UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)		
		SECTION 13 OR 15(d) OF THE IGE ACT OF 1934
For the quarter	ly period ende	d March 31, 2024
	or	
	PURSUANT TO	O SECTION 13 or 15(d) OF THE IGE ACT OF 1934 n to
Commiss	ion File Numb	er 001-34091
Delaware (State or other jurisdiction of		52-2230784 (IRS Employer
incorporation or organization) 55 Hudson Yards, 15th Floor Ne New York (Address of principal executive off	w York,	Identification No.) 10001 (Zip Code)
		ng area code: (212) 813-6000
Securities registered pursuant to S Title of each class	ection 12(b) of the Trading Symbol	e Act: Name of each exchange on which registered
Common Stock, \$0.003 par value	MKTX	NASDAQ Global Select Market
Indicate by check mark whether t	he 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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter)

such filing requirements for the past 90 days. Yes \square No \square

during the preceding 1 such files). Yes \square	.2 months (or for such shorter period that t No $\ \square$	he registrant was required to submit
non-accelerated filer, s	mark whether the registrant is a large accommaller reporting company, or an emerging er," "accelerated filer", "smaller reporting 2 of the Exchange Act.	g growth company. See definition of
Large accelerated		
filer	\boxtimes	Accelerated filer
Non-accelerated filer		Smaller reporting company
Emerging growth company		
the extended transition provided pursuant to S	owth company, indicate by check mark if to period for complying with any new or revocation 13(a) of the Exchange Act. mark whether the registrant is a shell company of the Exchange Act.	vised financial accounting standards
5 ,	4, the number of shares of the Registrant'	s voting common stock outstanding

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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, 2024 (In thousands and per sha		December 31, 2023		
ASSETS					
Cash and cash equivalents	\$	376,679	\$	451,280	
Cash segregated under federal regulations		45,629		45,122	
Investments, at fair value		135,831		134,861	
Accounts receivable, net of allowance of \$638 and \$577 as of March 31, 2024 and December 31, 2023, respectively		99,878		89,839	
Receivables from broker-dealers, clearing organizations and customers		662,888		687,936	
Goodwill		236,706		236,706	
Intangible assets, net of accumulated amortization Furniture, equipment, leasehold improvements and capitalized software, net of		113,576		119,108	
accumulated depreciation and amortization		107,239		102,671	
Operating lease right-of-use assets		62,006		63,045	
Prepaid expenses and other assets		86,531		84,499	
Total assets	\$	1,926,963	\$	2,015,067	
LIABILITIES AND STOCKHOLDERS' EQUITY Liabilities					
Accrued employee compensation		28,665		60,124	
Payables to broker-dealers, clearing organizations and customers		465,703		537,398	
Income and other tax liabilities		2,931		7,892	
Accounts payable, accrued expenses and other liabilities		33,361		37,013	
Operating lease liabilities		78,070		79,677	
Total liabilities	\$	608,730	\$	722,104	
Commitments and Contingencies (Note 13)					
Stockholders' equity					
Preferred stock, \$0.001 par value, 4,855,000 shares authorized, no shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively		_		_	
Series A Preferred Stock, \$0.001 par value, 110,000 shares authorized, no shares issued and outstanding as of March 31, 2024 and December					
31, 2023, respectively		_		_	
Common stock voting, \$0.003 par value, 110,000,000 shares authorized, 41,022,506 shares and 40,940,769 shares issued and 37,938,337 shares and		123		123	

37,899,688 shares outstanding as of March 31, 2024 and December 31, 2023, respectively		
Common stock non-voting, \$0.003 par value, 10,000,000 shares authorized, no shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively	_	_
Additional paid-in capital	327,519	333,292
Treasury stock - Common stock voting, at cost, 3,084,169 shares and 3,041,081 shares as of March 31, 2024 and December 31, 2023,		
respectively	(269,005)	(260,298)
Retained earnings	1,288,247	1,244,216
Accumulated other comprehensive loss	(28,651)	(24,370)
Total stockholders' equity	1,318,233	 1,292,963
Total liabilities and stockholders' equity	\$ 1,926,963	\$ 2,015,067

MARKETAXESS HOLDINGS INC. CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

Three Months Ended March 31, 2023 (In thousands, except per share amounts) Revenues Commissions 184,873 \$ 181,991 Information services 11,881 11,010 Post-trade services 10,730 9,980 Technology services 2,834 188 203,169 **Total revenues** 210,318 **Expenses** 52,315 Employee compensation and benefits 61,264 Depreciation and amortization 18,200 16,461 Technology and communications 17,051 14,999 Professional and consulting fees 7,127 6,395 Occupancy 3,425 3,611 Marketing and advertising 2,995 1,833 Clearing costs 4,911 4,545 4,739 5,760 General and administrative 117,818 107,813 **Total expenses Operating income** 92,500 95,356 Other income (expense) Interest income 5,973 4,249 (130)Interest expense (316)Equity in earnings of unconsolidated 370 204 affiliate Other, net (1,810)(1,484)4,217 2,839 **Total other income (expense)** 96,717 **Income before income taxes** 98,195 Provision for income taxes 24,102 24,567 72,615 73,628 \$ \$ Net income Net income per common share Basic 1.92 1.96 \$ \$ Diluted \$ 1.92 \$ 1.96 Cash dividends declared per common share \$ 0.74 0.72 Weighted average shares outstanding Basic 37,740 37,478 Diluted

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

37,790

37,645

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

	Three Months Ended March 31,				
	2024 202			2023	
)			
Net income	\$	72,615	\$	73,628	
Cumulative translation adjustment		(4,241)		5,755	
Net unrealized (loss) on securities available-for-sale, net of tax of \$33 and \$14, respectively		(40)		(41)	
Comprehensive income	\$	68,334	\$	79,342	

