electronic trading platform and other systems. We have focused on the unique aspects of the credit markets we serve in the development of our platform, working closely with our clients to provide a system that is suited to their needs.

Regulatory Environment

Our industry has been and is subject to continuous regulatory changes and may become subject to new regulations or changes in the interpretation or enforcement of existing regulations, which could require us to incur significant costs.

Following the global financial crisis and other recent events in the financial industry, governments and regulators in both the United States and Europe called for increased regulation and transparency in the over-the-counter markets. As a result, the Dodd-Frank Act was signed into law in 2010 and, among other things, mandated the clearing of certain derivative instruments (“swaps”) through regulated central clearing organizations and mandatory trading of those instruments through either regulated exchanges or swap execution facilities (“SEFs”), in each case, subject to certain key exceptions. However, following President Trump’s election in November 2016, he has stated that he will pursue a path of financial deregulation, including by signing an executive order that requires the Treasury Department to review the provisions of the Dodd-Frank Act.

Various rules promulgated since the financial crisis could also adversely affect our bank-affiliated broker-dealer clients' ability to make markets in a variety of fixed-income securities, thereby negatively impacting the level of liquidity and pricing available on our trading platform. For example, while the Volcker Rule does not apply directly to us, the Volcker Rule bans proprietary trading by banks and their affiliates. In addition, enhanced leverage ratios applicable to large banking organizations in the U.S. and Europe require such organizations to strengthen their balance sheets and may limit their ability or willingness to make markets on our trading platform. We cannot predict the extent to which these rules or any future regulatory changes may adversely affect our business and operations.

Similar to the U.S., regulatory bodies in Europe are developing new rules for the fixed-income markets. MiFID II and MiFIR were approved in June 2014 and introduce changes in market structure designed to: (i) enhance pre- and post-trade transparency for fixed-income instruments with the scope of requirements calibrated for liquidity, (ii) increase and enhance post-trade reporting obligations with a requirement to submit post-trade data to Approved Reporting Mechanisms, (iii) ensure trading of certain derivatives occurs on regulated trading venues and (iv) establish a consolidated tape for trade data. While some of the technical advice underpinning MiFID II have not yet been finalized, MiFID II will have a significant impact in these areas, as well as on corporate governance and investor protection. MiFID II and MiFIR are expected to take effect in January 2018. The final rules may have an adverse effect on our operations or our ability to provide our electronic trading platform in a manner that can successfully compete against other types of regulated and non-regulated venues for the fixed-income trading needs of our clients. In addition, MiFID II is expected to cause us to expend significantly more compliance, business and technology resources, incur additional operational costs and create additional regulatory exposure for our trading and post-trade businesses. While we generally believe the net impact of the rules and regulations may be positive for our businesses, unintended consequences of the rules and regulations may adversely affect us in ways yet to be determined.

In March 2017, the U.K. notified the European Council of its intention to leave the European Union (commonly referred to as "Brexit"). By invoking Article 50 of the Lisbon Treaty, the U.K. is currently set to leave the European Union in March 2019. Depending on the terms agreed between E.U. member states and the U.K. as part of the exit negotiations, our U.K. subsidiaries may not be able to rely on the existence of a "passporting" regime that allows immediate access to the single E.U. market. Accordingly, we have begun the process of establishing one or more new regulated subsidiaries in the E.U. in order to provide our trading platform and certain post-trade services to clients in the E.U. following Brexit.

Rapid Technological Changes

We must continue to enhance and improve our electronic trading platform. The electronic financial services industry is characterized by increasingly complex systems and infrastructures and new business models. Our future success will depend on our ability to enhance our existing products and services, develop and/or license new products and technologies that address the increasingly sophisticated and varied needs of our existing and prospective broker-dealer and institutional investor clients and respond to technological advances and emerging industry standards and practices on a cost-effective and timely basis. We have been issued 13 patents covering our most significant trading protocols and other aspects of our trading system technology.

Trends in Our Business

The majority of our revenues are derived from commissions for transactions executed on our platform between and among our institutional investor and broker-dealer clients and monthly distribution fees. We believe that there are five key variables that impact the notional value of such transactions on our platform and the amount of commissions and distribution fees earned by us:

- the number of participants on our platform and their willingness to originate transactions through the platform;
- the number of institutional investor and broker-dealer clients on the platform and the frequency and competitiveness of the price responses they provide on our platform;
- the number of markets for which we make trading available to our clients;
- the overall level of activity in these markets; and
- the level of commissions that we collect for trades executed through the platform.

We believe that overall corporate bond market trading volume is affected by various factors including the absolute levels of interest rates, the direction of interest rate movements, the level of new issues of corporate bonds and the volatility of corporate bond spreads versus U.S. Treasury securities. Because a significant percentage of our revenue is tied directly to the volume of securities traded on our platform, it is likely that a general decline in trading volumes, regardless of the cause of such decline, would reduce our revenues and have a significant negative impact on profitability.

Commission Revenue

Commissions are generally calculated as a percentage of the notional dollar volume of bonds traded on our platform and vary based on the type, size, yield and maturity of the bond traded. Under our transaction fee plans, bonds that are more actively traded or that have shorter maturities are generally charged lower commissions, while bonds that are less actively traded or that have longer maturities generally command higher commissions.

U.S. High-Grade Corporate Bond Commissions. Our U.S. high-grade corporate bond fee plans generally incorporate variable transaction fees and distribution fees billed to our broker-dealer clients on a monthly basis. Certain dealers participate in fee programs that do not contain monthly distribution fees and instead incorporate additional per transaction execution fees and minimum monthly fee commitments. Under these fee plans, we electronically add the transaction fee to the spread quoted by the broker-dealer client. The U.S. high-grade transaction fee is generally designated in basis points in yield and, as a result, is subject to fluctuation depending on the duration of the bond traded. The average U.S. high-grade fees per million may vary in the future due to changes in yield, years-to-maturity and nominal size of bonds traded on our platform.

Other Credit Commissions. Other credit includes Eurobonds, emerging markets bonds, high-yield bonds and municipal bonds. Commissions for other credit products generally vary based on the type of the instrument traded using standard fee schedules. During the fourth quarter of 2016, our Eurobond fee plan structure was changed to contain standardized minimum monthly commitments and variable transaction fees. Prior to the fee plan change, our European fee plans generally incorporated some combination of monthly distribution fees and variable transaction fees. The average other credit fees per million may vary in the future due to changes in product mix or trading protocols.

Liquid Products Commissions. Liquid products includes U.S. agency, European government bonds and credit derivatives. Commissions for liquid products generally vary based on the type of the instrument traded using standard fee schedules.

For trades that we execute between and among institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller, we earn our commission through the difference in price between the two trades. Distribution fees include any unused monthly fee commitments under our variable fee plans.

We anticipate that average fees per million may change in the future. Consequently, past trends in commissions are not necessarily indicative of future commissions.

Other Revenue

In addition to the commissions discussed above, we earn revenue from information and post-trade services, investment income and other income.

Information and post-trade services. We generate revenue from information services provided to our broker-dealer clients, institutional investor clients and data-only subscribers. Information services are invoiced monthly, quarterly or annually. When billed in advance, revenues are deferred and recognized monthly on a straight-line basis. We also generate revenue from trade matching and regulatory transaction reporting services. Revenue is recognized in the period the services are provided.

Investment Income. Investment income consists of income earned on our investments.

Other. Other revenues include revenue from professional consulting services, technology software licenses and maintenance and support services, fees from telecommunications line charges to broker-dealer clients, initial set-up fees and other miscellaneous revenues.

Expenses

In the normal course of business, we incur the following expenses:

Employee Compensation and Benefits. Employee compensation and benefits is our most significant expense and includes employee salaries, stock-based compensation costs, other incentive compensation, employee benefits and payroll taxes.

Depreciation and Amortization. We depreciate our computer hardware and related software, office hardware and furniture and fixtures and amortize our capitalized software development costs on a straight-line basis over three to seven years. We amortize leasehold improvements on a straight-line basis over the lesser of the life of the improvement or the remaining term of the lease. Intangible assets with definite lives, including purchased technologies, customer relationships and other intangible assets, are amortized over their estimated useful lives, ranging from three to 15 years. Intangible assets are assessed for impairment when events or circumstances indicate a possible impairment.

Technology and Communications. Technology and communications expense consists primarily of costs relating to maintenance on software and hardware, our internal network connections, data center hosting costs and data feeds provided by outside vendors or service providers. The majority of our broker-dealer clients have dedicated high-speed communication lines to our network in order to provide fast data transfer. We charge our broker-dealer clients a monthly fee for these connections, which is recovered against the relevant expenses we incur.

Professional and Consulting Fees. Professional and consulting fees consist primarily of accounting fees, legal fees and fees paid to information technology and other consultants for services provided for the maintenance of our trading platform, information and post-trade services products and other services.

Occupancy. Occupancy costs consist primarily of office and equipment rent, utilities and commercial rent tax.

