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 March 31, 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)**	**52-2230784** **(IRS Employer Identification No.)**
299 Park Avenue, 10th Floor New York, New York **(Address of principal executive offices)**	**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	☑	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐
		Emerging growth company	☐

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

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

As of April 26, 2017, the number of shares of the Registrant's voting common stock outstanding was 37,529,270.

MARKETAXESS HOLDINGS INC.
FORM 10-Q FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2017
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PART I — Financial Information

Item 1. ***Financial Statements***

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

	As of	
	March 31, 2017	December 31, 2016
	(In thousands, except share and per share amounts)	
ASSETS		
Cash and cash equivalents	$ 137,655	$ 168,243
Investments, at fair value	218,559	194,404
Accounts receivable, net of allowance of $57 and $82 as of March 31, 2017 and December 31, 2016, respectively	56,642	50,668
Goodwill and intangible assets, net of accumulated amortization	63,347	63,443
Furniture, equipment, leasehold improvements and capitalized software, net of accumulated depreciation and amortization	33,888	31,104
Prepaid expenses and other assets	13,794	11,618
Deferred tax assets, net	6,829	8,562
Total assets	$ 530,714	$ 528,042
LIABILITIES AND STOCKHOLDERS' EQUITY		
Liabilities		
Accrued employee compensation	$ 13,872	$ 34,783
Income and other tax liabilities	15,028	7,582
Deferred revenue	3,190	2,515
Accounts payable, accrued expenses and other liabilities	16,269	15,149
Total liabilities	48,359	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 March 31, 2017 and December 31, 2016	—	—
Series A Preferred Stock, $0.001 par value, 110,000 shares authorized, no shares issued and outstanding as of March 31, 2017 and December 31, 2016	—	—
Common stock voting, $0.003 par value, 110,000,000 shares authorized, 40,168,572 shares and 40,106,360 shares issued and 37,543,170 shares and 37,543,775 shares outstanding as of March 31, 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 March 31, 2017 and December 31, 2016	—	—
Additional paid-in capital	339,191	342,311
Treasury stock - Common stock voting, at cost, 2,625,402 and 2,562,585 shares as of March 31, 2017 and December 31, 2016, respectively	(129,537)	(117,330)
Retained earnings	285,150	255,140
Accumulated other comprehensive loss	(12,570)	(12,228)
Total stockholders' equity	482,355	468,013
Total liabilities and stockholders' equity	$ 530,714	$ 528,042

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

MARKETAXESS HOLDINGS INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
	(In thousands, except per share amounts)	
Revenues		
Commissions	$ 94,022	$ 79,093
Information and post-trade services	7,816	7,779
Investment income	747	418
Other	1,306	1,283
Total revenues	103,891	88,573
Expenses		
Employee compensation and benefits	27,401	24,527
Depreciation and amortization	4,693	4,681
Technology and communications	4,585	4,304
Professional and consulting fees	4,279	3,862
Occupancy	1,404	1,161
Marketing and advertising	1,886	1,778
Clearing costs	1,327	1,766
General and administrative	2,709	2,124
Total expenses	48,284	44,203
Income before income taxes	55,607	44,370
Provision for income taxes	13,144	15,407
Net income	$ 42,463	$ 28,963
Net income per common share		
Basic	$ 1.15	$ 0.79
Diluted	$ 1.11	$ 0.77
Cash dividends declared per common share	$ 0.33	$ 0.26
Weighted average shares outstanding		
Basic	36,850	36,775
Diluted	38,112	37,671

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

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

	Three Months Ended March 31,	
	2017	2016
	(In thousands)	
Net income	$ 42,463	$ 28,963
Net cumulative translation adjustment and foreign currency exchange hedge, net of tax of $(527) and $2,012, respectively	(365)	(2,237)
Net unrealized gain on securities available-for-sale, net of tax of $14 and $115, respectively	23	187
Comprehensive Income	$ 42,121	$ 26,913

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 Comprehen-sive Loss	Total Stockholders' Equity
			(In thousands)			
Balance at December 31, 2016	$ 120	$ 342,311	$ (117,330)	$ 255,140	$ (12,228)	$ 468,013
Net income	—	—	—	42,463	—	42,463
Cumulative translation adjustment and foreign currency exchange hedge, net of tax	—	—	—	—	(365)	(365)
Unrealized net gain on securities available-for-sale, net of tax	—	—	—	—	23	23
Stock-based compensation	—	3,943	—	—	—	3,943
Exercise of stock options	1	499	—	—	—	500
Withholding tax payments on restricted stock vesting and stock option exercises	—	(7,642)	—	—	—	(7,642)
Repurchases of common stock	—	—	(12,207)	—	—	(12,207)
Cumulative effect of change in accounting for employee share-based payments		80		(52)		28
Cash dividend on common stock	—	—	—	(12,401)	—	(12,401)
Balance at March 31, 2017	$ 121	$ 339,191	$ (129,537)	$ 285,150	$ (12,570)	$ 482,355

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

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

	Three Months Ended March 31,	
	2017	2016
	(In thousands)	
Cash flows from operating activities		
Net income	$ 42,463	$ 28,963
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	4,693	4,681
Stock-based compensation expense	3,943	3,494
Deferred taxes	1,827	2,331
Other	393	4,969
Changes in operating assets and liabilities:		
(Increase) in accounts receivable	(6,113)	(12,346)
(Increase) in prepaid expenses and other assets	(2,146)	(3,000)
(Increase) in corporate debt trading investments	(1,196)	(73,235)
(Increase) in mutual funds held in rabbi trust	(1,519)	(1,253)
(Decrease) in accrued employee compensation	(20,911)	(18,386)
Increase in income and other tax liabilities	7,366	6,026
Increase in deferred revenue	675	290
Increase in accounts payable, accrued expenses and other liabilities	1,074	4,723
Net cash provided by (used in) operating activities	30,549	(52,743)
Cash flows from investing activities		
Available-for-sale investments:		
Proceeds from maturities	46,485	12,000
Purchases	(68,166)	—
Purchases of furniture, equipment and leasehold improvements	(4,149)	(2,652)
Capitalization of software development costs	(3,172)	(3,035)
Other	(5)	26
Net cash (used in) provided by investing activities	(29,007)	6,339
Cash flows from financing activities		
Cash dividend on common stock	(12,356)	(9,727)
Exercise of stock options	500	831
Withholding tax payments on restricted stock vesting and stock option exercises	(7,642)	(5,230)
Repurchases of common stock	(12,207)	(1,199)
Net cash (used in) financing activities	(31,705)	(15,325)
Effect of exchange rate changes on cash and cash equivalents	(425)	(4)
Cash and cash equivalents		
Net (decrease) for the period	(30,588)	(61,733)
Beginning of period	168,243	199,728
End of period	$ 137,655	$ 137,995

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. While certain implementation issues are still pending resolution, including trade date versus settlement date recognition for broker dealers, the adoption of this accounting guidance is not expected to have a material effect on the Company's Consolidated Financial Statements.