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

				Treasury				
	_			Stock -		Ac	cumulate	
			Additional		D.1.1.1	•	Other	Total
		ock ting	Paid-In Capital	Stock Voting	Retained Earnings	Co	mprenens Loss	s Ste ckholders' Equity
		ung			ept per shai			Equity
Balance at January 1,			(III tilot	isaiius, exc	ept per snai	le a	iniounts)	
2024	\$	123	\$ 333,292	\$(260,298)	\$1,244,216	\$	(24,370)	\$1,292,963
Net income		_	_	_	72,615		_	72,615
Cumulative translation adjustment		_	_	_	_		(4,241)	(4,241)
Unrealized net gain (loss) on securities available-								,
for-sale, net of tax		_	_	_	_		(40)	(40)
Stock-based			7 200					7 200
compensation	_	_	7,298	_	_		_	7,298
Exercise of stock options	5	_	1,977	_	_		_	1,977
Withholding tax payments on full value awards vesting and stock option exercises		_	(14,893)	_	_		_	(14,893)
Reissuance of treasury stock		_	(155)	1,440	(581)		_	704
Repurchases of common stock		_	_	(10,147)	_		_	(10,147)
Cash dividend on common stock (\$0.74 per share)		_	_	_	(28,003)		_	(28,003)
Balance at March 31, 2024	\$	123	\$ 327,519	\$(269,005)	\$1,288,247	\$	(28,651)	\$1,318,233

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

			Additiona	Treasury 1Stock		Accumulate	d
	Comm	on		Common		Other	u Total
	Stoc		In	Stock		Comprehens	s Ste ckholders'
	Votin		Capital	Voting	Earnings	Loss	Equity
		((In thousa	nds, excep	t per shar	e amounts)	
Balance at January 1, 2023	\$	123	\$ 345,468	\$ (328,326) \$ 1,101,52	25\$ (37,697)	\$ 1,081,093
Net income		_		_	73,628	_	73,628
Cumulative translation adjustment		_	_	_	_	5,755	5,755
Unrealized net gain (loss) on securities available-for-							
sale, net of tax		_	_	_	_	(41)	(41)
Stock-based compensation		_	7,488	_	_	_	7,488
Reissuance of treasury stock		_	(57)	511	_	_	454
Exercise of stock options		_	707	_	_	_	707
Withholding tax payments on full value awards vesting and			(20.402)				(20.402)
stock option exercises		_	(20,492)) —	_	_	(20,492)
Cash dividend on common stock (\$0.72 per share)		_	_	_	(27,060)) —	(27,060)
Balance at March 31, 2023	\$	123	\$ 333,114	\$ (327,815) \$ 1,148,09	93\$ (31,983)	\$ 1,121,532

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

	Th	Three Months Ended March 31,			
		2024		2023	
		(In thou	ısan	ds)	
Cash flows from operating activities					
Net income	\$	72,615	\$	73,628	
Adjustments to reconcile net income to net cash provided by operating activities:	J				
Depreciation and amortization		18,200		16,461	
Amortization of operating lease right-of-use assets		1,599		1,368	
Stock-based compensation expense		7,103		7,488	
Deferred taxes		(1,338)		(1,433	
Foreign currency transaction losses		187		1,699	
Other		1,730		(2,532	
Changes in operating assets and liabilities:					
(Increase) in accounts receivable		(10,491)		(21,935	
Decrease/(increase) in receivables from broker-dealers, clearing		04 505		(50.540	
organizations and customers		21,735		(52,549	
(Increase)/decrease in prepaid expenses and other assets		(1,323)		3,163	
Decrease/(increase) in trading investments		255		(419	
(Increase) in mutual funds held in rabbi trust		(529)		(630	
(Decrease) in accrued employee compensation		(29,017)		(31,567	
(Decrease)/increase in payables to broker-dealers, clearing organizations and customers		(71,135)		12,281	
(Decrease)/increase in income and other tax liabilities		(4,001)		10,904	
(Decrease) in accounts payable, accrued expenses and other liabilities		(8,385)		(6,838	
(Decrease) in operating lease liabilities		(2,154)		(1,562	
Net cash (used in)/provided by operating activities		(4,949)		7,527	
Cash flows from investing activities					
Available-for-sale investments					
Proceeds from maturities and sales		4,302		1,048	
Purchases		(4,972)		(22,895	
Purchases of furniture, equipment and leasehold improvements		(1,197)		(217	
Capitalization of software development costs		(13,963)		(10,690	
Net cash (used in) investing activities		(15,830)		(32,754	
Cash flows from financing activities					
Cash dividend on common stock		(29,480)		(28,357	
Exercise of stock options		1,977		707	
Withholding tax payments on full value awards vesting and stock option exercises		(14,893)		(20,492	
Repurchases of common stock		(10,147)		_	
Proceeds from short-term borrowings		_		50,000	
Repayments of short-term borrowings		_		(50,000	
Net cash (used in) financing activities		(52,543)		(48,142	
Effect of exchange rate changes on cash and cash equivalents		(3,186)		3,345	
Cash and cash equivalents including restricted cash		(=,===)		2,010	
Net decrease for the period		(76,508)		(70,024	
Beginning of period		611,672		572,664	
	\$	535,164	\$	502,640	
End of period	Ψ		<u> </u>		

Supplemental cash flow information		
Cash paid for income taxes	\$ 37,187	\$ 11,660
Cash paid for interest	431	187
Non-cash investing and financing activity		
Operating lease right-of-use assets obtained in exchange for operating lease liabilities	630	_
Furniture, equipment, software and leasehold improvement additions included in accounts payable	4,825	_
Stock-based and accrued incentive compensation relating to capitalized		
software development costs	921	_
Exercise of stock options - cashless	1,735	_

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 leading electronic trading platforms delivering expanded liquidity opportunities, improved execution quality and significant cost savings across global fixed-income markets. Over 2,000 institutional investor and broker-dealer firms are active users of MarketAxess' patented trading technology, accessing global liquidity on its platforms in U.S. high-grade bonds, U.S. high-yield bonds, emerging market debt, Eurobonds, municipal bonds, U.S. government bonds and other fixed-income securities. Through its Open Trading® protocols, MarketAxess executes bond trades between and among institutional investor and brokerdealer clients in the leading all-to-all anonymous trading environment for corporate bonds. MarketAxess also offers a number of trading-related products and services, including: CP+™ pricing and other market data products to assist clients with trading decisions; autoexecution and other execution services for clients requiring specialized workflow solutions; connectivity solutions that facilitate straight-through processing; and technology services to optimize trading environments. The Company also provides a range of pre- and post-trade services, including post-trade matching, trade publication, 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, 2023. The consolidated financial information as of December 31, 2023 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.