Marketing and Advertising. Marketing and advertising expense consists primarily of print and other advertising expenses we incur to promote our products and services. This expense also includes costs associated with attending or exhibiting at industry-sponsored seminars, conferences and conventions, and travel and entertainment expenses incurred by our sales force to promote our trading platform and information and post-trade services.

Clearing Costs. Clearing costs consist of fees that we are charged by third-party clearing brokers for the clearing and settlement of matched principal trades.

General and Administrative. General and administrative expense consists primarily of general travel and entertainment, board of directors' expenses, charitable contributions, provision for doubtful accounts, and various state franchise and U.K. value-added taxes.

Expenses may grow in the future, notably in employee compensation and benefits, primarily due to investment in new products and geographic expansion. We also expect occupancy expense to increase in 2018 as a result of the new office space for our global headquarters in New York City. See Item 2 of the Annual Report on Form 10-K for a discussion of our properties. However, we believe that operating leverage can be achieved by increasing volumes in existing products and adding new products without substantial additions to our infrastructure.

Critical Accounting Policies and Estimates

This Management's Discussion and Analysis of Financial Condition and Results of Operations discusses our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States, also referred to as U.S. GAAP. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of income and expenses during the reporting periods. We base our estimates and judgments on historical experience and on various other factors that we believe are reasonable under the circumstances. Actual results may differ from these estimates under varying assumptions or conditions. Note 2 of the Notes to our Consolidated Financial Statements includes a summary of the significant accounting policies and methods used in the preparation of our Consolidated Financial Statements. There were no significant changes to our critical accounting policies and estimates during the six months ended June 30, 2017, as compared to those we disclosed in Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2016.

Recent Accounting Pronouncements

See Note 2 to the Consolidated Financial Statements for a discussion on recent accounting pronouncements.

Segment Results

We operate an electronic multi-party platform for the trading of fixed-income securities and provide related data, analytics, compliance tools and post-trade services. We consider our operations to constitute a single business segment because of the highly integrated nature of these product and services, of the financial markets in which we compete and of our worldwide business activities. We believe that results by geographic region or client sector are not necessarily meaningful in understanding our business. See Note 13 to the Consolidated Financial Statements for certain geographic information about the Company's business required by U.S. GAAP.

Results of Operations

Three Months Ended June 30, 2017 Compared to Three Months Ended June 30, 2016

Overview

Total revenues increased by \$0.7 million or 0.7% to \$97.3 million for the three months ended June 30, 2017, from \$96.6 million for the three months ended June 30, 2016. This increase in total revenues was primarily due to higher commissions of \$0.8 million. A 10.1% change in the average foreign currency exchange rates of the British Pound Sterling compared to the U.S. dollar from the three months ended June 30, 2016 to the three months ended June 30, 2017 had the effect of decreasing revenues by \$1.3 million.

Total expenses increased by \$1.7 million or 3.6% to \$47.7 million for the three months ended June 30, 2017, from \$46.1 million for the three months ended June 30, 2016. This increase was primarily due to higher marketing and advertising expenses of \$1.0 million and general and administrative expenses of \$0.7 million. The change in average foreign currency exchange rates had the effect of decreasing expenses by \$1.5 million in the three months ended June 30, 2017.

Income before taxes decreased by \$1.0 million or 1.9% to \$49.6 million for the three months ended June 30, 2017, from \$50.6 million for the three months ended June 30, 2016. Net income increased by \$4.9 million or 14.8% to \$38.0 million for the three months ended June 30, 2017, from \$33.1 million for three months ended June 30, 2016.

Revenues

Our revenues for the three months ended June 30, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended June 30,					
	2017		2016		\$ Change	% Change
	\$	% of Revenues	\$	% of Revenues		
	(\$ in thousands)					
Commissions	\$ 87,015	89.4 %	\$ 86,239	89.3 %	\$ 776	0.9 %
Information and post-trade services	8,272	8.5	8,586	8.9	(314)	(3.7)
Investment income	840	0.9	517	0.5	323	62.5
Other	1,187	1.2	1,297	1.3	(110)	(8.5)
Total revenues	<u>\$ 97,314</u>	<u>100.0 %</u>	<u>\$ 96,639</u>	<u>100.0 %</u>	<u>\$ 675</u>	<u>0.7 %</u>

Commissions. Our commission revenues for the three months ended June 30, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended June 30,			
	2017	2016	\$ Change	% Change
	(\$ in thousands)			
Variable transaction fees				
U.S. high-grade	\$ 32,868	\$ 35,771	\$ (2,903)	(8.1) %
Other credit	37,145	33,826	3,319	9.8
Liquid products	570	678	(108)	(15.9)
Total variable transaction fees	<u>70,583</u>	<u>70,275</u>	<u>308</u>	<u>0.4</u>
Distribution fees				
U.S. high-grade	15,930	14,297	1,633	11.4
Other credit	384	1,471	(1,087)	(73.9)
Liquid products	118	196	(78)	(39.8)
Total distribution fees	<u>16,432</u>	<u>15,964</u>	<u>468</u>	<u>2.9</u>
Total commissions	<u>\$ 87,015</u>	<u>\$ 86,239</u>	<u>\$ 776</u>	<u>0.9 %</u>

Variable Transaction Fees

The following table shows the extent to which the increase in variable transaction fees for the three months ended June 30, 2017 was attributable to changes in transaction volumes and variable transaction fees per million:

	Change from the Three Months Ended June 30, 2016			
	U.S. High- Grade	Other Credit	Liquid Products	Total
	(\$ in thousands)			
Volume increase (decrease)	\$ 2,694	\$ 3,457	\$ (169)	\$ 5,982
Variable transaction fee per million (decrease) increase	(5,597)	(138)	61	(5,674)
Total (decrease) increase in variable commissions	<u>\$ (2,903)</u>	<u>\$ 3,319</u>	<u>\$ (108)</u>	<u>\$ 308</u>

Our trading volumes for the three months ended June 30, 2017 and 2016 were as follows:

	Three Months Ended June 30,			
	2017	2016	\$ Change	% Change
Trading Volume Data (in millions)				
U.S. high-grade - fixed rate	\$ 195,717	\$ 183,107	\$ 12,610	6.9 %
U.S. high-grade - floating rate	7,870	6,220	1,650	26.5
Total U.S. high grade	203,587	189,327	14,260	7.5
Other credit	144,574	131,168	13,406	10.2
Liquid products	13,345	17,781	(4,436)	(24.9)
Total	<u>\$ 361,506</u>	<u>\$ 338,276</u>	<u>\$ 23,230</u>	6.9 %
Number of U.S. Trading Days	63	64		
Number of U.K. Trading Days	61	63		

For volume reporting purposes, transactions in foreign currencies are converted to U.S. dollars at average monthly rates. The 7.5% increase in our U.S. high-grade volume was principally due to an increase in our estimated market share of total U.S. high-grade corporate bond volume as reported by Financial Industry Regulatory Authority (“FINRA”) Trade Reporting and Compliance Engine (“TRACE”) to 17.0% for the three months ended June 30, 2017 from 16.1% for the three months ended June 30, 2016. Overall U.S. high-grade market volume as measured by TRACE was \$1.2 trillion for both the three months ended June 30, 2017 and 2016.

Other credit volumes increased by 10.2% for the three months ended June 30, 2017 compared to the three months ended June 30, 2016, primarily due to an increase of 39.2% in emerging markets bond volume, offset by decreases of 15.2% in Eurobond volume and 9.5% in high-yield bond volume. Liquid products volume (excluding credit derivatives) decreased by 24.9% for the three months ended June 30, 2017 compared to the three months ended June 30, 2016, due mainly to a 34.7% decrease in U.S. agency bond market volume as reported by TRACE.

Our average variable transaction fee per million for the three months ended June 30, 2017 and 2016 was as follows:

	Three Months Ended June 30,	
	2017	2016
Average Variable Transaction fee per million		
U.S. high-grade - fixed rate	\$ 165	\$ 194
U.S. high-grade - floating rate	63	36
Total U.S. high-grade	162	189
Other credit	257	258
Liquid products	43	38
Total	195	208

Total U.S. high-grade average variable transaction fee per million decreased to \$162 per million for the three months ended June 30, 2017 from \$189 per million for the three months ended June 30, 2016, mainly due to a decrease in the duration of bonds traded and an increase in the number of larger sized trades. Other credit average variable transaction fee per million decreased to \$257 per million for the three months ended June 30, 2017 from \$258 million for the three months ended June 30, 2016, mainly due to a larger percentage of trading volume in emerging market bonds that command lower fees per million offset by an increase in Eurobond fees per million as a result of the change in structure of our Eurobond fee plan which was implemented in the fourth quarter of 2016.

Distribution Fees

U.S. high-grade distribution fees increased \$1.6 million principally due to the migration of certain of our broker-dealer clients from an all-variable fee plan to a plan that incorporates a monthly distribution fee. The \$1.1 million decrease in Other credit distribution fees principally relates to the change in Eurobond fee plan structure. The new Eurobond bond fee plan structure contains standardized minimum monthly commitments and variable transaction fees.