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 three months ended March 31, 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 March 31, 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 March 31, 2017, the Company's subsidiaries maintained aggregate net capital and financial resources that was $128.9 million in excess of the required levels of $10.4 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 March 31, 2017				
Money market funds	$ 26,627	$ —	$ —	$ 26,627
Securities available-for-sale				
Corporate debt	—	140,309	—	140,309
Trading securities				
Corporate debt	—	75,404	—	75,404
Mutual funds held in rabbi trust	—	2,846	—	2,846
Foreign currency forward position	—	(1,093)	—	(1,093)
Total	$ 26,627	$ 217,466	$ —	$ 244,093
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	$ 58,573	$ 194,138	$ —	$ 252,711

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 three months ended March 31, 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	
	March 31, 2017	December 31, 2016
	(In thousands)	
Notional value	$ 68,260	$ 66,972
Fair value of notional	69,353	67,238
Fair value of the liability	$ (1,093)	$ (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 March 31, 2017				
Securities available-for-sale				
Corporate debt	$ 140,475	$ 13	$ (179)	$ 140,309
Trading securities				
Corporate debt	75,527	68	(191)	75,404
Mutual funds held in rabbi trust	2,729	117	—	2,846
Total trading securities	78,256	185	(191)	78,250
Total investments	$ 218,731	$ 198	$ (370)	$ 218,559
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 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	
	March 31, 2017	December 31, 2016
	(In thousands)	
Less than one year	$ 131,457	$ 117,904
Due in 1 - 5 years	87,102	76,500
Total	$ 218,559	$ 194,404

Proceeds from the sales and maturities of investments during the three months ended March 31, 2017 and 2016 were $56.8 million and $13.3 million, respectively. For both of the three months ended March 31, 2017 and 2016, the net unrealized gains on corporate debt trading securities were $0.1 million. There were no net realized gains or losses for the three months ended March 31, 2017 and 2016, 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 March 31, 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 March 31, 2017						
Corporate debt	$ 136,368	$ (369)	$ 900	$ (1)	$ 137,268	$ (370)
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 March 31, 2017 and December 31, 2016. Intangible assets that are subject to amortization, including the related accumulated amortization, are comprised of the following:

	March 31, 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	5,630	(1,995)	3,635	5,628	(1,897)	3,731
Non-competition agreements	380	(380)	—	380	(380)	—
Tradenames	370	(370)	—	370	(370)	—
Total	$ 12,150	$ (8,515)	$ 3,635	$ 12,148	$ (8,417)	$ 3,731

Amortization expense associated with identifiable intangible assets was $0.1 million and $0.4 million for the three months ended March 31, 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 March 31,	
	2017	2016
	(In thousands)	
Current:		
Federal	$ 8,315	$ 7,078
State and local	1,458	1,289
Foreign	1,546	1,135
Total current provision	11,319	9,502
Deferred:		
Federal	1,539	4,977
State and local	166	713
Foreign	120	215
Total deferred provision	1,825	5,905
Provision for income taxes	$ 13,144	$ 15,407

During the three months ended March 31, 2017, the Company recognized excess tax benefits on share-based payments of $5.8 million through the provision for income taxes.

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 months ended March 31, 2017 and 2016 was as follows:

	Three Months Ended March 31,	
	2017	2016
	(In thousands)	
Employees	$ 3,699	$ 3,276
Non-employee directors	244	218
Total stock-based compensation	$ 3,943	$ 3,494

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 three months ended March 31, 2017, the Company granted to employees and directors a total of 56,555 shares of restricted stock or restricted stock units, performance-based shares with an expected pay-out at target of 13,619 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 $150.47 and $156.85, 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 March 31, 2017, the total unrecognized compensation cost related to all non-vested awards was $31.4 million. That cost is expected to be recognized over a weighted-average period of 2.5 years.

8. Earnings Per Share

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

	Three Months Ended March 31,	
	2017	2016
	(In thousands, except per share amounts)	
Net income	$ 42,463	$ 28,963
Basic weighted average shares outstanding	36,850	36,775
Dilutive effect of stock options and restricted stock	1,262	896
Diluted weighted average shares outstanding	38,112	37,671
Basic earnings per share	$ 1.15	$ 0.79
Diluted earnings per share	$ 1.11	$ 0.77

Stock options and restricted stock totaling 59,910 shares and 238,224 shares for the three months ended March 31, 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 March 31, 2017, the Company had $0.9 million in letters of credit outstanding and $99.1 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 March 31, 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 March 31, 2017 under such operating leases were as follows (in thousands):

2017	$	3,422
2018		4,306
2019		9,213
2020		10,500
2021		10,083
2022 and thereafter		107,854
	$	145,378

Rental expense was $1.2 million and $1.0 million for the three months ended March 31, 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 $0.9 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 $127.2 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 March 31, 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 three months ended March 31, 2017 and 2016, revenues from matched principal trading were approximately $11.9 million and $7.5 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 March 31, 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 $1.5 million, respectively. For the three months ended March 31, 2017 and 2016, clearing expenses associated with matched principal transactions were $1.3 million and $1.8 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 three months ended March 31, 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 three months ended March 31, 2017 and 2016, no single client accounted for more than 10% of total revenue. One institutional investor client accounted for 13.2% and 16.4% of trading volumes during the three months ended March 31, 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 three months ended March 31, 2017, the Company repurchased 65,317 shares of common stock at a cost of $12.2 million. A total of 221,185 shares have been repurchased under this program. As of March 31, 2017, approximately $38.9 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 months ended March 31, 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 months ended March 31, 2017 and 2016 and long-lived assets as of March 31, 2017 and December 31, 2016 was as follows:

	Three Months Ended March 31,	
	2017	2016
	(In thousands)	
Revenues		
United States	$ 87,755	$ 75,372
United Kingdom	15,759	12,704
Other	377	497
Total	$ 103,891	$ 88,573

	As of	
	March 31, 2017	December 31, 2016
	(In thousands)	
Long-lived assets, as defined		
United States	$ 26,014	$ 23,370
United Kingdom	7,854	7,713
Other	20	21
Total	$ 33,888	$ 31,104

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 March 31, 2017 and 2016, the fair value of the mutual fund investments and deferred compensation obligations were $2.8 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 each of the three months ended March 31, 2017 and 2016, the trading gains and compensation expense were $0.1 million.

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 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 three months ended March 31, 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 March 31, 2017 Compared to Three Months Ended March 31, 2016

Overview

Total revenues increased by $15.3 million or 17.3% to $103.9 million for the three months ended March 31, 2017, from $88.6 million for the three months ended March 31, 2016. This increase in total revenues was primarily due to higher commissions of $14.9 million. A 13.1% change in the average foreign currency exchange rates of the British Pound Sterling compared to the U.S. dollar from the three months ended March 31, 2016 to the three months ended March 31, 2017 had the effect of decreasing revenues by $1.9 million.

Total expenses increased by $4.1 million or 9.2% to $48.3 million for the three months ended March 31, 2017, from $44.2 million for the three months ended March 31, 2016. This increase was primarily due to higher employee compensation and benefits of $2.9 million and general and administrative expenses of $0.6 million. The change in average foreign currency exchange rates had the effect of decreasing expenses by $1.8 million in the three months ended March 31, 2017.

Income before taxes increased by $11.2 million or 25.3% to $55.6 million for the three months ended March 31, 2017, from $44.4 million for the three months ended March 31, 2016. Net income increased by $13.5 million or 46.6% to $42.5 million for the three months ended March 30, 2017, from $29.0 million for three months ended March 31, 2016.