Cash and Cash Equivalents

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. Available-for-sale investments are carried at fair value with unrealized gains or losses reported in accumulated other comprehensive loss in the Consolidated Statements of Financial Condition and realized gains or losses reported in other, net in the Consolidated Statements of Operations. Trading investments include U.S. Treasuries and are carried at fair value, with realized and unrealized gains or losses included in other, net in the Consolidated Statements of Operations.

The Company assesses whether an impairment loss on its available-for-sale debt securities has occurred due to declines in fair value or other market conditions. When the amortized cost basis of an available-for-sale debt security exceeds its fair value, the security is deemed to be impaired. The portion of an impairment related to credit losses is determined by comparing the present value of cash flows expected to be collected from the security with the amortized cost basis of the security and is recorded as a charge in the Consolidated Statements of Operations. The remainder of an impairment 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.

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, trading securities, available-for-sale securities, foreign currency forward contracts and contingent consideration payables associated with acquisitions. All other financial instruments are short-term in nature and the carrying amounts reported on the Consolidated Statements of Financial Condition approximate fair value.

Receivables from and Payables to Broker-dealers, Clearing Organizations and Customers

Receivables from broker-dealers, clearing organizations and customers include amounts receivable for securities not delivered by the Company to the purchaser by the settlement date ("securities failed-to-deliver") and cash deposits held at clearing organizations and clearing brokers to facilitate the settlement and clearance of matched principal transactions. Payables to broker-dealers, clearing organizations and customers include amounts payable for securities not received by the Company from a seller by the settlement date ("securities failed-to-receive"). Securities failed-to-deliver and securities failed-to-receive for transactions executed on a matched principal basis where the Company serves as a counterparty to both the buyer and the seller are recorded on a settlement date basis. The Company presents its securities failed-to-deliver and securities failed-to-receive balances on a net-by-counterparty basis within receivables from and payables to broker-dealers, clearing organizations and customers. The difference between the Company's trade-date receivables and payables for unsettled matched principal transactions reflects commissions earned and is recorded within accounts receivable, net on a trade date basis.

Allowance for Credit Losses

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 credit losses is based on the estimated expected credit losses in accounts receivable, as determined from a review of aging schedules, past due balances, historical collection experience and other specific collection issues that have been identified. Account balances are grouped for evaluation based on various risk characteristics, including billing type, legal entity, and geographic region. Additions to the allowance for credit losses are charged to bad debt expense, which is included in general and administrative expense in the Company's Consolidated Statements of Operations. Balances that are determined to be uncollectable are written off against the allowance for credit losses.

The allowance for credit losses was \$0.6 million as of each of March 31, 2024 and December 31, 2023. The provision for bad debts for the three months ended March 31, 2024 and 2023 was \$0.1 million and \$0.2 million, respectively. Write-offs and other charges against the allowance for credit losses were immaterial for each of the three months ended March 31, 2024 and 2023.

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 to five 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.

Cloud Computing Costs

The Company capitalizes certain costs associated with cloud computing arrangements, including, among other items, vendor software development costs billed to us that are part of the application development stage. These costs are recorded as a prepaid asset on the Consolidated Statements of Financial Condition and are amortized over the period of the hosting service contract, which ranges from one to five 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.

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 other, net in the Consolidated Statements of Operations.

The Company enters into foreign currency forward contracts to economically hedge its foreign currency transaction gains and losses. Realized and unrealized gains and losses on these forward contracts are included in other, net in the Consolidated Statements of Operations. The Company records the fair value of the forward contract asset in prepaid expenses and other assets or the fair value of the forward contract liability in accounts payable, accrued expenses and other liabilities in the Consolidated Statements of Financial Condition.

Revenue Recognition

The Company's classification of revenues in the Consolidated Statements of Operations represents revenues from contracts with customers disaggregated by type of revenue. The Company has four revenue streams as described below.

Commission Revenue – The Company charges its broker-dealer clients variable transaction fees for trades executed on its platforms and, under certain plans, distribution fees or monthly minimum fees to use the platforms for a particular product area. Variable transaction fees are recognized on a trade date basis, are generally calculated as a percentage of the notional dollar volume of bonds traded on the platforms and vary based on the type, size, yield and maturity of the bond traded, as well as individual client incentives. Bonds that are more actively traded or that have shorter maturities generally generate lower commissions, while bonds that are less actively traded or that have longer maturities generally command higher commissions. Under the Company's disclosed trading transaction fee plans, variable transaction fees, distribution fees and unused monthly fee commitments are invoiced and recorded on a monthly basis.

For Open Trading 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 its commission through the difference in price between the two trades. The commission is collected upon settlement of the trade, which typically occurs within one to two trading days after the trade date. For the majority of the Company's U.S. Treasury matched principal trades, commissions are invoiced and recorded on a monthly basis.

As a result of its acquisition of Pragma LLC and Pragma Financial Systems LLC (collectively, "Pragma") in the fourth quarter of 2023, the Company also earns other commissions on equities and foreign exchange products for algorithmic trading services. These fees incorporate variable transaction fees, which are calculated as a percentage of the notional dollar volume traded and are billed on a monthly basis.