Information and Post-Trade Services. Information and post-trade services revenue decreased \$0.3 million for the three months ended June 30, 2017. The negative impact of foreign exchange of \$0.6 million and lower post-trade transaction reporting revenue was partially offset by a \$0.6 million increase in revenue from new data contracts. Our transaction reporting business processed 252 million transactions for the three months ended June 30, 2017 compared to 289 million for the three months ended June 30, 2016.

Investment Income. Investment income increased by \$0.3 million primarily due to higher investment balances and an increase in interest rates in 2017.

Other. Other income was \$1.2 million and \$1.3 million for the three months ended June 30, 2017 and 2016, respectively.

Expenses

Our expenses for the three months ended June 30, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended June 30,					
	2017		2016		\$	%
	\$	% of Revenues	\$	% of Revenues		
	(\$ in thousands)					
Expenses						
Employee compensation and benefits	\$ 25,421	26.1 %	\$ 25,815	26.7 %	\$ (394)	(1.5) %
Depreciation and amortization	4,790	4.9	4,540	4.7	250	5.5
Technology and communications	4,822	5.0	4,277	4.4	545	12.7
Professional and consulting fees	4,086	4.2	4,245	4.4	(159)	(3.7)
Occupancy	1,422	1.5	1,225	1.3	197	16.1
Marketing and advertising	2,782	2.9	1,824	1.9	958	52.5
Clearing costs	1,517	1.6	1,953	2.0	(436)	(22.3)
General and administrative	2,901	3.0	2,209	2.3	692	31.3
Total expenses	<u>\$ 47,741</u>	49.1 %	<u>\$ 46,088</u>	47.7 %	<u>\$ 1,653</u>	3.6 %

Employee Compensation and Benefits. Employee compensation and benefits decreased by \$0.4 million, primarily due to lower employee incentive compensation of \$1.0 million, which is tied to operating performance, offset by an increase of \$0.6 million in salaries and benefits, principally as a result of higher employee headcount.

Depreciation and Amortization. Depreciation and amortization increased by \$0.3 million primarily due to a \$0.2 million increase in amortization of leasehold improvements and a \$0.1 million increase in amortization for software development costs. For the three months ended June 30, 2017 and 2016, \$1.6 million and \$1.3 million, respectively, of equipment purchases and leasehold improvements and \$3.5 million and \$3.1 million, respectively, of software development costs were capitalized.

Technology and Communications. Technology and communication expenses increased by \$0.5 million due to higher market data costs of \$0.3 million and software costs of \$0.2 million.

Professional and Consulting Fees. Professional and consulting fees decreased by \$0.2 million primarily due to a reduction in risk consulting services of \$0.2 million and recruiting fees of \$0.2 million, offset by a \$0.2 million increase in consulting fees related to MiFID II.

Occupancy. Occupancy costs increased by \$0.2 million primarily due to the lease of additional office space to accommodate our increased headcount.

Marketing and Advertising. Marketing and advertising expenses increased by \$1.0 million due to higher advertising costs of \$0.4 million associated with our Open Trading TM protocols and travel and entertainment expenses related to sales activities of \$0.3 million.

Clearing Costs . Clearing costs decreased by \$0.4 million. During the third quarter 2016, we amended the terms of our agreements with our third-party clearing brokers which resulted in a reduction in transaction and other clearing costs. Third-party clearing costs as a percentage of matched principal trading revenue decreased from 22.0% for the three months ended June 30, 2016 to 13.5% for the three months ended June 30, 2017.

General and Administrative. General and administrative expenses increased by \$0.7 million principally due to a decrease in foreign currency transaction gains of \$0.3 million and an increase in general travel and entertainment expenses of \$0.2 million.

Provision for Income Tax . Our consolidated effective tax rate for the three months ended June 30, 2017 was 23.3%, compared to 34.5% for the three months ended June 30, 2016. The tax provision for the three months ended June 30, 2017 includes excess tax benefits of \$5.3 million relating to a new standard for share-based payments accounting adopted effective January 1, 2017. Our consolidated effective tax rate can vary from period to period depending on the geographic mix of our earnings, changes in tax legislation and tax rates and the amount and timing of excess tax benefits related to share-based payments, among other factors.

Six Months Ended June 30, 2017 Compared to Six Months Ended June 30, 2016

Overview

Total revenues increased by \$16.0 million or 8.6% to \$201.2 million for the six months ended June 30, 2017, from \$185.2 million for the six months ended June 30, 2016. This increase in total revenues was primarily due to higher commissions of \$15.7 million. An 11.7% change in the average foreign currency exchange rates of the British Pound Sterling compared to the U.S. dollar from the six months ended June 30, 2016 to the six months ended June 30, 2017 had the effect of decreasing revenues by \$3.2 million.

Total expenses increased by \$5.7 million or 6.4% to \$96.0 million for the six months ended June 30, 2017, from \$90.3 million for the six months ended June 30, 2016. This increase was primarily due to higher employee compensation and benefits of \$2.5 million and general and administrative expenses of \$1.3 million. The change in average foreign currency exchange rates had the effect of decreasing expenses by \$3.3 million in the six months ended June 30, 2017.

Income before taxes increased by \$10.3 million or 10.8% to \$105.2 million for the six months ended June 30, 2017, from \$94.9 million for the six months ended June 30, 2016. Net income increased by \$18.4 million or 29.6% to \$80.5 million for the six months ended June 30, 2017, from \$62.1 million for six months ended June 30, 2016.

Revenues

Our revenues for the six months ended June 30, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Six Months Ended June 30,					
	2017		2016			
	(\$ in thousands)					
	\$	% of Revenues	\$	% of Revenues	\$ Change	% Change
Commissions	\$ 181,037	90.0 %	\$ 165,332	89.3 %	\$ 15,705	9.5 %
Information and post-trade services	16,088	8.0	16,365	8.8	(277)	(1.7)
Investment income	1,587	0.8	935	0.5	652	69.7
Other	2,493	1.2	2,580	1.4	(87)	(3.4)
Total revenues	\$ 201,205	100.0 %	\$ 185,212	100.0 %	\$ 15,993	8.6 %

Commissions. Our commission revenues for the six months ended June 30, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Six Months Ended June 30,			
	2017	2016	\$ Change	% Change
	(\$ in thousands)			
Variable transaction fees				
U.S. high-grade	\$ 68,391	\$ 67,339	\$ 1,052	1.6 %
Other credit	78,840	64,747	14,093	21.8
Liquid products	1,200	1,298	(98)	(7.6)
Total variable transaction fees	<u>148,431</u>	<u>133,384</u>	<u>15,047</u>	11.3
Distribution fees				
U.S. high-grade	31,680	28,521	3,159	11.1
Other credit	664	2,971	(2,307)	(77.7)
Liquid products	262	456	(194)	(42.5)
Total distribution fees	<u>32,606</u>	<u>31,948</u>	<u>658</u>	2.1
Total commissions	<u>\$ 181,037</u>	<u>\$ 165,332</u>	<u>\$ 15,705</u>	9.5 %

Variable Transaction Fees

The following table shows the extent to which the increase in variable transaction fees for the six months ended June 30, 2017 was attributable to changes in transaction volumes and variable transaction fees per million:

	Change from the Six Months Ended June 30, 2016			
	U.S. High- Grade	Other Credit	Liquid Products	Total
	(\$ in thousands)			
Volume increase (decrease)	\$ 10,260	\$ 14,653	\$ (175)	\$ 24,738
Variable transaction fee per million (decrease) increase	(9,208)	(560)	77	(9,691)
Total increase (decrease) in variable commissions	<u>\$ 1,052</u>	<u>\$ 14,093</u>	<u>\$ (98)</u>	<u>\$ 15,047</u>

Our trading volumes for the six months ended June 30, 2017 and 2016 were as follows:

	Six Months Ended June 30,			
	2017	2016	\$ Change	% Change
Trading Volume Data (in millions)				
U.S. high-grade - fixed rate	\$ 407,691	\$ 353,326	\$ 54,365	15.4 %
U.S. high-grade - floating rate	15,290	13,727	1,563	11.4
Total U.S. high grade	422,981	367,053	55,928	15.2
Other credit	304,298	248,142	56,156	22.6
Liquid products	28,651	33,102	(4,451)	(13.4)
Total	<u>\$ 755,930</u>	<u>\$ 648,297</u>	<u>\$ 107,633</u>	16.6 %
Number of U.S. Trading Days	125	125		
Number of U.K. Trading Days	125	125		

For volume reporting purposes, transactions in foreign currencies are converted to U.S. dollars at average monthly rates. The 15.2% increase in our U.S. high-grade volume was principally due to an increase in our estimated market share of total U.S. high-grade corporate bond volume as reported by TRACE to 16.4% for the six months ended June 30, 2017 from 15.5% for the six months ended June 30, 2016, coupled with an increase in overall market volume as measured by TRACE. U.S. high-grade TRACE volume increased 8.5% to \$2.6 trillion for the six months ended June 30, 2017 from \$2.4 trillion for the six months ended June 30, 2016.