Revenues

Our revenues for the three months ended March 31, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended March 31,					
	2017		2016			
	$	% of Revenues	$	% of Revenues	$ Change	% Change
	($ in thousands)					
Commissions	$ 94,022	90.5 %	$ 79,093	89.3 %	$ 14,929	18.9 %
Information and post-trade services	7,816	7.5	7,779	8.8	37	0.5
Investment income	747	0.7	418	0.5	329	78.7
Other	1,306	1.3	1,283	1.4	23	1.8
Total revenues	$ 103,891	100.0 %	$ 88,573	100.0 %	$ 15,318	17.3 %

Commissions. Our commission revenues for the three months ended March 31, 2017 and 2016, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended March 31,			
	2017	2016	$ Change	% Change
	($ in thousands)			
Variable transaction fees				
U.S. high-grade	$ 35,523	$ 31,568	$ 3,955	12.5 %
Other credit	41,695	30,921	10,774	34.8
Liquid products	630	620	10	1.6
Total variable transaction fees	77,848	63,109	14,739	23.4
Distribution fees				
U.S. high-grade	15,750	14,224	1,526	10.7
Other credit	280	1,500	(1,220)	(81.3)
Liquid products	144	260	(116)	(44.6)
Total distribution fees	16,174	15,984	190	1.2
Total commissions	$ 94,022	$ 79,093	$ 14,929	18.9 %

Variable Transaction Fees

The following table shows the extent to which the increase in variable transaction fees for the three months ended March 31, 2017 was attributable to changes in transaction volumes and variable transaction fees per million:

	Change from the Three Months Ended March 31, 2016			
	U.S. High-Grade	Other Credit	Liquid Products	Total
	(In thousands)			
Volume increase (decrease)	$ 7,401	$ 11,301	$ (1)	$ 18,701
Variable transaction fee per million (decrease) increase	(3,446)	(527)	11	(3,962)
Total increase in variable commissions	$ 3,955	$ 10,774	$ 10	$ 14,739

Our trading volumes for the three months ended March 31, 2017 and 2016 were as follows:

	Three Months Ended March 31,			
	2017	2016	$ Change	% Change
Trading Volume Data (in millions)				
U.S. high-grade - fixed rate	$ 211,974	$ 170,219	$ 41,755	24.5 %
U.S. high-grade - floating rate	7,420	7,507	(87)	(1.2)
Total U.S. high-grade	219,394	177,726	41,668	23.4
Other credit	159,724	116,974	42,750	36.5
Liquid products	15,306	15,320	(14)	(0.1)
Total	$ 394,424	$ 310,020	$ 84,404	27.2 %
Number of U.S. Trading Days	62	61		
Number of U.K. Trading Days	64	62		

For volume reporting purposes, transactions in foreign currencies are converted to U.S. dollars at average monthly rates. The 23.4% 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 15.9% for the three months ended March 31, 2017 from 14.9% for the three months March 31, 2016, coupled with an increase in overall market volume as measured by TRACE. U.S. high-grade TRACE volume increased 15.5% to $1.4 trillion for the three months ended March 31, 2017 from $1.2 trillion for the three months ended March 31, 2016.

Other credit volumes increased by 36.5% for the three months ended March 31, 2017 compared to the three months ended March 31, 2016, primarily due to increases of 69.4% in emerging markets bond volume, 18.7% in Eurobond volume and 8.8% in high-yield bond volume.

Our average variable transaction fee per million for the three months ended March 31, 2017 and 2016 was as follows:

	Three Months Ended March 31,	
	2017	2016
Average Variable Transaction fee per million		
U.S. high-grade - fixed rate	$ 166	$ 184
U.S. high-grade - floating rate	55	36
Total U.S. high-grade	162	178
Other credit	261	264
Liquid products	41	40
Total	197	204

Total U.S. high-grade average variable transaction fee per million decreased to $162 per million for the three months ended March 31, 2017 from $178 per million for the three months ended March 31, 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 $261 per million for the three months ended March 31, 2017 from $264 million for the three months ended March 31, 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 $1.5 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 $1.2 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 revenues was $7.8 million for both the three months ended March 31, 2017 and 2016. The change in foreign currency exchange rates had the effect of decreasing information and post-trade services revenue by approximately $0.8 million for the three months ended March 31, 2017. Excluding the negative impact of foreign exchange, information services revenue increased $0.9 million principally as a result of new data contracts. Our transaction reporting business processed 270 million transactions for the three months ended March 31, 2017 compared to 301 million for the three months ended March 31, 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 $1.3 million for both the three months ended March 31, 2017 and 2016.

Expenses

Our expenses for the three months ended March 31, 2017 and 2016, and the resulting dollar and percentage changes were as follows:

	Three Months Ended March 31,					
	2017		2016			
	$	% of Revenues	$	% of Revenues	$ Change	% Change
	($ in thousands)					
Expenses						
Employee compensation and benefits	$ 27,401	26.4 %	$ 24,527	27.7 %	$ 2,874	11.7 %
Depreciation and amortization	4,693	4.5	4,681	5.3	12	0.3
Technology and communications	4,585	4.4	4,304	4.9	281	6.5
Professional and consulting fees	4,279	4.1	3,862	4.4	417	10.8
Occupancy	1,404	1.4	1,161	1.3	243	20.9
Marketing and advertising	1,886	1.8	1,778	2.0	108	6.1
Clearing costs	1,327	1.3	1,766	2.0	(439)	(24.9)
General and administrative	2,709	2.6	2,124	2.4	585	27.5
Total expenses	$ 48,284	46.5 %	$ 44,203	49.9 %	$ 4,081	9.2 %

Employee Compensation and Benefits. Employee compensation and benefits increased by $2.9 million, primarily due to a $1.4 million increase in salaries, taxes and benefits, principally as a result of higher employee headcount; higher employee incentive compensation of $1.0 million, which is tied to operating performance, and a $0.4 million increase in stock-based compensation.

Depreciation and Amortization. Depreciation and amortization was $4.7 million for both the three months ended March 31, 2017 and 2016. For the three months ended March 31, 2017, there was a $0.3 million increase in amortization for software development costs which was offset by a $0.3 million decrease in amortization expense of acquired intangible assets. For the three months ended March 31, 2017 and 2016, $4.1 million and $2.7 million, respectively, of equipment purchases and leasehold improvements and $3.2 million and $3.0 million, respectively, of software development costs were capitalized.

Technology and Communications. Technology and communication expenses increased by $0.3 million.

Professional and Consulting Fees. Professional and consulting fees increased by $0.4 million primarily due to higher consulting fees associated with new system implementations, legal expenses and risk consulting services.

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 $0.1 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 23.5% for the three months ended March 31, 2016 to 11.1% for the three months ended March 31, 2017.

General and Administrative. General and administrative expenses increased by $0.6 million principally due to a decrease in foreign currency transaction gain of $0.4 million.

Provision for Income Tax. Our consolidated effective tax rate for the three months ended March 31, 2017 was 23.6%, compared to 34.7% for the three months ended March 31, 2016. The tax provision for the three months ended March 31, 2017 includes excess tax benefits of $5.8 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 $356.2 million at March 31, 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 March 31, 2017, we had $0.9 million in letters of credit outstanding and $99.1 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:

	Three Months Ended March 31,			
	2017	2016	$ Change	% Change
	($ in thousands)			
Net cash provided by (used in) operating activities	$ 30,549	$ (52,743)	$ 83,292	(157.9) %
Net cash (used in) provided by investing activities	(29,007)	6,339	(35,346)	(557.6)
Net cash (used in) financing activities	(31,705)	(15,325)	(16,380)	106.9
Effect of exchange rate changes on cash and cash equivalents	(425)	(4)	(421)	10,525.0
Net (decrease) for the period	$ (30,588)	$ (61,733)	$ 31,145	(50.5) %

The $83.3 million increase in net cash provided by operating activities was primarily due to a net decrease in purchases of corporate debt trading investments of $72.0 million and an increase in net income of $13.5 million.

The $35.3 million increase in net cash used in investing activities was primarily due to an increase of $33.7 million in net purchases of available-for-sale investments and $1.5 million in purchases of furniture, equipment and leasehold improvements.