The following table presents commission revenue by fee type:

		Three Months Ended March 31,				
	_	2024 2023				
	_	(In thousands)				
Commission revenue by fee type						
Variable transaction fees						
Disclosed trading	\$	94,778	\$	88,128		
Open Trading - matched principal trading		48,180		54,236		
U.S. government bonds - matched principal trading		3,712		4,864		
Other		4,849		_		
Total variable transaction fees		151,519		147,228		
Distribution fees and unused minimum fees		33,354		34,763		
Total commissions	\$	184,873	\$	181,991		

Information services - Information services includes data licensed to the Company's broker-dealer clients, institutional investor clients and data-only subscribers; professional and consulting services; technology software licenses; and maintenance and support services. The nature and timing of each performance obligation may vary as these contracts are either subscription-based services transferred over time, and may be net of volume-based discounts, or one-time services that are transferred at a point in time. Revenues for services transferred over time are recognized ratably over the contract period as the Company's performance obligation is met, whereas revenues for services transferred at a point in time are recognized in the period the services are provided. Customers are generally billed monthly, quarterly, or annually; revenues billed in advance are deferred and recognized ratably over the contract period. The following table presents information services revenue by timing of recognition:

	Three Months Ended March 31,					
	2024 2023					
		(In thou	sands)		
Information services revenue by timing of recognition						
Services transferred over time	\$	11,874	\$	10,659		
Services transferred at a point in time		7		351		
Total information services revenues	\$	11,881	\$	11,010		

Post-trade services - Post-trade services revenue is generated from regulatory transaction reporting, trade publication and post-trade matching services. Customers are generally billed monthly in arrears, and revenue is recognized in the period transactions are processed. Revenues billed in advance are deferred and recognized ratably over the contract period. The Company also generates one-time implementation fees for onboarding clients, which are invoiced and recognized in the period the implementation is completed. The following table presents post-trade services revenue by timing of recognition:

	Three Months Ended March 31,					
	2024 2023			2023		
		(In thou	sands	3)		
Post-trade services revenue by timing of						
recognition						
Services transferred over time	\$	10,540	\$	9,955		
Services transferred at a point in time		190		25		
Total post-trade services revenues	\$	10,730	\$	9,980		

Technology services - Technology services revenue primarily includes technology services revenue generated by Pragma and revenue from telecommunications line charges to broker-dealer clients. Customers may be billed monthly or quarterly in arrears or in advance, and revenue is recognized in the period transactions are processed. Revenues billed in advance are deferred and recognized ratably over the contract period.

The following table presents technology services revenue by timing of recognition:

	T	Three Months Ended March 31,					
	2024 2023						
		(In thou	sands)				
Technology services revenue by timing of recognition							
Services transferred over time	\$	2,830	\$	188			

Services transferred at a point in time	4	_
Total technology services revenues	\$ 2,834	\$ 188

Contract liabilities consist of deferred revenues that the Company records when cash payments are received or due in advance of services to be performed. Deferred revenues are included in accounts payable, accrued expenses and other liabilities on the Consolidated Statements of Financial Condition. The revenue recognized from contract liabilities and the remaining balance is shown below:

	Dece	ember 31, 2023	rece adv servi	yments eived in ance of ces to be formed (In	•		for services erformed Foreign uring the Currency period Translation			rch 31, 2024
Information services	\$	3,049	\$	3,437	\$	(3,544)	\$	_	\$	2,942
Post-trade services		923		6,498		(5,487)		(7)		1,927
Technology services		567		2,014		(2,110)		_		471
Total deferred revenue	\$	4,539	\$	11,949	\$	(11,141)	\$	(7)	\$	5,340

Darrania

The majority of the Company's information services and post-trade services contracts are short-term in nature with durations of less than one year. For contracts with original durations extending beyond one year, the aggregate amount of the transaction price allocated to remaining performance obligations was \$66.1 million as of March 31, 2024. The Company expects to recognize revenue associated with the remaining performance obligations over the next 55 months.

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. Forfeitures are recognized as they occur.

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. Tax benefits for uncertain tax positions are recognized when it is more likely than not that the positions will be sustained upon examination based on their technical merits. The Company recognizes interest and penalties related to unrecognized tax benefits in the provision for income taxes in the Consolidated Statements of Operations. All tax effects related to share-based payments are recorded in the provision for income taxes 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 requires judgment and often involves the use of significant estimates and assumptions, including assumptions with respect to future cash flows, discount rates, revenue growth rates, customer attrition rates, royalty rates, obsolescence and asset lives. Intangible assets are valued using various methodologies, including the relief-from-royalty method and multi-period excess earnings method.

The Company operates as a single reporting unit. Following 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 over their estimated useful lives which range from one

years using either a straight-line or accelerated amortization method based on the pattern of economic benefit the Company expects to realize from such assets. Intangible assets are assessed for impairment when events or circumstances indicate the existence of a possible impairment.

Equity Investments and Consolidation

The Company evaluates equity investments for potential consolidation under the voting-interest or variable-interest models. The Company consolidates investees over which the Company determines it has control under the voting interest model, generally greater than 50% ownership, or for which the Company is the primary beneficiary under the variable-interest model. The Company uses the equity method of accounting when it exercises significant influence over the investee, but does not have operating control, generally between 20% and 50% ownership. Under the equity method of accounting, original investments are recorded at cost in prepaid expenses and other assets on the Consolidated Statements of Financial Condition and adjusted by the Company's proportionate share of the investees' undistributed earnings or losses. Equity investments are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable.

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.

Recent Accounting Pronouncements

In December 2023, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures. The ASU requires disaggregated information about a reporting entity's effective tax rate reconciliation and income taxes paid. The ASU is effective for the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2025. The guidance may be applied on a prospective or retrospective basis and early adoption is permitted. The Company is currently evaluating the impact of adopting this ASU on its consolidated financial statements.

In November 2023, FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. The ASU expands public entities' segment disclosures by requiring disclosure of significant segment expenses that are regularly reviewed by the chief operating decision maker ("CODM") and included within each reported measure of segment profit or loss, an amount and description of its composition for other segment items and interim disclosures of a reportable segment's profit or loss and assets. The ASU also requires the disclosure of the title and position of the CODM and an explanation of how the CODM uses the reported measure(s) of segment profit or loss in assessing segment performance and deciding how to allocate resources. All disclosure requirements under ASU 2023-07 and existing segment disclosures in ASC 280, Segment Reporting are also required for public entities with a single reportable segment. The ASU is effective for the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2024, and subsequent interim periods, with early adoption permitted. The ASU must be applied retrospectively to all periods presented in the financial statements. The Company is currently evaluating the impact of adopting this ASU on its consolidated financial statements.

3. Regulatory Capital Requirements

Certain of the Company's U.S. subsidiaries are registered as broker-dealers and therefore are subject to the applicable rules and regulations of the SEC and the Financial Industry Regulatory Authority ("FINRA"). These rules contain minimum net capital requirements, as defined in the applicable regulations. Certain of the Company's foreign subsidiaries are regulated by the Financial Conduct Authority ("FCA") in the United Kingdom ("U.K.") or other foreign regulators and must maintain financial resources, as defined in the applicable regulations, in excess of the applicable financial resources requirement. As of March 31, 2024, 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, 2024, the Company's subsidiaries maintained aggregate net capital and financial resources that were \$545.0 million in excess of the required levels of \$35.7 million.