Other credit volumes increased by 22.6% for the six months ended June 30, 2017 compared to the six months ended June 30, 2016. Emerging markets bond volume increased 53.0%, while Eurobond and high-yield bond volume each changed less than 1.0%. Liquid products volume (excluding credit derivatives) decreased by 13.4% for the six months ended June 30, 2017 compared to the six months ended June 30, 2016, due mainly to a 25.6% decrease in U.S. agency bond market volume as reported by TRACE.

Our average variable transaction fee per million for the six months ended June 30, 2017 and 2016 was as follows:

	Six Months Ended June 30,	
	2017	2016
Average Variable Transaction fee per million		
U.S. high-grade - fixed rate	\$ 166	\$ 189
U.S. high-grade - floating rate	59	36
Total U.S. high-grade	162	183
Other credit	259	261
Liquid products	42	39
Total	196	206

Total U.S. high-grade average variable transaction fee per million decreased to \$162 per million for the six months ended June 30, 2017 from \$183 per million for the six months ended June 30, 2016, mainly due to a decrease in the duration of bonds traded and an increase in the number of larger sized trades. Other credit average variable transaction fee per million decreased to \$259 per million for the six months ended June 30, 2017 from \$261 million for the six months ended June 30, 2016, mainly due to a larger percentage of trading volume in high-yield protocols that command lower fees per million offset by an increase in Eurobond fees per million as a result of the change in structure of our Eurobond fee plan.

Distribution Fees

U.S. high-grade distribution fees increased \$3.2 million principally due to the migration of certain of our broker-dealer clients from an all-variable fee plan to a plan that incorporates a monthly distribution fee. The \$2.3 million decrease in Other credit distribution fees principally relates to the change in Eurobond fee plan structure implemented in the fourth quarter of 2016. The new Eurobond bond fee plan structure contains standardized minimum monthly commitments and variable transaction fees.

Information and Post-Trade Services. Information and post-trade services revenue decreased by \$0.3 million for the six months ended June 30, 2017 and 2016, respectively. The negative impact of foreign exchange of \$1.5 million and lower post-trade transaction reporting revenue was partially offset by a \$1.5 million increase in revenue from new data contracts. Our transaction reporting business processed 523 million transactions for the six months ended June 30, 2017 compared to 590 million for the six months ended June 30, 2016.

Investment Income. Investment income increased by \$0.7 million primarily due to higher investment balances and an increase in interest rates in 2017.

Other. Other income was \$2.5 million and \$2.6 million for the six months ended June 30, 2017 and 2016, respectively.

Expenses

Our expenses for the six months ended June 30, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Six Months Ended June 30,					
	2017		2016		\$	%
	\$	% of Revenues	\$	% of Revenues		
	(\$ in thousands)					
Expenses						
Employee compensation and benefits	\$ 52,822	26.3 %	\$ 50,342	27.2 %	\$ 2,480	4.9 %
Depreciation and amortization	9,483	4.7	9,221	5.0	262	2.8
Technology and communications	9,407	4.7	8,581	4.6	826	9.6
Professional and consulting fees	8,365	4.2	8,107	4.4	258	3.2
Occupancy	2,826	1.4	2,386	1.3	440	18.4
Marketing and advertising	4,668	2.3	3,602	1.9	1,066	29.6
Clearing costs	2,844	1.4	3,719	2.0	(875)	(23.5)
General and administrative	5,610	2.8	4,333	2.3	1,277	29.5
Total expenses	<u>\$ 96,025</u>	<u>47.7 %</u>	<u>\$ 90,291</u>	<u>48.8 %</u>	<u>\$ 5,734</u>	<u>6.4 %</u>

Employee Compensation and Benefits. Employee compensation and benefits increased by \$2.5 million, primarily due to a \$2.0 million increase in salaries, taxes and benefits, principally as a result of higher employee headcount, and a \$0.4 million increase in stock-based compensation.

Depreciation and Amortization. Depreciation and amortization increased by \$0.3 million primarily due to a \$0.4 million increase in amortization of leasehold improvements. For the six months ended June 30, 2017 and 2016, \$5.8 million and \$3.9 million, respectively, of equipment purchases and leasehold improvements and \$6.7 million and \$6.1 million, respectively, of software development costs were capitalized.

Technology and Communications. Technology and communication expenses increased by \$0.8 million due to higher software costs of \$0.4 million and market data costs of \$0.3 million.

Professional and Consulting Fees. Professional and consulting fees increased by \$0.3 million primarily due to higher consulting fees of \$0.4 million related to MiFID II and \$0.2 million in legal fees, offset by lower recruiting fees of \$0.4 million.

Occupancy. Occupancy costs increased by \$0.4 million primarily due to the lease of additional office space to accommodate our increased headcount.

Marketing and Advertising. Marketing and advertising expenses increased by \$1.1 million due to higher advertising costs of \$0.5 million associated with our Open Trading TM protocols and travel and entertainment expenses related to sales activities of \$0.3 million.

Clearing Costs. Clearing costs decreased by \$0.9 million. During the third quarter 2016, we amended the terms of our agreements with our third-party clearing brokers which resulted in a reduction in transaction and other clearing costs. Third-party clearing costs as a percentage of matched principal trading revenue decreased from 22.7% for the six months ended June 30, 2016 to 12.3% for the six months ended June 30, 2017.

General and Administrative. General and administrative expenses increased by \$1.3 million principally due to a decrease in foreign currency transaction gains of \$0.7 million and an increase in general travel and entertainment expenses of \$0.3 million.

Provision for Income Tax. Our consolidated effective tax rate for the six months ended June 30, 2017 was 23.5%, compared to 34.6% for the six months ended June 30, 2016. The tax provision for the six months ended June 30, 2017 includes excess tax benefits of \$11.0 million relating to a new standard for share-based payments accounting adopted effective January 1, 2017. Our consolidated effective tax rate can vary from period to period depending on the geographic mix of our earnings, changes in tax legislation and tax rates and the amount and timing of excess tax benefits related to share-based payments, among other factors.

Liquidity and Capital Resources

During the past three years, we have met our funding requirements through cash on hand and internally generated funds. Cash and cash equivalents and investments totaled \$365.5 million at June 30, 2017.

In January 2013, we entered into a three-year credit agreement that provided for revolving loans and letters of credit up to an aggregate of \$50.0 million. In October 2015, we entered into an amended and restated credit agreement (the "Credit Agreement") that increased our borrowing capacity to an aggregate of \$100.0 million, including a \$5.0 million sub-limit for standby letters of credit. The Credit Agreement will mature in October 2017. As of June 30, 2017, we had \$1.0 million in letters of credit outstanding and \$99.0 million in available borrowing capacity under the Credit Agreement. Subject to satisfaction of certain specified conditions, we are permitted to upsize the borrowing capacity under the Credit Agreement by an additional \$50.0 million.

Our cash flows were as follows:

	Six Months Ended June 30,			
	2017	2016	\$ Change	% Change
	(\$ in thousands)			
Net cash provided by (used in) operating activities	\$ 69,118	\$ (20,096)	\$ 89,214	(443.9) %
Net cash (used in) provided by investing activities	(54,337)	1,988	(56,325)	(2,833.2)
Net cash (used in) financing activities	(55,455)	(28,160)	(27,295)	96.9
Effect of exchange rate changes on cash and cash equivalents	574	(185)	759	(410.3)
Net (decrease) for the period	<u>\$ (40,100)</u>	<u>\$ (46,453)</u>	<u>\$ 6,353</u>	(13.7) %

The \$89.2 million increase in net cash provided by operating activities was primarily due to a decrease in net purchases of corporate debt trading investments of \$72.3 million and an increase in net income of \$18.4 million.

The \$56.3 million increase in net cash used in investing activities was primarily due to increases of \$53.8 million in net purchases of available-for-sale investments and capital expenditures of \$2.4 million.

The \$27.3 million increase in net cash used in financing activities was principally due to an increase of \$18.7 million in repurchases of our common stock, a \$5.2 million increase in the cash dividend paid on common stock and higher withholding tax payments on restricted stock vesting and stock option exercises of \$2.5 million.

Past trends of cash flows are not necessarily indicative of future cash flow levels. A decrease in cash flows may have a material adverse effect on our liquidity, business and financial condition.

Non-GAAP Financial Measures

In addition to cash flow from operating activities in accordance with GAAP, we use a non-GAAP financial measures called "Free Cash Flow". Free Cash Flow is defined as cash flow from operating activities excluding net purchases of corporate debt trading investments less expenditures for furniture, equipment and leasehold improvements and capitalized software development costs. We believe this non-GAAP financial measure is important in gaining an understanding of our financial strength and cash flow generation.