The $16.4 million increase in net cash used in financing activities was principally due to an increase of $11.0 million in repurchases of our common stock, a $2.6 million increase in the cash dividend paid on common stock and higher withholding tax payments on restricted stock vesting and stock option exercises of $2.4 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 March 31, 2017 and 2016:

	Twelve months ended March 31,	
	2017	2016
	($ in thousands)	
Cash flow from operating activities	$ 168,221	$ 52,779
Add: Net purchases of corporate debt trading investments	2,156	73,235
Add: Excess tax benefits from share-based compensation previously recorded under financing activities	4,818	6,279
Less: Purchases of furniture, equipment and leasehold improvements	(7,882)	(6,630)
Less: Capitalization of software development costs	(12,255)	(10,970)
Free Cash Flow	$ 155,058	$ 114,693

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 March 31, 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 March 31, 2017, our subsidiaries maintained aggregate net capital and financial resources that were $128.9 million in excess of the required levels of $10.4 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 March 31, 2017, the amount of unrestricted cash held by our non-U.S. subsidiaries was $63.5 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 three months ended March 31, 2017 and 2016, revenues from matched principal trading were approximately $11.9 million and $7.5 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 March 31, 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 $1.5 million, respectively. For the three months ended March 31, 2017, and 2016, clearing expenses associated with matched principal transactions were $1.3 million and $1.8 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 the Company for any losses they suffer resulting from a counterparty's failure on any of the Company's trades. We did not record any liabilities or losses with regard to this right for the three months ended March 31, 2017 and 2016.

In the ordinary 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 material 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 March 31, 2017, approximately $38.9 million remained authorized for repurchase under the current program.

In April 2017, our Board of Directors approved a quarterly cash dividend of $0.33 per share payable on May 25, 2017 to stockholders of record as of the close of business on May 11, 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 March 31, 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	$ 145,378	$ 4,546	$ 15,020	$ 20,236	$ 105,576
Foreign currency forward contract	69,353	69,353	—	—	—
	$ 214,731	$ 73,899	$ 15,020	$ 20,236	$ 105,576

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 $127.2 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 March 31, 2017, the notional value of the foreign currency forward contract outstanding was $69.4 million and the fair value of the liability was $1.1 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 March 31, 2017, we had $215.7 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 March 31, 2017, our cash and cash equivalents and investments amounted to $356.2 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 March 31, 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 $1.0 million, assuming no change in the amount or composition of the investments. The hypothetical unrealized gain (loss) of $1.0 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 $1.0 million. The hypothetical unrealized gain (loss) of $1.0 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 March 31, 2017, approximately 13% of our revenue and 28% 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 $4.9 million and operating expenses by approximately $5.0 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 March 31, 2017, the fair value of the notional amount of our foreign currency forward contract was $69.4 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 March 31, 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 March 31, 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 March 31, 2017, we repurchased the following shares of common stock:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans and Programs	Dollar Value of Shares That May Yet Be Purchased Under the Plans and Programs
				(In thousands)
January 1, 2017 -- January 31, 2017	47,177	$ 161.68	7,417	$ 50,000
February 1, 2017 -- February 28, 2017	31,925	191.12	27,900	44,680
March 1, 2017 -- March 31, 2017	30,000	192.23	30,000	38,913
	109,102	$ 178.70	65,317	

During the three months ended March 31, 2017, we repurchased 109,102 shares of common stock. The repurchases included 43,785 shares surrendered by employees to us to satisfy the withholding tax obligations upon the vesting of restricted shares and 65,317 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	Amendment to Richard M. McVey Employment Agreement (incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K dated January 6, 2017)
10.2	MarketAxess Holdings Inc. Severance Pay Plan, as amended (incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K dated January 6, 2017)
10.3	Form of notice of Eligibility to Participate (incorporated by reference to Exhibit 10.3 to the registrant's Current Report on Form 8-K dated January 6, 2017)
10.4*	Contract of Employment, dated March 15, 2017, between MarketAxess Europe Limited and Christophe Roupie
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 March 31, 2017 and December 31, 2016; (ii) Consolidated Statements of Operations for the Three Months Ended March 31, 2017 and 2016; (iii) Consolidated Statements of Comprehensive Income for the Three Months Ended March 31, 2017 and 2016; (iv) Consolidated Statement of Stockholders' Equity for the Three Months Ended March 31, 2017; (v) Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2017 and 2016; and (vi) Notes to the Consolidated Financial Statements.

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: April 27, 2017	By: /s/ RICHARD M. MCVEY Richard M. McVey Chief Executive Officer (principal executive officer)
Date: April 27, 2017	By: /s/ ANTONIO L. DELISE Antonio L. DeLise Chief Financial Officer (principal financial and accounting officer)

Exhibit 10.4

Dated 15 of March 2017

MARKETAXESS EUROPE LIMITED

and

Christophe Roupie

CONTRACT OF EMPLOYMENT

CONTRACT OF EMPLOYMENT

This **contract of employment** is made on 15 of March 2017 **between:**

(1) **MarketAxess Europe Limited,** whose registered office is at 5 Aldermanbury Square, London, EC2V 7HR (the **"Company");** and

(2) **Christophe Roupie** of 61Prince's Gate Mews, London SW7 2PP **("you").**

This Contract of Employment sets out the terms on which you are employed by the Company.

1 Interpretation

1.1 In this agreement (and any schedules to it):

1.1.1 "Board" means the board of directors of the Company from time to time or any person or committee nominated by the board of directors as its representative for the purposes of this agreement;

1.1.2 "Employment" means the employment governed by this agreement;

1.1.3 "Group" means the Company, its ultimate holding company for the time being and the associated companies (as defined in section 435 of the Insolvency Act 1986) of the Company for the time being;

1.1.4 "Group Company" means a member of the Group and **"Group Companies"** will be interpreted accordingly;

1.1.5 "holding company" has the meaning given in section 1159 of the Companies Act 2006; and

1.1.6 "Termination Date" means the date on which the Employment is terminated;

1.1.7 references to any statutory provisions include any modifications or re-enactments of those provisions;

1.1.8 references in this agreement to rules, regulations, policies, handbooks or other similar documents which supplement it, are referred to in it or describe any pensions or other benefits arrangements, are references to the versions or forms of the relevant documents as amended or updated from time to time; and

1.1.9 headings will be ignored in construing this agreement.

2 Start Date and Continuous Employment

2.1 Your employment will commence on 15 day of March 2017 (the **"Commencement Date").**
No previous employment counts as continuous employment with the Company.

2.2 You represent and warrant that you are not prevented from taking up the Employment or from performing your duties under this contract by any obligation or duty owed to any other party, contractual or otherwise.

2.3 You represent and warrant that you will uphold all confidentiality provisions of previous employers to which you are subject.

2.4 You undertake to indemnify the Company against any claims, costs, damages, liabilities or expenses which the Company may incur as a result if you are in breach of any such obligations set out in clauses 2.2 and 2.3 above.

3 Conditions

3.1 Your Employment is conditional upon the receipt by the Company of satisfactory references covering a period of employment of 5 years, a credit check and you being entitled to work in the UK without any additional approvals.

3.2 If applicable for your position, your Employment is also conditional upon you obtaining registration by the Financial Conduct Authority (or its replacement regulatory authority). an to the holding of any other qualification, licence, authority, registration or membership required (by statute or otherwise) for the proper performance of your duties under this contract.

3.3 If clauses 3.1and 3.2 cannot be satisfied or remains unfulfilled after such period of time as the Company considers reasonable, it may, at its sole and absolute discretion, terminate your Employment without notice, any payment in lieu of notice and shall not be liable to provide any form of compensation whatsoever.

3.4 The continuation of Employment following the take up of your position is subject to the satisfactory achievement of a 3 month probation period. If the probation is not satisfactorily achieved, the Company may terminate your Employment by paying you base salary only in lieu of notice. The Company shall not be liable to provide any other form of compensation.

3.5 You acknowledge that you have not relied on any taxation or other financial advice from the Company or any other Group Company in deciding whether to enter into this agreement.