One of the Company's U.S. broker-dealer subsidiaries is required to segregate funds in a special reserve bank account for the benefit of customers pursuant to Rule 15c3-3 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). As of March 31, 2024, this U.S. broker-dealer subsidiary had a balance of \$45.6 million in its special reserve bank account. This U.S. broker-dealer subsidiary also maintained net capital that was \$304.5 million in excess of the required level of \$7.9 million.

Each of the Company's U.S. and foreign regulated subsidiaries are subject to local regulations which generally limit, or require the prior notification to or approval from such regulated entity's principal regulator before, the 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.

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	_1	Level 2 (In tho	Level 3 usands)		 Total
As of March 31, 2024			•		,	
Assets						
Money market funds	\$ 18,571	\$	_	\$	_	\$ 18,571
Securities available-for-sale						
Corporate debt	_		25,389		_	25,389
Trading securities						
U.S. Treasuries	_		99,427		_	99,427
Mutual funds held in rabbi trust	_		11,015		_	11,015
Total assets	\$ 18,571	\$	135,831	\$		\$ 154,402
Liabilities						
Foreign currency forward position	_		196		_	196
Total liabilities	\$ _	\$	196	\$		\$ 196
As of December 31, 2023						
Assets						
Money market funds	\$ 18,634	\$	_	\$	_	\$ 18,634

Securities available-for-sale

Corporate debt	_	24,694	_	24,694
Trading securities				
U.S. Treasuries	_	99,682	_	99,682
Mutual funds held in rabbi trust	_	10,485	_	10,485
Foreign currency forward position	_	1,901	_	1,901
Total assets	\$ 18,634	\$ 136,762	<u> </u>	\$ 155,396

Money market funds are included in cash and cash equivalents on the Consolidated Statements of Financial Condition. Securities available-for-sale and trading securities are included in investments, at fair value on the Consolidated Statements of Financial Condition. 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 included in either other assets or accounts payable, accrued expenses and other liabilities on the Consolidated Statements of Financial Condition, and 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 Company's deferred cash incentive plan.

The table below presents the carrying value, fair value and fair value hierarchy category of the Company's financial assets and liabilities that are not measured at fair value on the Consolidated Statements of Financial Condition. The carrying values of the Company's financial assets and liabilities not measured at fair value categorized in the fair value hierarchy as Level 1 and Level 2 approximate fair value due to the short-term nature of the underlying assets and liabilities.

	Carrying	Fair				
	<u>Value</u>	<u>Value</u>	Level 1 (In thou	Level 2	Level 3	Total
As of March 31, 2024						
Financial assets not measured at fair value:						
Cash	\$358,108	\$ 358,108	\$358,108	\$ —	\$ —	\$358,108
Cash segregated under federal regulations	l 45,629	45,629	45,629		_	45,629
Accounts receivable, net of allowance	99,878	99,878	_	99,878	_	99,878
Receivables from broker- dealers, clearing	662 999	662,888	112,713	550,175		662,888
organizations and customers		$\frac{002,888}{3}$ \$ 1,166,5		\$650,053	<u> </u>	\$1,166,503
Total	\$1,100,300	<u> </u>	<u></u>	\$030,033	-	\$1,100,303
Financial liabilities not measured at fair value:						
Payables to broker-dealers, clearing organizations and customers	\$465,703	\$465,703	<u>\$</u>	\$465,703	<u> </u>	\$465,703
·						
As of December 31, 2023						
Financial assets not measured at fair value:						
Cash	\$432,646	\$432,646	\$432,646	\$ —	\$ —	\$432,646
Cash segregated under federal regulations	l 45,122	45,122	45,122	_	_	45,122
Accounts receivable, net of allowance	89,839	89,839	_	89,839	_	89,839
Receivables from broker- dealers, clearing						
organizations and customers		687,936	115,151	572,785		_687,936
Total	<u>\$1,255,5</u> 43	3 <u>\$1,255,5</u> 43	3 <u>\$592,91</u> 9	\$662,624	<u>\$</u>	<u>\$1,255,5</u> 43

Financial liabilities not measured at fair value:

Payables to broker-dealers, clearing

organizations and customers $\frac{$537,398}{}$ $\frac{$537,398}{}$ $\frac{$}{}$ — $\frac{$537,398}{}$ $\frac{$}{}$ — $\frac{$537,398}{}$

During the three months ended March 31, 2024 and 2023 there were no transfers between Level 1, Level 2 and Level 3 securities.

The Company enters into foreign currency forward contracts as an economic hedge against certain foreign currency transaction gains and losses in the Consolidated Statements of Operations. These forward contracts are for three-month periods and are used to limit exposure to foreign currency exchange rate fluctuations. The Company records the fair value of the asset in prepaid expenses and other assets or the fair value of the liability in accounts payable, accrued expenses and other liabilities in the Consolidated Statements of Financial Condition. The following table summarizes the Company's foreign currency forward position:

	As of					
	March 3	1, 2024	December 3 2023			
		(In thous	sands)			
Notional value	\$	63,305	\$	61,858		
Fair value of notional		63,109		63,759		
Fair value of the (liability)/asset	\$	(196)	\$	1,901		

Realized and unrealized gains and losses on foreign currency forward contracts are included in other, net in the Consolidated Statements of Operations. The Company recorded a net realized gain of \$1.3 million and a net unrealized loss of \$2.1 million for the three months ended March 31, 2024. The Company recorded a net realized loss of \$1.7 million and a net unrealized gain of \$2.5 million for the three months ended March 31, 2023. The Company records collateral deposits with its counterparty bank in prepaid expenses and other assets on the Consolidated Statements of Financial Condition. As of March 31, 2024, the Company did not maintain a collateral deposit with its counterparty bank.