The table set forth below presents a reconciliation of our cash flow from operating activities to Free Cash Flow, as defined, for the twelve months ended June 30, 2017 and 2016:

	Twelve months ended June 30,	
	2017	2016
	(\$ in thousands)	
Cash flow from operating activities	\$ 178,076	\$ 50,932
Add: Net purchases of corporate debt trading investments	1,910	72,396
Add: Excess tax benefits from share-based compensation previously recorded under financing activities	885	9,128
Less: Purchases of furniture, equipment and leasehold improvements	(8,258)	(6,354)
Less: Capitalization of software development costs	(12,643)	(11,915)
Free Cash Flow	<u>\$ 159,970</u>	<u>\$ 114,187</u>

Other Factors Influencing Liquidity and Capital Resources

We believe that our current resources are adequate to meet our liquidity needs and capital expenditure requirements for at least the next 12 months. However, our future liquidity and capital requirements will depend on a number of factors, including expenses associated with product development and expansion and new business opportunities that are intended to further diversify our revenue stream. We may also acquire or invest in technologies, business ventures or products that are complementary to our business. In the event we require any additional financing, it will take the form of equity or debt financing. Any additional equity offerings may result in dilution to our stockholders. Any debt financings, if available at all, may involve restrictive covenants with respect to dividends, issuances of additional capital and other financial and operational matters related to our business.

Certain of our U.S. subsidiaries are registered as a broker-dealer or a SEF and therefore are subject to the applicable rules and regulations of the SEC and the CFTC. These rules contain minimum net capital requirements, as defined in the applicable regulations, and also may require a significant part of the registrants' assets be kept in relatively liquid form. Certain of our foreign subsidiaries are regulated by the Financial Conduct Authority in the U.K. or Ontario Securities Commission in Canada and must maintain financial resources, as defined in the applicable regulations, in excess of the applicable financial resources requirement. As of June 30, 2017, each of our subsidiaries that are subject to these regulations had net capital or financial resources in excess of their minimum requirements. As of June 30, 2017, our subsidiaries maintained aggregate net capital and financial resources that were \$136.0 million in excess of the required levels of \$10.5 million.

Each of our U.S. and foreign regulated subsidiaries are subject to local regulations which generally prohibit repayment of borrowings from our affiliates, paying cash dividends, making loans to our affiliates or otherwise entering into transactions that result in a significant reduction in regulatory net capital or financial resources without prior notification to or approval from such regulated entity's principal regulator.

As of June 30, 2017, the amount of unrestricted cash held by our non-U.S. subsidiaries was \$75.0 million. We have determined that unremitted earnings of our foreign subsidiaries are considered indefinitely reinvested outside of the U.S. Any repatriation of such foreign earnings by way of dividend may be subject to both U.S. federal and state income taxes, reduced by applicable foreign tax credits. However, we do not have any current needs or foreseeable plans to repatriate cash by way of dividends from our non-U.S. subsidiaries.

We execute certain bond transactions between and among institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller in trades which settle through third-party clearing brokers. Settlement typically occurs within one to three trading days after the trade date. Cash settlement of the transaction occurs upon receipt or delivery of the underlying instrument that was traded. For the six months ended June 30, 2017 and 2016, revenues from matched principal trading were approximately \$23.2 million and \$16.4 million, respectively. Under securities clearing agreements with third-party clearing brokers, we maintain collateral deposits with each clearing broker in the form of cash. As of June 30, 2017 and 2016, the amount of the collateral deposits included in prepaid expenses and other assets in the Consolidated Statements of Financial Condition was \$1.1 million and \$1.4 million, respectively. For the six months ended June 30, 2017, and 2016, clearing expenses associated with matched principal transactions were \$2.8 million and \$3.7 million, respectively, and are classified under clearing costs on our Consolidated Statements of Operations. We are exposed to credit risk in the event a counterparty does not fulfill its obligation to complete a transaction or if there is a miscommunication or other error in executing a matched principal transaction. Pursuant to the

terms of the securities clearing agreements, each third-party clearing broker has the right to charge us for any losses they suffer resulting from a counterparty's failure on any of our trades. We did not record any liabilities or losses with regard to this right for the six months ended June 30, 2017 and 2016.

In the normal course of business, we enter into contracts that contain a variety of representations, warranties and general indemnifications. Our maximum exposure from any claims under these arrangements is unknown, as this would involve claims that have not yet occurred. However, based on past experience, we expect the risk of loss to be remote.

In January 2016, our Board of Directors authorized a two-year share repurchase program for up to \$25.0 million of our common stock. In October 2016, our Board of Directors approved a \$50.0 million increase in the size of the share repurchase program. Shares repurchased under the program will be held in treasury for future use. As of June 30, 2017, approximately \$27.0 million remained authorized for repurchase under the current program.

In July 2017, our Board of Directors approved a quarterly cash dividend of \$0.33 per share payable on August 24, 2017 to stockholders of record as of the close of business on August 10, 2017. Any future declaration and payment of dividends will be at the sole discretion of our Board of Directors. Our Board of Directors may take into account such matters as general business conditions, our financial results, capital requirements, contractual obligations, legal, and regulatory restrictions on the payment of dividends to our stockholders or by our subsidiaries to their respective parent entities, and any such other factors as the Board of Directors may deem relevant.

Effects of Inflation

Because the majority of our assets are short-term in nature, they are not significantly affected by inflation. However, the rate of inflation may affect our expenses, such as employee compensation, office leasing costs and communications expenses, which may not be readily recoverable in the prices of our services. To the extent inflation results in rising interest rates and has other adverse effects on the securities markets, it may adversely affect our financial condition and results of operations.

Contractual Obligations and Commitments

As of June 30, 2017, we had the following contractual obligations and commitments:

	Payments due by period				
	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 - years
	(\$ in thousands)				
Operating leases	\$ 144,646	\$ 4,544	\$ 16,639	\$ 19,950	\$ 103,513
Foreign currency forward contract	79,425	79,425	—	—	—
	<u>\$ 224,071</u>	<u>\$ 83,969</u>	<u>\$ 16,639</u>	<u>\$ 19,950</u>	<u>\$ 103,513</u>

During 2016, we entered into non-cancelable lease agreements for approximately 108,000 square feet of office space that commence on or after December 1, 2016 that expire through December 31, 2033. The aggregate minimum rental commitment remaining under such leases is \$126.8 million.

We enter into foreign currency forward contracts to hedge our exposure to variability in certain foreign currency cash flows resulting from the net investment in our U.K. subsidiaries. As of June 30, 2017, the notional value of the foreign currency forward contract outstanding was \$79.4 million and the fair value of the liability was \$2.3 million.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Market risk is the risk of the loss resulting from adverse changes in market rates and prices, such as interest rates and foreign currency exchange rates.

Market Risk

The global financial services business is, by its nature, risky and volatile and is directly affected by many national and international factors that are beyond our control. Any one of these factors may cause a substantial decline in the U.S. and global financial services markets, resulting in reduced trading volume and revenues. These events could have a material adverse effect on our business, financial condition and results of operations.

As of June 30, 2017, we had \$234.4 million of investments, which were invested in corporate bonds and classified as securities available-for-sale or trading securities. Adverse movements, such as a 10% decrease in the value of these securities or a downturn or disruption in the markets for these securities, could result in a substantial loss. In addition, principal gains and losses resulting from these securities could on occasion have a disproportionate effect, positive or negative, on our financial condition and results of operations for any particular reporting period.

Interest Rate Risk

Interest rate risk represents our exposure to interest rate changes with respect to our cash, cash equivalents and investments. As of June 30, 2017, our cash and cash equivalents and investments amounted to \$365.5 million. A hypothetical five basis point decrease in short-term interest rates would decrease our annual pre-tax earnings by approximately \$0.2 million, assuming no change in the amount or composition of our cash, cash equivalents and investments.

As of June 30, 2017, a hypothetical 100 basis point increase or decrease in interest rates would decrease or increase the fair value of the available-for-sale investment portfolio by approximately \$1.3 million, assuming no change in the amount or composition of the investments. The hypothetical unrealized gain (loss) of \$1.3 million would be recognized in other comprehensive income on the Consolidated Statements of Financial Condition.

A similar hypothetical 100 basis point increase or decrease in interest rates would decrease or increase the fair value of the trading securities portfolio by approximately \$0.9 million. The hypothetical unrealized gain (loss) of \$0.9 million would be recognized in other income in the Consolidated Statements of Operations.

We do not maintain an inventory of bonds that are traded on our platform.

Foreign Currency Exchange Rate Risk

We conduct operations in several different countries outside of the U.S., most notably the U.K., and substantial portions of our revenues, expenses, assets and liabilities are generated and denominated in non U.S. dollar currencies. Since our consolidated financial statements are presented in U.S. dollars, we must translate revenues, income and expenses, as well as assets and liabilities, into U.S. dollars at exchange rates in effect during or at the end of each reporting period. Accordingly, increases or decreases in the value of the U.S. dollar against the other currencies will affect our net operating revenues, operating income and the value of balance sheet items denominated in foreign currencies.