3.6 If the Company (acting in good faith) forms the opinion that it is necessary to do so, in order to comply with any binding law or regulatory requirements, including but not limited to remuneration law, regulations or regulatory guidance, the Company may, among other things, restructure your remuneration package to provide an alternative remuneration package which is consistent with law, regulation and regulatory guidance.

4 Job **Title**

Your job title is Head of Europe and Asia and, subject to any organizational changes, you will report to Chief Executive Officer of MarketAxess Holdings Inc. This is not a job description and may be changed from time to time. The Company may transfer you to another position or to another department.

5 Duration of Employment

5.1 Either you or the Company shall give to the other no less than 3 months' written notice to terminate your employment or longer if required by law.

5.2 The Company reserves the right, at its sole and absolute discretion, to pay your base salary **("Basic Salary")** only at the rate set out in clause 9.1in lieu of any period of notice given either by you or the Company (less any deductions of income tax, national insurance contributions, other statutory deductions and other agreed deductions).

5.3 The Company may elect to pay any sums due under clause 5.2 in equal monthly instalments less any deductions as shall be necessary to satisfy any performance adjustment or clawback provisions applicable to you.

5.4 If the Company exercises its right to make a payment pursuant to clause 5.3, and you receive income (whether as an employee, consultant or otherwise) during the period equal to your unexpired notice period, you must immediately notify the Company in writing of any income so received. Future monthly instalments shall be reduced by the amount of any such income. If you receive any such income after the last monthly instalment has been paid, you shall repay to the Company such part of this instalment as is equal to the income received but not deducted.

5.5 At any time during your Employment, or upon its termination, the Company shall be entitled to deduct from your Basic Salary or any other payment due to you in respect of your Employment (including your final salary payment) any monies due from you to the Company or any Group Company.

6 Place of Work

You will be based at the Company's principal office at 5 Aldermanbury Square, London, EC2V 7HR but you may be required to work on a temporary or permanent basis at another location within the Greater London area, or, on a temporary basis, at another location within the United Kingdom. You may also be expected to travel and work outside the United Kingdom from time to time as required by the Company.

7 Hours of Work

7.1 Your normal hours of work are 8.30am to 5.30pm, Monday to Friday, with a one hour lunch break per day **("your normal weekly hours").** You will comply with the Company's normal working hours and will also work any additional hours the Company considers necessary to meet its business needs. You will not receive further remuneration for any hours worked in addition to your normal working hours.

7.2 You agree that for the purposes of the Working Time Regulations 1998 (the "Regulations") the performance of your duties pursuant to this agreement may require you to work more than 48 hours per week. You may withdraw your consent to work more than 48 hours per week by giving the Board not less than three months' notice.

7.3 You agree to keep records of your working hours as reasonably required by the Company from time to time in order to comply with its obligations under Regulations.

8 Your Duties

8.1 You are required at all times to comply with the Company's rules, policies and procedures in force from time to time.

8.2 You will promptly disclose to the Company full details of any wrongdoing by any employee of the Company or any Group Company where that wrongdoing is material to that employee's employment by the relevant company or to the interests or reputation of any Group Company.

8.3 You will devote the whole of your working time, attention and skill to your Employment and use your best endeavours to promote the interests and reputation of the Company and every Group Company.

8.4 You shall obey the directions of the Board and keep the Board (and, where appropriate the board of directors of any other Group Company) fully informed of your conduct of the Company and any other Group Company in a prompt and timely manner.

9 Salary

9.1 Your Basic Salary is £300,000 per annum, accruing on a daily basis.

9.2 Salary will be paid in equal monthly instalments in arrears on or about the 24'h day of each calendar month, after deduction in income tax, national insurance contributions, other statutory deductions and other agreed deductions.

9.3 You are not entitled to any additional remuneration in respect of any hours worked in excess of your normal weekly hours.

9.4 The Company reserves the right to and you agree that it may recover from your salary payments, any overpayment of remuneration or other payments, made by mistake or through misrepresentation or for any other legitimate reason.

9.5 On termination of your Employment the Company may deduct from your final salary payment an amount equal to any sums you owe the Company or any Group Company.

10 Performance Cash Bonus

10.1 In addition to your Basic salary, you are eligible to participate in the Company's discretionary bonus scheme (the "Bonus Scheme") from 2017 onwards. Any bonus payable will be subject to deduction of income tax, national insurance contributions, other statutory deductions and other agreed deductions.

10.2 The Company may in its absolute discretion pay you a bonus of such amount, at such intervals and subject to such conditions as the Company may in its absolute discretion determine from time to time.

10.3 Any bonus payment to you shall be purely discretionary and shall not form part of your contractual remuneration under this agreement.

10.4 Notwithstanding clause 10.3, you shall in any event have no entitlement to a bonus or a time-apportioned bonus if your employment terminates for any reason or you are under notice of termination (whether given by you or the Company) at or prior to the date when a bonus might otherwise have been payable.

10.5 Notwithstanding any other clause in this clause 10, you will receive a minimum guaranteed cash bonus of £300,000 for performance year 2017 only, on an exceptional basis, payable when bonuses are paid to employees of the Company. The payment under this clause 10.5 is subject to deduction of income tax, national insurance contributions, other statutory deductions and other agreed deductions. You shall have no entitlement to a bonus or a time-apportioned bonus under this clause 10.5 if you do not commence employment with the Company, and/or your employment terminates for any reason or you are under notice of termination (whether given by you or the Company) at or prior to the date when that bonus might otherwise have been payable.

10.6 Any bonus payment shall not be pensionable.

11 Performance Equity Awards

11.1 In addition to your salary you may, at the Company's sole and absolute discretion, be eligible to take part in a Company share scheme. If you are eligible to take part in such a scheme, the Company will advise you in due course. This is for your information only, and is not intended to be a contractually binding part of your contract.

11.2 Notwithstanding the above, you will be granted a performance-based restricted stock award of MarketAxess Holdings Inc. common stock ("MKTX") valued at £1,400,000 on the first day of the month after the Commencement Date (or on the Commencement Date, if the first day of the month).

11.3 The target number of shares will be determined on a US Dollar basis using the market rate at the time of processing and will be calculated by the Company as follows: award value divided by the average price of MKTX on the ten {10) trading days up to and including the Award Date, rounded to the nearest full share. The award will vest in two annual instalments: Fifty percent {50%) will vest on each of the third and fourth anniversaries of the Award Date.

11.4 The actual number of shares earned is contingent upon meeting Company and regional financial performance targets and subject to reduction and forfeiture, as outlined in the respective award agreement.

11.5 The award will be subject to and governed by the provisions of the MarketAxess Holdings Inc. 2012 Incentive Plan and its respective agreements. The grant is subject to the full execution of a restricted stock agreement by you and MarketAxess Holdings Inc.

12 Holidays

12.1 The holiday year runs from 1January to 31December.

12.2 You are entitled to 25 days paid holiday in each holiday year ("holiday entitlement"), accruing on a daily basis in addition to the usual English bank and other public holidays. This will be pro-rated in the year of joining and leaving the Company and the resulting entitlement will be rounded up to the nearest whole day.

12.3 You must agree the dates of your holidays in advance with your line manager. You agree that the provisions of Regulations 15(1) to (4) of the Regulations (dates on which leave is taken) do not apply to your Employment.

12.4 You may carry forward a maximum of 5 days' holiday entitlement from one holiday year to the next. Any carry over holiday entitlement must be taken by 31 March of the subsequent holiday year or it will be forfeited.

12.5 On termination of your Employment you will be paid in respect of any holiday entitlement accrued but not taken unless your Employment is terminated for gross misconduct. The Company may require you to take any accrued holiday during any notice period. If you have taken holiday in excess of your entitlement at your Termination Date, the Company may deduct from your final salary an amount that is equal to 1/260 of your annual Basic Salary payable under clause 9.1multiplied by the number of excess days of holiday taken.