The following table summarizes the Company's investments:

	Ar	nortized cost	uni	Gross realized gains	unr	ross ealized osses	Fair value
				(In thou	sands	s)	
As of March 31, 2024							
Securities available-for-sale							
Corporate debt	\$	25,473	\$	25	\$	(109)	\$ 25,389
Trading securities							
U.S. Treasuries		99,682		_		(255)	99,427
Mutual funds held in rabbi trust		10,818		629		(432)	11,015
Total investments	\$	135,973	\$	654	\$	(796)	\$ 135,831
As of December 31, 2023							
Securities available-for-sale							
Corporate debt	\$	24,705	\$	55	\$	(66)	\$ 24,694
Trading securities							
U.S. Treasuries		99,236		446		_	99,682
Mutual funds held in rabbi trust		10,962		172		(649)	10,485
Total investments	\$	134,903	\$	673	\$	(715)	\$ 134,861

Purchases of investments during the three months ended March 31, 2024 and 2023 were \$5.0 million and \$22.9 million, respectively. Proceeds from the sales and maturities of

The following table summarizes the Company's unrealized and realized gains and losses on investments:

	Three Months Ended March 31,					
	2	024	2023			
		(In thou	sands)			
<u>Unrealized gains/(losses)</u>						
Securities available-for-sale						
Corporate debt	\$	(73)	\$	(55)		
Trading securities						
U.S. Treasuries		(255)		420		
Mutual funds held in rabbi trust		674		585		
Total investments	\$	346	\$	950		
Realized gains/(losses)						
Securities available-for-sale						
Corporate debt	\$	2	\$	(17)		
Trading securities						
Mutual funds held in rabbi trust		35		<u> </u>		
Total investments	\$	37	\$	(17)		

Unrealized gains and losses on securities available-for-sale are included in accumulated other comprehensive loss on the Consolidated Statements of Financial Condition. Realized gains and losses on securities available-for-sale and realized and unrealized gains and losses on trading securities are included in other, net on the Consolidated Statements of Operations.

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

	s than e year	Due in 1 - 5 years (In thousands)		 Total
As of March 31, 2024				
Securities available-for-sale				
Corporate debt	\$ 11,480	\$	13,909	\$ 25,389
Trading securities				
U.S. Treasuries	49,757		49,670	99,427
Mutual funds held in rabbi trust	11,015		_	11,015
Total	\$ 72,252	\$	63,579	\$ 135,831
As of December 31, 2023				
Securities available-for-sale				
Corporate debt	\$ 10,727	\$	13,967	\$ 24,694
Trading securities				
U.S. Treasuries	49,756		49,926	99,682
Mutual funds held in rabbi trust	10,485		<u> </u>	 10,485
Total	\$ 70,968	\$	63,893	\$ 134,861

The following table provides fair values and unrealized losses on the Company's available-for-sale investments and the aging of securities' continuous unrealized loss positions:

	Less than Twelve Months		Twelve Months or More		Total		
	Fair value	Gross unrealize losses	Gross d Fair unrealize value losses		ed Fair value	Gross unrealized losses	
	(In thousands)						
As of March 31, 2024							
Corporate debt	\$17,958	\$ (100)	\$ 2,043	\$ (9)	\$20,001	\$ (109)	
-							
As of December 31, 2023							
Corporate debt	\$17,658	\$ (66)	<u>\$</u>	<u>\$</u>	\$17,658	\$ (66)	

During the three months ended March 31, 2024 and 2023, the Company did not recognize any credit losses on its available-for-sale securities. The unrealized losses on securities are due to changes in interest rates and market liquidity.

5. Receivables from and Payables to Broker-dealers, Clearing Organizations and Customers

		As of			
		March 31, 2024		December 31, 2023	
Receivables from broker-dealers, clearing organizations and customers:	5	(In thousands)			
Securities failed-to-deliver – broker-dealers and clearing organizations Securities failed-to-deliver – customers	\$	262,239	\$	282,125	
Deposits with clearing organizations and broker-dealers		282,172 112,713		284,322 115,151	
Other		5,764		6,338	
Total	\$	662,888	\$	687,936	
Payables to broker-dealers, clearing organizations and customers:					
Securities failed-to-receive – broker-dealers and clearing organizations Securities failed-to-receive – customers	\$	169,798 287,086	\$	125,022 405,186	
Other		8,819		7,190	
Total	\$	465,703	\$	537,398	

6. Acquisitions and Equity Investments

Acquisition of Pragma

On October 2, 2023, the Company completed its acquisition (the "Pragma Acquisition") of all of the outstanding ownership interests of Pragma LLC and Pragma Financial Systems LLC (collectively "Pragma") pursuant to the terms and conditions of a Membership Interest Purchase Agreement entered into among the Company, Pragma Weeden Holdings LLC, Pragma Financial Systems LLC, Pragma LLC and, solely for certain limited purposes, David Mechner, Pragma's chief executive officer, on August 5, 2023 (the "Purchase Agreement"). Following customary adjustments for cash, debt, transaction expenses and working capital, the aggregate purchase price for the Acquisition was \$125.0 million, comprised of approximately \$81.2 million in cash and 224,776 shares of common stock of the Company, valued at approximately \$43.8 million as of the closing date of the Pragma Acquisition, as described below. A portion of the stock consideration, amounting to 8,603 shares of common stock, was placed in escrow for 12 months to secure the sellers' indemnification obligations under the Purchase Agreement. In addition, pursuant to the Purchase Agreement and subject to certain exceptions, the sellers and their affiliates are prohibited from transferring any of the Company common stock received in the Acquisition for a period of six months following the October 2, 2023 closing date. The value ascribed to the shares by the Company was discounted from the market value on the date of closing to reflect the non-marketability of such shares during the restriction period.