During the twelve months ended June 30, 2017, approximately 13.6% of our revenue and 29.1% of our expenses were denominated in currencies other than the U.S. dollar, most notably the British Pound Sterling. Based on actual results over the past year, a hypothetical 10% increase or decrease in the U.S. dollar against all other currencies would have increased or decreased revenue by approximately \$5.2 million and operating expenses by approximately \$5.4 million.

Derivative Risk

Our limited derivative risk stems from our activities in the foreign currency forward contract market. We use this market to mitigate our U.S. dollar versus British Pound Sterling exposure that arises from the activities of our U.K. subsidiaries. As of June 30, 2017, the fair value of the notional amount of our foreign currency forward contract was \$79.4 million. We do not speculate in any derivative instruments.

Credit Risk

Two of our subsidiaries, MarketAxess Corporation and MarketAxess Europe Limited, act as a matched principal counterparty in connection with the Open Trading™ transactions that we execute between clients. We act as an intermediary in these transactions by serving as counterparty to both the buyer and the seller in trades which then settle through a third-party clearing broker. Settlement typically occurs within one to three trading days after the trade date. Cash settlement of the transaction occurs upon receipt or delivery of the underlying instrument that was traded.

We are exposed to credit and performance risks in our role as matched principal trading counterparty to our Open Trading™ clients executing bond trades on our platform, including the risk that counterparties that owe us money or securities will not perform their obligations. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. Adverse movements in the prices of securities that are the subject of these transactions can increase our risk. In connection with Open Trading™ or other anonymous protocols, we expect that the number of transactions in which we act as a matched principal will increase.

We have policies and procedures in place to identify and manage our credit risk. In connection with the recent growth of our Open Trading™ protocols, we have implemented additional automated controls to help us manage our credit risk exposure. There can be no assurance that the policies, procedures and automated controls we use to manage this credit risk will effectively mitigate our credit risk exposure. Some of our risk management procedures are reliant upon the evaluation of information regarding the fixed-income markets, our clients or other relevant matters that are publicly available or otherwise acquired from third party sources. Such information may not be accurate, complete, up-to-date or properly assessed and interpreted by us. If our risk management procedures fail, our business, financial condition and results of operations may be adversely affected. Furthermore, our insurance policies are unlikely to provide coverage for such risks.

Cash and cash equivalents includes cash and money market instruments that are primarily maintained at one major global bank. Given this concentration, we are exposed to certain credit risk in relation to our deposits at this bank.

Item 4. Controls and Procedures

(a) *Evaluation of Disclosure Controls and Procedures.* Our management, including the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our “disclosure controls and procedures,” as that term is defined in Rule 13a-15(e) and Rule 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as of June 30, 2017. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures are effective to ensure that information required to be disclosed by MarketAxess in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and to ensure that information is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) *Changes in Internal Control over Financial Reporting.* There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act) during the quarter ended June 30, 2017 identified in connection with the evaluation thereof by our management, including the Chief Executive Officer and Chief Financial Officer, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — Other Information

Item 1. Legal Proceedings

In the normal course of business, we and our subsidiaries included in the consolidated financial statements may be involved in various lawsuits, proceedings and regulatory examinations. We assess liabilities and contingencies in connection with outstanding legal proceedings, if any, utilizing the latest information available. For matters where it is probable that we will incur a material loss and the amount can be reasonably estimated, we will establish an accrual for the loss. Once established, the accrual will be adjusted to reflect any relevant developments. When a loss contingency is not both probable and estimable, we would not establish an accrual.

Based on currently available information, the outcome of our outstanding matters is not expected to have a material adverse impact on our financial position. It is not presently possible to determine our ultimate exposure to these matters and there is no assurance that the resolution of the outstanding matters will not significantly exceed any reserves accrued by us.

Item 1A. Risk Factors

There have been no material changes in our risk factors from those disclosed in our most recent Form 10-K for the year ended December 31, 2016. For a discussion of the risk factors affecting the Company, see “Risk Factors” in Part I, Item 1A of our 2016 Form 10-K.

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

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

During the quarter ended June 30, 2017, we repurchased the following shares of common stock:

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans and Programs</u>	<u>Dollar Value of Shares That May Yet Be Purchased Under the Plans and Programs</u> <u>(in thousands)</u>
April 1, 2017 -- April 30, 2017	19,272	\$ 183.81	18,900	\$ 35,441
May 1, 2017 -- May 31, 2017	22,312	188.27	21,800	31,338
June 1, 2017 -- June 30, 2017	23,444	199.04	21,877	26,973
	<u>65,028</u>	<u>\$ 190.83</u>	<u>62,577</u>	

During the three months ended June 30, 2017, we repurchased 65,028 shares of common stock. The repurchases included 2,451 shares surrendered by employees to us to satisfy the withholding tax obligations upon the vesting of restricted shares and 62,577 shares repurchased in connection with our share repurchase program.

In January 2016, our Board of Directors authorized a two-year share repurchase program for up to \$25.0 million of our common stock. In October 2016, our Board of Directors approved a \$50.0 million increase in the size of the current share repurchase program. Shares repurchased under the program will be held in treasury for future use.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit Listing:

Number	Description
10.1 * †	Restricted Stock Agreement Pursuant to the MarketAxess Holdings Inc. 2012 Incentive Plan, dated as of April 1, 2017, by and between MarketAxess Holdings, Inc. and Christophe Roupie
10.2	Amendment Number One to the MarketAxess Holdings Inc. 2012 Incentive Plan as Amended and Restated Effective June 7, 2016 (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K dated April 21, 2017)
31.1*	Certification by Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification by Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification by Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification by Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document**
101.SCH	XBRL Taxonomy Extension Schema Document**
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document**
101.LAB	XBRL Taxonomy Extension Label Linkbase Document**
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document**

* Filed herewith.

** Attached as Exhibit 101 to this Quarterly Report on Form 10-Q are the following materials, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Financial Condition as of June 30, 2017 and December 31, 2016; (ii) Consolidated Statements of Operations for the Three and Six Months Ended June 30, 2017 and 2016; (iii) Consolidated Statements of Comprehensive Income for the Three and Six Months Ended June 30, 2017 and 2016; (iv) Consolidated Statement of Stockholders' Equity for the Six Months Ended June 30, 2017; (v) Consolidated Statements of Cash Flows for the Six Months Ended June 30, 2017 and 2016; and (vi) Notes to the Consolidated Financial Statements.

† Certain portions of this exhibit have been omitted pursuant to a request for confidential treatment.

SIGNATURES

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

MARKETAXESS HOLDINGS INC.

Date: July 27, 2017

By: /s/ RICHARD M. MCVEY

Richard M. McVey
Chief Executive Officer
(principal executive officer)

Date: July 27, 2017

By: /s/ ANTONIO L. DELISE

Antonio L. DeLise
Chief Financial Officer
(principal financial and accounting officer)

NOTE: A request for confidential treatment has been made with respect to portions of the following document that are marked [***]. The redacted portions have been filed separately with the Securities and Exchange Commission.

UK R S A

**RE S T R I C T E D S T O C K A G R E E M E N T P U R
S U A N T T O T H E
M A R K E T A X E S S H O L D I N G S I N C . 2 0 1 2 I N C E N T I V E P L A N**

THIS AGREEMENT, effective as of the 1st day of April 2017, by and between MarketAxess Holdings Inc., a Delaware corporation with its principal office at 299 Park Avenue, 10th Floor, New York, New York 10171 (the “Company”), and Christopher Roupie (the “Participant”).

WHEREAS, the Board of Directors of the Company (the “Board”) adopted, and the stockholders of the Company approved, the MarketAxess Holdings Inc. 2012 Incentive Plan (the “Plan”);

WHEREAS, the Company, through the Committee under the Plan, wishes to grant to the Participant shares of its common stock, par value \$.003 per share (“Common Stock” or the “Shares”) in the amount set forth below; and

WHEREAS, such Shares are subject to certain restrictions.

NOW, THEREFORE, the Company and the Participant agree as follows:

1. Sale of Shares. Subject to the terms, conditions and restrictions of the Plan and this Agreement, the Company awards to the Participant 9,367 shares of the Company’s Common Stock on the 1st day of April 2017 (the “Grant Date”). To the extent required by law, the Participant shall pay the Company the par value (\$.003) (the “Purchase Price”) for each Share awarded to the Participant simultaneously with the execution of this Agreement in cash or cash equivalents payable to the order of the Company. Pursuant to the Plan and Section 2 of this Agreement, the Shares are subject to certain restrictions, which restrictions shall expire in accordance with the provisions of the Plan and Section 2 hereof. While such restrictions are in effect, the Shares subject to such restrictions shall be referred to here in as “Restricted Stock.”