13 Other Benefits

13.1 Private Medical & Dental Insurance

13.1.1 You may participate in the Company's private medical and dental insurance schemes, subject in each case to the terms of the relevant insurance policy (as amended from time to time), the rules of the relevant scheme and you (and, where appropriate, your spouse or civil partner and children) being eligible to participate in or benefit from such schemes pursuant to their rules at a cost and on terms which are acceptable to the Company.

13.1.2 This is a discretionary benefit and the Company shall in its sole and absolute discretion reserve the right to discontinue, vary or amend this benefit at any time on reasonable notice to you. Full details are available on request.

13.2 Life Assurance

13.2.1 You may participate in the Company's Life Assurance Scheme, subject to any eligibility requirements or other conditions set by the Company and any insurer of the Company and your health not being such as to prevent the Company being able to obtain cover on reasonable terms, the Company shall arrange life assurance cover for you, currently equivalent to 4 times your Basic Salary (as set
out in clause 9.1). Premiums shall be paid by the Company.

13.2.2 This is a discretionary benefit and the Company shall in its sole and absolute discretion reserve the right to discontinue, vary or amend this benefit at any time
on reasonable notice to you. Full details are available on request.

13.3 Pension Scheme

13.3.1 You will be automatically be enrolled in the Company pension scheme ("the Scheme"), from 1st day of April 2017 subject to satisfying certain eligibility criteria and subject to the rules of the Scheme as amended from time to time.

13.3.2 The Company reserves the right at any time to amend the Scheme and/or change Provider. Full details of the Scheme are available from Human Resources.

13.4 Group Income Protection

13.4.1 You are entitled to participate in the Group Income Protection Plan (the "Plan") subject to the rules of the Plan as amended from time to time, the rules or insurance policy of the relevant Plan provider as amended from time to time, and you satisfying the normal underwriting requirements of the relevant Plan provider and the premium being at a rate which the Company considers reasonable.

13.4.2 Under the Plan, if you are signed off for a medical condition and are unable to work for a continuous period of 26 weeks, and were at work on the last day of your probation, you may be eligible to receive 75% of your basic salary (less State benefits) for the period of incapacity or up to the age of 65. Premiums shall be paid by the Company.

13.4.3 This is also a discretionary benefit and the Company shall in its sole and absolute discretion reserve the right to discontinue, vary or amend the Plan at any time on reasonable notice to you. If the insurance provider refuses for any reason to provide permanent health insurance benefit to you, the Company shall not be liable to provide to you any replacement benefit of the same or similar kind or to pay any compensation in lieu of such benefit.

14 Sickness & Injury

14.1 If you are absent from work due to sickness or injury, you must inform the office no later than Sam on the first day of absence.

14 Sickness & Injury

14.1 If you are absent from work due to sickness or injury, you must inform the office no later than Sam on the first day of absence.

14.2 If you are away from work for seven calendar days or less, you must complete an online self-certification. For absences of more than seven calendar days you must provide a medical certificate from your doctor. Further medical certificates will be required for the remainder of the period of your absence.

14.3 The Company reserves the right, at any time, to require you to undergo a medical examination or Occupational Health at the Company's expense. You agree that the medical adviser may disclose the results of the examination to the Company. You also agree that you will provide, at the Company's reasonable request, a copy of your GP's report on any medical condition, illness or injury relevant to your Employment.

14.4 Subject to the Employee's compliance with this agreement and the Company's sickness absence procedures (as amended from time to time), the Employee shall continue to receive his/her full salary and contractual benefits during any period of absence due to sickness or injury for up to an aggregate of 26 weeks in any 52-week period. Such payment shall be inclusive of any Statutory Sick Pay due in accordance with applicable legislation.

14.5 If you are absent from work due to sickness or injury caused by the fault of another person, and you recover any sum representing compensation for loss of salary under this contract of employment from that person or another person, you agree to repay to the Company any money it has paid to you under clause 16.4 above as salary in respect of the same period of absence.

14.6 The Company may terminate your Employment by giving written notice to take immediate effect whether or not your entitlement to any sick pay, contractual or otherwise, has been exhausted or even when such termination would or might cause you to forfeit any entitlement to Group Income Protection or other benefits if you do not perform your duties of employment for a period of 180 days (whether or not consecutive) in any period of 365 days because of sickness, injury or other incapacity. This notice can be given whilst you continue not to perform your duties or on expiry of the 180 day period. In this clause, 'days' includes Saturdays, Sundays and public holidays.

15 Confidential lnformation

15.1 You agree that you will not use, divulge or disclose to any person, firm or organisation (except as required by law or to carry out your employment duties with the Company) any trade secrets or other confidential information relating to the business, finances or affairs of the Company or any Group Company, or any other information provided on the basis that it is confidential. You also agree that you will sign and abide by the Confidentiality Statement, which will form part of this contract of employment.

15.2 This restriction will continue to apply after your employment ends without limit in time but will not apply to information which becomes public, unless through unauthorised disclosure by you.

15.3 Nothing in this contract is intended to exclude, restrict or limit in any way any right you may have to make a protected disclosure under the Employment Rights Act 1996, or to raise "reportable concerns" in accordance with the Financial Conduct Authority Handbook.

16 IntellectualProperty Rights

16.1 You will promptly inform the Company if you make or are involved in making an Invention during your Employment and will give the Company sufficient details of it to allow the Company to assess the Invention and to decide whether the Invention belongs to the Company. The Company will treat any Invention which does not belong to it as confidential.

"Invention" means any invention (whether patentable or not within the meaning of the Patents Act 1977 or other applicable legislation in any other country) relating to or capable of being used in the business of the Company.

16.2 If an Invention belongs to the Company, you will act as a trustee for the Company in relation to that Invention and you will, at the request and expense of the Company, do everything necessary to:

16.2.1 vest all right, title and interest in the Invention in the Company or its nominee (as legal and beneficial owner);

16.2.2 secure full patent or other appropriate protection for the Invention anywhere in the world; and

16.2.3 defend the Company's or its nominee's rights in the Invention and assist with enforcement anywhere in the world.

16.3 If you create or are involved in creating any Work during the Employment, you will promptly give the Company full details of it.

"Work" means any discovery, design, database or other work (whether registrable or not and whether a copyright work or not) which is not an Invention and which you create or are involved in creating:

16.3.1 in connection with your Employment; or

16.3.2 relating to or capable of being used in those aspects of the businesses of the Group Companies in which you are involved.

16.4 You:

16.4.1 assign to the Company to the extent allowed by law all of your right, title and interest in any current or future Work (whether now existing or brought into being in the future); and

16.4.2 will act as a trustee for the Company in relation to all such Works,

and will in either case at the request and expense of the Company do everything necessary to vest all right, title and interest in any Work in the Company or its nominees (as legal and beneficial owner) and to defend its rights in those works and to secure appropriate protection anywhere in the world.

16.5 If you generate any Information or are involved in generating any Information during the Employment you will promptly give to the Company full details of it and you acknowledge that such Information belongs to the Company.

"Information" means any idea, method or information, which is not an Invention or Work, generated by you either:

16.5.1 in the course of your Employment; or

16.5.2 outside the course of your Employment but relating to the business, finance or affairs of any Group Company.

16.6 If you become aware of any infringement or suspected infringement of any intellectual property right in any Invention, Work or Information you will promptly notify the Company in writing.

16.7 You will not disclose or make use of any Invention, Work or Information without the Company's prior written consent except to comply with this clause 16 or as necessary for the proper performance of your duties.

16.8 So far as permitted by law you irrevocably waive any rights you may have under Chapter IV (moral rights) of Part 1of the Copyright, Designs and Patents Act 1988 and any foreign corresponding rights in respect of all Works.