Pragma is a quantitative trading technology provider specializing in algorithmic and analytical services. Pragma LLC is a registered broker-dealer. The Company has performed an allocation of the purchase price to the fair value of assets acquired and liabilities assumed at the date of acquisition. The Company utilized an independent third-party to assist in determining the fair value of the acquired intangible assets. The purchase price allocation is as follows (in thousands):

Purchase price	\$ 125,002
Less: acquired cash	(2,685)
Purchase price, net of acquired cash	122,317
Intangible assets	(38,900)
Accounts receivable	(2,637)
Prepaid expenses and other assets	(4,181)
Accounts payable, accrued expenses and other liabilities	 5,318
Goodwill	\$ 81,917

The acquired developed technology and customer relationships intangible assets were valued using the relief-from-royalty method and multi-period excess earnings method, respectively. The fair values of the intangible assets acquired are as follows (in thousands, except for useful lives):

	Costs	Useful Lives
Developed technology	\$ 28,500	7 years
Customer relationships	9,200	15 years
Tradename - finite life	1,200	15 years
Total	\$ 38,900	

The goodwill recognized in connection with the Pragma Acquisition is primarily attributable to the acquisition of an assembled workforce and expected future technology and synergies from the integration of the operations of Pragma into the Company's

operations. All of the goodwill recognized in connection with the Pragma Acquisition is expected to be deductible for income tax purposes.

Pro forma financial information and current period results for the Pragma Acquisition were not material to the Company's consolidated financial statements and therefore have not been presented.

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

RFQ Hub LLC Equity Investment

In May 2022, the Company invested \$34.4 million to acquire a minority ownership stake in RFQ-hub Holdings LLC, an entity formed with a consortium of market participants to support the growth of RFQ-hub, a multi-asset request for quote platform. The Company possesses significant influence over RFQ-hub Holdings LLC and is accounting for its investment under the equity method of accounting. As of March 31, 2024, the Company's investment is recorded at carrying value of \$36.6 million within prepaid expenses and other assets on the Consolidated Statements of Financial Condition. The Company's proportionate share of RFQ-hub Holdings LLC's net earnings was \$0.4 million and \$0.2 million for the three months ended March 31, 2024 and 2023, respectively, and is recorded within equity in earnings of unconsolidated affiliate on the Consolidated Statements of Operations.

Under a services agreement, the Company charges its equity method investee for certain reimbursable support costs incurred by the Company, including personnel compensation, and certain operational overhead costs. The amount billed for the three months ended March 31, 2024 was \$0.5 million and is included within other, net on the Consolidated Statements of Operations. The receivable from the equity method investee was \$1.6 million as of March 31, 2024 and is included within accounts receivable, net on the Consolidated Statements of Financial Condition.

7. Goodwill and Intangible Assets

Goodwill and intangible assets with indefinite lives were \$236.7 million as of each of March 31, 2024 and December 31, 2023. Intangible assets that are subject to amortization, including the related accumulated amortization, are comprised of the following:

		Marc	h 31, 2024	December 31, 2023					
	Cost		Net Accumulate c hrrying amortizatio a mount		Cost	Accumulati amortizati			
		(In thousands)							
Customer relationships	\$	139,463	\$ (54,366)	\$85,097	\$140,348	\$ (50,987)	\$89,361		
Technology and other intangibles		41,130	(12,651)	28,479	41,130	(11,383)	29,747		
Total	\$	180,593	\$ (67,017)	\$113,576	\$181,478	\$(62,370)	\$119,108		

Amortization expense associated with identifiable intangible assets was \$5.0 million and \$4.1 million for the three months ended March 31, 2024 and 2023, respectively. Annual estimated total amortization expense is \$19.8 million, \$16.9 million, \$15.2 million, \$13.8 million and \$12.3 million for the years ended December 31, 2024 through 2028, respectively.

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

8. Income Taxes

The Company's provision for income taxes includes U.S. federal, state and local, and foreign taxes. The Company's effective tax rate was 24.9% and 25.0% for the three months ended March 31, 2024 and 2023, respectively. The Company's effective tax rate can vary from period to period depending on 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.

The Company or one of its subsidiaries files U.S. federal, state and foreign income tax returns. The Company is currently under a New York State income tax examination for tax years 2015 through 2017 and a New York City income tax examination for the tax years 2016 through 2018. At this time, the Company cannot estimate when the examinations will conclude or the impact such examinations will have on the Company's Consolidated Financial Statements, if any. Generally, other than the New York City and New York State audits, the Company is no longer subject to tax examinations by tax authorities for years prior to 2020.

9. Stock-Based Compensation Plans

Equity Incentive Plan

The Company maintains the MarketAxess Holdings Inc. 2020 Equity Incentive Plan (the "2020 Plan"), which provides for the grant of restricted stock, restricted stock units, performance shares, performance stock units (collectively, "full value awards"), stock options and other stock-based awards as incentives to encourage employees, consultants and non-employee directors to participate in the long-term success of the Company. As of March 31, 2024, there were 2,330,396 shares available for grant under the 2020 Plan.

Total stock-based compensation expense was as follows:

	Three Months Ended March 31,				
	2024 202			2023	
	(In thousands)				
Employees	\$	6,893	\$	7,100	
Non-employee directors		405		388	
Total stock-based compensation	\$	7,298	\$	7,488	

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. Included in the stock-based compensation for employees in the table above is \$0.2 million of capitalized software development costs for each of the three months ended March 31, 2024 and 2023.

During the three months ended March 31, 2024, the Company granted (i) 126,965 restricted stock units, (ii) 20,793 stock options and (iii) performance stock units with an expected pay-out at target of 30,811 shares of common stock. The fair values of the restricted stock units and performance stock units were based on a weighted-average fair value per unit at the grant date of \$220.89 and \$220.50, respectively. Based on the Black-Scholes option pricing model, the weighted-average fair value for each stock option granted was \$77.16 per share.

As of March 31, 2024, the total unrecognized compensation cost related to all non-vested awards was \$68.0 million. That cost is expected to be recognized over a weighted-average period of 2.4 years.

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

Employee Stock Purchase Plan

The Company maintains the MarketAxess Holdings Inc. 2022 Employee Stock Purchase Plan (the "ESPP"), pursuant to which a total of 121,221 shares of the Company's Common Stock is available for purchase by employees. The Company issued 3,756 shares of common stock on February 15, 2024 under the ESPP. As of March 31, 2024, there were 112,810 shares available for purchase under the ESPP.