2. Vesting.

(a) Except as set forth in subsections (b) and (c) below, the Restricted Stock shall become vested and cease to be Restricted Stock (but shall remain subject to the other terms of this Agreement and the Plan) as follows if the Participant has both met the goals set out in Appendix I and been continuously employed by the Company until such date:

Vesting Date	Percentage Vested
1 April 2020	50%
1 April 2021	50%

There shall be no pro rata or partial vesting in the periods prior to the applicable vesting dates and all vestings shall occur only on the appropriate vesting date.

(b) Upon the death or Disability of the Participant, 50% of any shares of Restricted Stock that are unvested at the time of such Termination shall become vested and cease to be Restricted Stock (but shall remain subject to the other terms of this Agreement and the Plan). Any remaining unvested shares of Restricted Stock shall be forfeited.

(c) In the event of a Change in Control, the Restricted Stock shall be treated in accordance with Section 12.1 of the Plan; provided that, (i) immediately prior to the Change in Control, the Committee may determine that the Restricted Stock will not be continued, assumed or have new rights substituted therefor in accordance with Section 12.1 (a) of the Plan, and immediately prior to the Change in Control, the Restricted Stock shall become fully vested and cease to be Restricted Stock (but shall remain subject to the other terms of this Agreement and the Plan) and (ii) if the Participant incurs a Termination by the Company without Cause within 24 months after such Change in Control, the Restricted Stock shall become fully vested and cease to be Restricted Stock (but shall remain subject to the other terms of this Agreement and the Plan).

3. Restrictions on Transfer. The Participants shall not sell, negotiate, transfer, pledge, hypothecate, assign, encumber or otherwise dispose of the Shares or grant any proxy with respect thereto, except as specifically permitted by the Plan and this Agreement. Any attempted Transfer in violation of this Agreement and the Plan shall be void and of no effect and the Company shall have the right to disregard the same on its books and records and to issue "stop transfer" instructions to its transfer agent. Notwithstanding the foregoing, nothing herein or in the Plan shall prohibit the Participant from pledging the Shares the Participant is granted hereunder to the Company pursuant to a stock pledge agreement entered into between the parties hereto.

4. Forfeiture.

(a) The provisions in Section 8.1 of the Plan regarding Derivative Activities shall apply to the Restricted Stock.

(b) If a Participant incurs a Termination for any reason, the Company shall repurchase from the Participant for the Purchase Price paid for such shares of Restricted Stock, any and all Restricted Stock.

5. Rights as a Holder of Restricted Stock. From and after the issue date, the Participants shall have, with respect to the shares of Restricted Stock, all of the rights of a holder of shares of Common Stock, including, without limitation, the right to vote the Shares, to receive and retain in all regular cash dividends payable to holders of Shares of record on and after the issue date (although such dividends will be treated, to the extent required by applicable law, as a additional compensation for tax purposes), and to exercise all other rights, powers and privileges of a holder of Shares with respect to the Restricted Stock, with the exceptions that (i) the Participant shall not be entitled to delivery of the stock certificate or certificates representing the Restricted Stock until such shares are no longer Restricted Stock; (ii) the Company (or its designated agent) will retain custody of the stock certificate or certificates representing the Restricted Stock and any other property ("RS Property") issued in respect of the Restricted Stock, including stock dividends at all times such Shares are Restricted Stock; (iii) no RS Property will bear interest or be segregated in separate accounts; and (iv) the Participants shall not, directly or indirectly, Transfer the Restricted Stock in any manner whatsoever.

6. Tax.

(a) The Employer, or trustee of any employee benefit trust may withhold such amount and make such arrangements as it considers necessary to meet any liability to taxation or social security contributions in respect of the Restricted Stock. These arrangements may include the sale, on behalf of the Participant of any shares of Common Stock or the reduction in the number of shares of Common Stock subject to the Restricted Stock Agreement, unless the Participant has personally discharged the liability.

(b) Without limiting subsection (a) above, the Committee may require the Participant to enter into: (i) such arrangements as it considers appropriate for the recovery or payment by the Participant of secondary National Insurance Contributions payable in respect of the Restricted Stock, including, without limitation, any agreement of the sort contemplated by Paragraphs 3 A and 3 B of Schedule 1 to the Social Security Contributions and Benefits Act 1992; and/or (ii) (as a condition of receiving and retaining any award of Restricted Stock) a joint election with his or her employer under section 431 of the Income Tax (Earnings and Pensions) Act 2003 in respect of the Restricted Stock.

7. Legend. In the event that a certificate evidencing Restricted Stock is issued, the certificate represents the Shares shall have endorsed thereon the following legend:

(a) “THE ANTICIPATION, ALIENATION, ATTACHMENT, SALE, TRANSFER, ASSIGNMENT, PLEDGE, ENCUMBRANCE OR CHARGE OF THE SHARES OF STOCK REPRESENTED HERE BY ARE SUBJECT TO THE TERMS AND CONDITIONS (INCLUDING FORFEITURE) OF THE MARKET AXESS HOLDINGS INC. (THE “COMPANY”) 2012 INCENTIVE PLAN (THE “PLAN”) AND AN AGREEMENT EFFECTIVE AS OF THE 1st DAY OF APRIL 2017. COPIES OF SUCH PLAN AND AGREEMENT ARE ON FILE AT THE PRINCIPAL OFFICE OF THE COMPANY.”

(b) Any legend required to be placed thereon by applicable blue sky laws of any state. Notwithstanding the foregoing, in no event shall the Company be obligated to issue a certificate representing the Restricted Stock prior to vesting a set forth in Section 2 hereof.

8. Performance Adjustment. Any Restricted Stock is subject to performance adjustment as set out in clause 8.1 and 8.2 below in addition to any performance adjustment required by law, rules or other regulatory requirements in relation to performance adjustment applicable to the Company or any Participants and any policies intended to comply with them, including without limitation any performance adjustment required by the Dodd-Frank Wall Street Reform and Consumer Protection Act and any rules and regulations promulgated thereunder, the IFPRUR emune rat ion Co de pub lish ed by th e UK Financial Conduct Authority and/or such other applicable law and/or regulatory requirement.

8.1 Performance adjustment includes, but is not limited to:

(a) The Company reducing the amount of any Restricted Stock or any other award;

(b) The Company requiring the Participant to forfeit the whole of any Restricted Stock; and/or

(c) The Company requiring the Participant to repay to the Company on demand on a gross basis the cash value of any Restricted Stock that has vested.

8.2 The Company shall be entitled to implement performance adjustments, as defined in clause 8.1 including but not limited to where:

(a) The Participant has participated in or was responsible for conduct which resulted in significant losses to the Company or its Affiliates.

(b) The Participant has failed to meet appropriate standards of fitness and propriety.

(c) The Company or Affiliate has suffered a material downturn in its financial performance.

(d) The Company or Affiliate has suffered a material failure of risk management.

(e) The Company or any Affiliate has reasonable evidence of fraud or material dishonesty by the Participant.

(f) The Company or any Affiliate has been required to restate its accounts to a material extent.

(g) The Company or any Affiliate becomes aware of any material wrongdoing on the part of the Participant that would have resulted in the relevant award not being made had it known about such material wrongdoing at the time the relevant award was made.

(h) The Company becomes aware of a material error in assessing the Participant's performance against the relevant performance conditions at the time that the Restricted Stock was granted.

(i) The Participant has acted in any manner which in the opinion of the Committee has brought or is likely to bring the Participant, the Company or any Affiliate into material disrepute or is materially adverse to the interests of the Company or any Affiliate.

8.3 Any decision regarding performance adjustments shall be taken by the Committee in its absolute discretion.

8.4 The implementation of performance adjustments by the Company shall be without prejudice to any other rights or remedies that may be available to it.

9. Securities Representations. The Shares are being issued to the Participant and this Agreement is being made by the Company in reliance upon the following express representations and warranties of the Participant. The Participant acknowledges, represents and warrants that:

(a) The Participant has been advised that the Participant may be an “affiliate” within the meaning of Rule 144 under the Securities Act and in this connection the Company is relying in part on the Participant’s representations set forth in this section;

(b) The Shares must be held in definitely by the Participant unless (i) an exemption from the registration requirements of the Securities Act is available for the resale of such Shares or (ii) the Company files an additional registration statement (or a “re-offer prospectus”) with regard to the resale of such Shares and the Company is under no obligation to continue in effect a Form S-8 Registration Statement or to otherwise register the resale of the Shares (or to file a “re-offer prospectus”);

(c) The exemption from registration under Rule 144 will not be available under current law unless (i) a public trading market then exists for the Common Stock of the Company, (ii) adequate information concerning the Company is then available to the public, and (iii) other terms and conditions of Rule 144 or any exemption therefrom are complied with and that any sale of the Shares may be made only in limited amounts in accordance with such terms and conditions.

10. Not an Employment Agreement. This Agreement is not an agreement of employment. This Agreement does not guarantee that the Employer will employ the Participant for a specific time period, nor does it modify in any respect the Employer’s right to terminate or modify the Participant’s employment or compensation.