16.9 Rights and obligations under this clause 16 will continue after the termination of your Employment in respect of all Inventions, Works and Information made or obtained during your Employment and will be binding on your personal representatives.

16.10 You agree that you will not by your acts or omissions do anything that would or might prejudice the rights of the Company under this clause 16.

16.11 You will not make copies of any computer files belonging to any Group Company or their service providers and you will not introduce any of your own computer files into any computer used by any Group Company in breach of any Group Company policy, unless you have obtained the consent of the Board.

16.12 By entering into this agreement you irrevocably appoint the Company to act on your behalf to execute any document and do anything in your name for the purpose of giving the Company (or its nominee) the full benefit of the provision of this clause 16 or the Company's entitlement under statute. If there is any doubt as to whether such a document (or other thing) has been carried out within the authority conferred by this clause 16.12, a certificate in writing (signed by any director or the secretary of the Company) will be sufficient to prove that the act or thing (in the absence of any manifest error) falls within that authority.

17 Your Interests

17.1 You must disclose promptly in writing to the Company's General Counsel, or designee, from time to time your financial interests, to the extent that this is required to fulfil your regulatory obligations, and as set out in the Compliance Manual.

17.2 You will comply, and will procure that any person 'closely associated' (as such term is defined in the Market Abuse Regulation No. 596/2014) with you complies, with all rules of law (including the Market Abuse Regulation and Part V of the Criminal Justice Act 1993), the Company's share dealing code, and any other applicable codes or policies in relation to the holding and trading of securities, including in relation to the disclosure of inside information and of dealings.

18 Garden leave

18.1 At any time after notice to terminate employment is given by either party, or if you resign without giving due notice and the Company does not accept your resignation, the Company may at its absolute discretion require you to take a period of absence called garden leave for a maximum period of 3 months (the **"Garden Leave Period").** The provisions of this clause shall apply to any Garden Leave Period.

18.2 The Company may require that you do not:

18.2.1 enter or attend the premises of the Company or any other Group Company;

18.2.2 retain or seek to obtain any access to electronic systems or devices owned or operated by the Company or a Group Company;

18.2.3 contact or have any communication with any customer or client of the Company or any other Group Company in relation to the business of the Company or any other Group Company;

18.2.4 contact or have any communication with any employee, officer, director, agent or consultant of the Company or any other Group Company in relation to the business of the Company or any other Group Company; and/or

18.2.5 remain or become involved in any aspect of the business of the Company or any other Group Company except as required by such companies.

18.3 The Company may require you to immediately resign from any directorship, trusteeships or other offices which you hold in the Company, any other Group Company or any other company where such directorship or other office is held as a consequence or requirement of your Employment, unless you are required to perform duties to which any such directorship, trusteeship or other office relates in which case you may retain such directorships, trusteeships or other offices while those duties are ongoing. You hereby irrevocably appoint the Company to be your attorney to execute any instrument and do anything in your name and on your behalf to affect your resignation if you fail to do so in accordance with this clause 18.3.

18.4 During the Garden Leave Period, you will be entitled to receive your salary and all contractual benefits (excluding bonuses) in accordance with the terms of this agreement. Any unused holiday accrued at the commencement of the Garden Leave Period and any holiday accrued during any such period will be deemed to be taken by you during the Garden Leave Period.

18.5 During the Garden Leave Period all duties of your Employment (whether express or implied) including without limitation your duties of fidelity, good faith and exclusive service, shall continue throughout the Garden Leave Period.

18.6 At the end of the Garden Leave Period, the Company may, at its sole and absolute discretion, pay to you Basic Salary alone in lieu of the balance of any period of notice given by the Company or you (less deductions of income tax, national insurance contributions, other statutory deductions and other agreed deductions).

18.7 During the Garden Leave Period:

18.7.1 you shall provide such assistance as the Company or any Group Company may require to effect an orderly handover of your responsibilities to any individual or individuals appointed by the Company or any Group Company to take *over* your role or responsibilities;

18.7.2 you shall make yourself available to deal with requests for information, provide assistance, be available for meetings and to advise on matters relating to work (unless the Company has agreed that you may be unavailable for a period); and

18.7.3 the Company may appoint another person to carry out your duties in substitution for you.

19 Disciplinary Rules

19.1 The Company's dismissal, disciplinary and grievance procedures as set out in the Company's Disciplinary Policy and Grievance Policy are applicable to you. These procedures are non-contractual.

19.2 The following are examples of conduct which is not acceptable to the Company and which may result in disciplinary action being taken against you. The list is intended as guidance only and should not be considered exhaustive:

- failure to meet the required standards of work performance;
- poor time keeping;
- failure to keep records relating to your working time where required by the Company;
- smoking in "No Smoking" areas within the work-place;
- falsification of records;
- failure to comply with the Company's health and safety policy;
- unauthorised use of Company property;
- unauthorised disclosure of confidential information;
- insubordination.

19.3 Examples of gross misconduct are serious incidents of any of the matters listed above and, by way of further example, the following:

- acts of discrimination or harassment (including,but not limited to, breaches of the Company's Equal Opportunities or Anti-bullying and harassment policies in force from time to time);
- theft or dishonesty;
- disorderly conduct including fighting or threatening physical violence;
- being under the influence of alcohol or illegal drugs during working hours;
- intentional damage to Company property or that of other employees;
- serious breach of confidence;
- a material breach of the Confidentiality Statement; and
- failure to comply with the Rules of the Financial Conduct Authority.

19.4 The Company reserves the right to suspend you from employment with pay for a reasonable period while investigating any alleged breach of the Company's disciplinary rules.

19.5 If you are disciplined for a failure to meet the required standards of work performance, the Company may move you to suitable alternative work, if this is available.

19.6 If you are found to have committed any act of gross misconduct, the Company may terminate your employment immediately without notice and without pay in lieu of notice.

20 Return of Company Property

When your Employment ends, or at any other time if you are requested to do so, you must return to the Company all property belonging or relating to the Company or any

Group Company in good condition. If you commence Garden Leave in accordance with clause 18 you may be required to comply with the provisions of this clause 20.

21 Restrictions after Termination of Employment

21.1 In this clause:

21.1.1 "Demonstrable Steps" means any steps the Company or any Group Company has taken in actively and directly seeking to supply its services to any person during the last 12 months of your Employment.

21.1.2 "Relevant Date" means the Termination Date or, if earlier, the date on which you commence any Garden Leave Period.

21.1.3 "Restricted Business" means any business:

(i) that is engaged in the design, development, operation or promotion of an electronic platform or electronic commerce network (ECN) for credit products, fixed income securities, information research, distribution, trading and/or other transactions; and/or

(ii) whose principal business is electronic distribution, research and/or trading of credit product fixed income securities; and/or

(iii) whose principal business is regulatory transaction reporting, trade matching and/or the collection and dissemination of market data, **in** each case whether for fixed income or other types of securities;

but does not include:

(iv) your ownership of not more than 1% of the total issued shares of a publicly held company;

(v) your performance of services for any business to the extent that such services do not otherwise fall within paragraphs (i) or (ii) of this sub clause (including, without limitation, your performance of services for any entity which has a division or business unit engaging in competition with the Company's business, if such performance does not in any capacity, directly or indirectly, involve work with or assistance to such division or business unit); or

(vi) any activity engaged in by you with the prior written approval of the Board.

21.1.4 "Restricted Period" means the period of 6 months less any Garden Leave Period imposed by the Company under clause 18 commencing on the Termination Date.