11. Power of Attorney. The Company, its successors and assigns, is hereby appointed the attorney-in-fact, with full power of substitution, of the Participant for the purpose of carrying out the provisions of this Agreement and taking any action and executing any instruments which such attorney-in-fact may deem necessary or advisable to accomplish the purposes hereof, which appointment as attorney-in-fact is irrevocable and coupled with an interest. The Company, as attorney-in-fact for the Participant, may in the name and stead of the Participant, make and execute all conveyances, assignments and transfers of the Restricted Stock, other RS Property, Shares and property provided for herein, and the Participant hereby ratifies and confirms that which the Company, as said attorney-in-fact, shall do by virtue hereof. Nevertheless, the Participant shall, if so requested by the Company, execute and deliver to the Company all such instruments as may, in the judgment of the Company, be advisable for this purpose.

12. Data Protection. By participating in the Plan the Participant consents to the holding and processing of personal data provided by the Participant to the Company for all purposes relating to the operation of the Plan. These include, but are not limited to:

(a) administering and maintaining Participant records; and

(b) transferring information about the Participant to a country or territory outside the European Economic Area.

13. Miscellaneous.

(a) This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, personal legal representatives, successors, trustees, administrators, distributees, devisees and legatees. The Company may assign to, and require, any successor (whether the director in direct, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company or any affiliate by which the Participant is employed to expressly assume and agree in writing to perform this Agreement. Notwithstanding the foregoing, the Participant may not assign this Agreement to other than with respect to Shares Transferred in compliance with the terms hereof.

(b) The Participant agrees that any sum owed to the Company under the Plan may be deducted from the salary or any outstanding payments due to them from the Company or any Affiliate.

(c) This award of Restricted Stocks shall not affect in any way the right or power of the Board or stockholders of the Company to make or authorize an adjustment, recapitalization or other change in the capital structure or the business of the Company, any merger or consolidation of the Company or subsidiaries, any issue of bonds, debentures, preferred or prior preference stock ahead of or affecting the Common Stock, the dissolution or liquidation of the Company, any sale or transfer of all or part of its assets or business or any other corporate act or proceeding.

(d) The Participant agrees that the award of the Restricted Stock hereunder is special incentive compensation and that it, any dividends paid thereon (even if treated as compensation for tax purposes) and any other RS Property will not be taken into account as "salary" or "compensation" or "bonus" in determining the amount of any payment under any pension, retirement or profit-sharing plan of the Company or any life insurance, disability or other benefit plan of the Company.

(e) No modification or waiver of any of the provisions of this Agreement shall be effective unless in writing and signed by the party against whom it is sought to be enforced save that the Company in its absolute discretion reserves the right to amend the incentive award agreement referred to in this Agreement at any time on reasonable notice to the Participant, including in order to comply with any applicable law and/or regulatory requirement.

(f) The grant of Restricted Stock on a particular basis in any year does not create any right to or expectation of the grant of Restricted Stock on the same basis, or at all, in any future year.

(g) This Agreement may be executed in one or more counterparts, all of which taken together shall constitute one contract.

(h) The failure of any party hereto at any time to require performance by another party of any provision of this Agreement shall not affect the right of such party to require performance of that provision, and any waiver by any party of any breach of any provision of this Agreement shall not be construed as a waiver of any continuing or succeeding breach of such provision, a waiver of the provision itself, or a waiver of any right under this Agreement.

(i) The headings of these sections of this Agreement have been inserted for convenience of reference only and shall in no way restrict or modify any of the terms or provisions hereof.

(j) All notices, consents, requests, approvals, instructions and other communications provided for herein shall be in writing and shall be deemed to have been made: (i) when delivered in person; (ii) on the second succeeding business day after being mailed by United States registered or certified mail; or (iii) on the seventh succeeding business day after being posted from overseas, whichever is earlier, to the person sent to or required to receive the same, at the address set forth in the heading of this Agreement or to such other address as either party may designate by like notice. Notices to the Company shall be addressed to the Compensation Committee of the Board.

(k) This Agreement shall be construed, interpreted and governed and the legal relationships of the parties determined in accordance with the internal laws of the State of Delaware without reference to rules relating to conflicts of law.

(l) By executing this Agreement within 60 days after the day and year first written above, the award of Restricted Stocks shall be accepted by the Participant within the time period required under Section 8.2(b) of the Plan.

14. Provisions of Plan Control. This Agreement is subject to all the terms, conditions and provisions of the Plan, including, without limitation, the amendment provisions thereof, and to such rules, regulations and interpretations relating to the Plan as may be adopted by the Committee and as may be in effect from time to time. The Plan is incorporated here in by reference. A copy of the Plan has been delivered to the Participant. If and to the extent that this Agreement conflicts or is inconsistent with the terms, conditions and provisions of the Plan, the Plan shall control, and this Agreement shall be deemed to be modified accordingly. Unless otherwise indicated, any capitalized term used but not defined herein shall have the meaning ascribed to such term in the Plan. This Agreement contains the entire understanding of the parties with respect to the subject matter hereof (other than any other documents expressly contemplated herein or in the Plan) and supersedes any prior agreements between the Company and the Participant.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

MARKET AXES HOLDINGS INC.

By: /s/ Richard M. McVey
Name: Richard McVey
Title: Chief Executive Officer

/s/ Christophe Roupie
Christophe Roupie

**Appendix 1 to
UK RSA Agreement dated 1st of April 2017 between Market Axes Holdings Inc.
(the “Company”) and Christopher Roupie (the “Participant”) (“Agreement”)**

The following shares will vest if the outlined goals are achieved by 31 December 2018, as measured on or before 15 March 2019:

1. 25% of the shares referenced in Section 1 of the Agreement shall be earned if:

a) The Company’s consolidated financial performance results in cumulative pre-tax operating income for calendar years 2017 and 2018 (“Consolidated Performance”) of a minimum of USD [***]

2. 25% of the shares referenced in Section 1 of the Agreement shall be earned if:

a) The financial performance for Europe and Asia results in cumulative pre-tax operating income for calendar years 2017 and 2018 (“Regional Performance”) of a minimum of GBP [***]

3. 25% of the shares referenced in Section 1 of the Agreement are subject to upward and downward adjustment (e.g., payout percentage) based on achievement of operating income for Consolidated Performance as specified in the table below:

	Cumulative Operating Income 2017 - 2018 (USD 000s)	Payout
Threshold	\$ [***]	50%
	\$ [***]	75%
Target Range	\$ [***]	100%
	\$ [***]	100%
	\$ [***]	125%
Maximum	\$ [***]	150%

Interpolation between results

No shares are earned if achievement is below 85%

4. 25% of the shares referenced in Section 1 of the Agreement are subject to upward and downward adjustment (e.g., payout percentage) based on achievement of operating income for Regional Performance as specified in the table below:

	Cumulative Operating Income 2017-2018 (GBP 000s)	Payout
Threshold	£ [***]	50%
	£ [***]	75%
Target Range	£ [***] £ [***]	100% 100%
	£ [***] £ [***]	117% 133%
Maximum	£ [***]	150%

Interpolation between results

No shares are earned if achievement is below 85%

Regardless of shares earned as a result of financial performance, the vesting requirements for continued employment in Section 2 (a) and the requirements for performance adjustment as defined in Section 8 shall apply.

CERTIFICATIONS

I, Richard M. McVey, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MarketAxess Holdings Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ RICHARD M. MCVEY

Richard M. McVey
Chief Executive Officer
(principal executive officer)

Dated: July 27, 2017

CERTIFICATIONS

I, Antonio L. DeLise, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MarketAxess Holdings Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ ANTONIO L. DELISE

Antonio L. DeLise

Chief Financial Officer

(principal financial and accounting officer)

Dated: July 27, 2017

**Certification Under Section 906 of the Sarbanes-Oxley Act of 2002
(United States Code, Title 18, Chapter 63, Section 1350)
Accompanying Quarterly Report on Form 10-Q of
MarketAxess Holdings Inc. for the Quarter Ended June 30, 2017**

In connection with the Quarterly Report on Form 10-Q of MarketAxess Holdings Inc. (the "Company") for the quarter ended June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard M. McVey, Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ RICHARD M. MCVEY

Richard M. McVey

Chief Executive Officer

July 27, 2017

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates it by reference.

**Certification Under Section 906 of the Sarbanes-Oxley Act of 2002
(United States Code, Title 18, Chapter 63, Section 1350)
Accompanying Quarterly Report on Form 10-Q of
MarketAxess Holdings Inc. for the Quarter Ended June 30, 2017**

In connection with the Quarterly Report on Form 10-Q of MarketAxess Holdings Inc. (the "Company") for the quarter ended June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Antonio L. DeLise, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ ANTONIO L. DELISE

Antonio L. DeLise
Chief Financial Officer

July 27, 2017

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates it by reference.