21.2 You are likely to obtain trade secrets and confidential information and personal knowledge of and influence over clients and employees of the Group during the course of the Employment. To protect these interests of the Company, you agree with the Company that you will be bound by the following covenants:

21.2.1 During the Restricted Period you will not be employed in, or carry on for your own account or for any other person, whether directly or indirectly (or be a director of any company engaged in), any business which is involved in the Restricted Business which is or is about to be in competition with any business of the Company or any other Group Company being carried on by such company at the Relevant Date provided you were concerned or connected with that business to a material extent at any time during the last 12 months prior to the Relevant Date.

21.2.2 During the Restricted Period you will not (either on your own behalf or for or with any other person), whether directly or indirectly, canvass or solicit in competition with the Company or any other Group Company the custom of any person who at any time during the last 6 months prior to the Relevant Date was a client of, or in the habit of dealing with, the Company or (as the case may be) any other Group Company, or in relation to which the Company or any Group Company had taken Demonstrable Steps, and in respect of whom you had access to confidential information or with whose custom or business you were personally concerned.

21.2.3 During the Restricted Period you will not (either on your own behalf or for or with any other person, whether directly or indirectly), deal with or otherwise accept in competition with the Company or any Group Company the custom of any person who was at any time during the last 6 months prior to the Relevant Date a client of, or in the habit of dealing with, the Company or (as the case may be) any Group Company, or in relation to which the Company or any Group Company had taken Demonstrable Steps, and in respect of which you had access to confidential information or with whose custom or business you were personally concerned.

21.2.4 During the Restricted Period you will not (either on your own behalf or for or with any other person, whether directly or indirectly), entice or try to entice away from the Company or any other Group Company any person who was a non clerical employee of such a company at the Termination Date and who had been a non-clerical employee at any time during your last 6 months prior to the Relevant Date and with whom you had worked closely at any time during that period.

21.3 Each of the paragraphs contained in clause 21.2 constitutes an entirely separate and independent covenant. If any covenant is found to be invalid this will not affect the validity or enforceability of any of the other covenants.

21.4 Following the Termination Date, you will not represent yourself as being in any way connected with the businesses of the Company or of any other Group Company (except to the extent agreed by such a company).

21.5 Any benefit given or deemed to be given by you to any Group Company under the terms of this clause 21 is received and held on trust by the Company for the relevant Group

Company. You will enter into appropriate restrictive covenants directly with other Group Companies if asked to do so by the Company.

22 Data Protection Act 1998

22.1 For the purposes of the Data Protection Act 1998 (the **"Act")** you give your consent to the holding, processing and disclosure of your personal data (including sensitive personal data within the meaning of the Act) provided by you to the Company for all purposes relating to the performance of this contract of employment including, but not limited to:

22.1.1 administering and maintaining personnel records;

22.1.2 paying and reviewing salary and other remuneration and benefits;

22.1.3 providing and administering benefits (including if relevant, pension, life assurance, permanent health insurance and medical insurance);

22.1.4 undertaking performance appraisals and reviews;

22.1.5 maintaining sickness and other absence records;

22.1.6 taking decisions as to your fitness for work;

22.1.7 providing references and information to future employers, and if necessary, governmental and quasi-governmental bodies for social security and other purposes, the Inland Revenue and the Contributions Agency;

22.1.8 equal opportunities monitoring;

22.1.9 providing information to future purchasers of the Company or of the business in which you work;

22.1.10 transferring information concerning you to a country or territory outside the European Economic Area (and subsequent processing, including as provided elsewhere in this clause 22.1);

22.1.11 monitoring registrations you have with any regulatory bodies to ensure compliance, training, examination and other requirements are met; and

22.1.12 administration of disciplinary and grievance procedures.

22.2 You acknowledge that during the Employment you will have access to and process, or authorise the processing of, personal data and sensitive personal data relating to employees, customers and other individuals held and controlled by the Company.

22.3 You agree to comply with the terms of the Act (and any other relevant legislation in force from time to time) and to abide by the Company's data protection policy issued from time to time.

23 Personal Account Transactions

You acknowledge that the Company has drawn to your attention its written notice setting out the restrictions upon the Company's employees undertaking personal account transactions, as defined in the Financial Conduct Authority Handbook (the "Restrictions"). You acknowledge that the Restrictions will apply to you. You will comply with the Restrictions for the duration of this agreement.

24 Offers on Liquidation

24.1 You will have no claim against the Company if your Employment is terminated by reason of liquidation in order to reconstruct or amalgamate the Company or by reason of any reorganisation of the Company and:

24.1.1 you are offered employment with the company succeeding to the Company upon such liquidation or reorganisation; and

24.1.2 the new terms of employment offered to you are no less favourable to you than the terms of this agreement.

25 Notices

25.1 Any notices given under this agreement must be given by letter or fax. Notice to the Company must be addressed to its registered office at the time the notice is given. Notice provided to you by the Company shall be given personally or sent to your last known address.

25.2 Except for notices given by hand, notices given by post will be deemed to have been given on the next working day after the day of posting and notices given by fax will be deemed to have been given in the ordinary course of transmission.

26 Statutory Particulars

This contract and the attached Appendix contain the written particulars of employment which you are entitled to receive under the Employment Rights Act 1996.

27 Whole Agreement

This contract of employment supersedes any previous arrangements, whether oral or in writing, between the Company and you in relation to the matters dealt with in it. This contract of employment (and any agreement referred to in it including the Confidentiality Statement) contains the whole agreement between the Company and you relating to your employment at the date the contract of employment was entered into (except for those terms implied by law which cannot be excluded by the agreement of the parties).

28 Contracts (Rights of Third Parties) Act 1999

To the extent permitted by law and with the exception of the Group Companies, a person who is not a party to this contract of employment has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this contract of employment. This does not affect any right or remedy of a third party which exists and is available under any separate rules or provisions.

29 Waiver

29.1 Neither party's rights or powers under this agreement will be affected if:

29.1.1 one party delays in enforcing any provision of this agreement; or

29.1.2 one party grants time to the other party.

29.2 If either party agrees to waive his rights under a provision of this agreement, that waiver will only be effective if it is in writing and it is signed by him. A party's agreement to waive any breach of any term or condition of this agreement will not be regarded as a waiver of any subsequent breach of the same term or condition or a different term or condition.

30 Governing Law & Jurisdiction

This contract of employment and any documents to be entered in pursuant to it, save as expressly referred to therein, and any non-contractual obligations arising out of or in connection with it and any such documents shall be governed by the law of England and Wales. The Company and you irrevocably agree that the courts of England are to have exclusive jurisdiction to settle any dispute arising out of or in connection with this contract of employment and any documents to be entered into pursuant to it. The Company and you irrevocably submit to the jurisdiction of such courts and waive any objection to proceedings in any such court on the ground of venue or on the ground that proceedings have been brought in an inconvenient forum.

/s/ Richard M. McVey

Director

SIGN ED as a DEED by

MEARK TAXESS EUROPE LIMITED
a director; In the presence of

Witness signature
Name:
Address
Occupation

SIGNED as a DEED by

Christophe Roupie /s/ Christophe Roupie
In the presence of Employee

Witness signature
Name: /s/ Sarah Tennant
Address
Occupation Licensed Associate

APPENDIX 1

The Company is required by law to give you details of the following matters pursuant to the Employment Rights Act 1996, as amended. These particulars do not form part of your contract of employment.

Collective Agreements

There are no collective agreements in force which affect the terms and conditions of your employment.

Exhibit 31.1

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: April 27, 2017

Exhibit 31.2

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: April 27, 2017

Exhibit 32.1

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 March 31, 2017

In connection with the Quarterly Report on Form 10-Q of MarketAxess Holdings Inc. (the "Company") for the quarter ended March 31, 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

April 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.

Exhibit 32.2

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 March 31, 2017

In connection with the Quarterly Report on Form 10-Q of MarketAxess Holdings Inc. (the "Company") for the quarter ended March 31, 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

April 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.