10. Earnings Per Share

The following table sets forth basic and diluted weighted average shares outstanding used to compute earnings per share:

	Three Months Ended March 31,					
	2024	2023				
	(In thousands, excep	t per sh	are amounts)			
Basic weighted average shares outstanding	37,740		37,478			
Dilutive effect of stock options and full value awards	50		167			
Diluted weighted average shares outstanding	37,790		37,645			
Basic earnings per share	\$ 1.92	\$	1.96			
Diluted earnings per share	1.92		1.96			

Stock options and full value awards totaling 571,145 shares and 179,147 shares for the three months ended March 31, 2024 and 2023, 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.

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

11. Credit Agreements and Short-term Financing

2021 Credit Agreement

On October 15, 2021, the Company entered into a three-year revolving credit facility (the "2021 Credit Agreement") provided by a syndicate of lenders and JPMorgan Chase Bank, N.A., as administrative agent, which provided aggregate commitments totaling \$500.0 million, including a revolving credit facility, a \$5.0 million letter of credit sub-limit for standby letters of credit and a \$50.0 million sub-limit for swingline loans. The 2021 Credit Agreement was scheduled to mature on October 15, 2024, but was replaced by the 2023 Credit Agreement (as defined below).

The 2021 Credit Agreement required that the Company satisfy certain covenants, including a requirement to not exceed a maximum consolidated total leverage ratio. The Company incurred

\$0.1 million of interest expense under the 2021 Credit Agreement for the three months ended March 31, 2023.

2023 Credit Agreement

On August 9, 2023, the Company replaced the 2021 Credit Agreement with a new three-year revolving credit facility (the "2023 Credit Agreement") provided by a syndicate of lenders and JPMorgan Chase Bank, N.A., as administrative agent, which provides aggregate commitments totaling \$750.0 million, including a revolving credit facility, a \$5.0 million letter of credit sub-limit for standby letters of credit and a \$380.0 million sub-limit for swingline loans. The 2023 Credit Agreement will mature on August 9, 2026, with the Company's option to request up to two additional 364-day extensions at the discretion of each lender and subject to customary conditions. Subject to satisfaction of certain specified conditions, the Company is permitted to upsize the 2023 Credit Agreement by up to \$375.0 million in total. As of March 31, 2024, the Company had \$0.1 million in letters of credit outstanding and \$749.9 million in available borrowing capacity under the 2023 Credit Agreement.

Borrowings under the 2023 Credit Agreement will bear interest at a rate per annum equal to the alternate base rate or the adjusted term Secured Overnight Financing Rate ("SOFR") rate, plus an applicable margin that varies with the Company's consolidated total leverage ratio. The 2023 Credit Agreement requires that the Company satisfy certain covenants, including a requirement not to exceed a maximum consolidated total leverage ratio.

The Company did not incur any interest expense under the 2023 Credit Agreement for the three months ended March 31, 2024.

Uncommitted Collateralized Agreements

In connection with their self-clearing operations, certain of the Company's U.S. and U.K. operating subsidiaries maintain agreements with a settlement bank to allow the subsidiaries to borrow in the aggregate of up to \$500.0 million on an uncommitted basis, collateralized by eligible securities pledged by the subsidiaries to the settlement bank, subject to certain haircuts. Borrowings under these agreements will bear interest at a base rate per annum equal to the higher of the upper range of the Federal Funds Rate, 0.25% or one-month SOFR, plus 1.00%.

The Company did not incur any interest expense on borrowings under such agreements during the three months ended March 31, 2024, and incurred \$0.1 million of interest expense during the three months ended March 31, 2023. As of March 31, 2024, the Company had no borrowings outstanding and up to \$500.0 million in available uncommitted borrowing capacity under such agreements.

Short-term Financing

Under arrangements with their settlement banks, certain of the Company's U.S. and U.K. operating subsidiaries may receive overnight financing in the form of bank overdrafts. The Company incurred interest expense on such overnight financing of \$0.3 million and \$0.1 million during the three months ended March 31, 2024 and 2023, respectively. As of March 31, 2024, the Company had no overdrafts payable outstanding.

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

12. Leases

The Company has operating leases for corporate offices with initial lease terms ranging from one year to 15 years. Certain leases contain options to extend the initial term at the Company's discretion. The Company accounts for the option to extend when it is reasonably certain of being exercised. The Company's lease agreements do not contain any material residual value guarantees, restrictions or covenants. The Company also has operating and finance leases for equipment with initial lease terms ranging from one-year to 5 years.

The following table presents the components of operating lease expense for the three months ended March 31, 2024 and 2023:

		 March 31,				
Lease cost:	Classification	2024		2023		
		(In thousands)				
Operating lease cost - office space	Occupancy	\$ 2,753	\$	3,111		
Operating lease cost - equipment	Technology and communications	98		_		
Variable lease costs	Occupancy	587		51		
Total operating lease cost		\$ 3,438	\$	3,162		

Three Months Ended

Finance lease expense was \$0.1 million for the three months ended March 31, 2024.

The Company determines whether an arrangement is, or includes, a lease at contract inception. Operating lease right-of-use assets and liabilities are recognized at commencement date and are initially measured based on the present value of lease payments over the defined lease term. As the Company's leases do not provide an implicit rate, the Company used its incremental borrowing rate based on the information available at the adoption date in determining the present value of lease payments.

The weighted average remaining lease term and weighted average discount rate are as follows:

	As of					
Lease Term and Discount Rate	March 31, 2024	December 31, 2023				
Weighted average remaining lease term (in years) - operating leases	9.4	9.6				
Weighted average discount rate - operating leases	6.0%	6.0%				
Weighted average remaining lease term (in years) - finance leases	1.5	1.8				
Weighted average discount rate - finance leases	7.2 %	7.2 %				

The following table presents the maturity of lease liabilities as of March 31, 2024:

	Operating Leases Finance Le				
	 (In tho	usands)			
Remainder of 2024	\$ 9,852	\$	88		
2025	12,302		88		

2026	11,730	_
2027	8,983	_
2028	8,603	_
2029 and thereafter	51,242	_
Total lease payments	102,712	176
Less: imputed interest	24,642	10
Present value of lease liabilities	\$ 78,070	\$ 166

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

13. Commitments and Contingencies

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 certain of its subsidiaries, executes securities transactions between its institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller in trades. The Company's operating subsidiaries settle such transactions pursuant to their self-clearing operations or through the use of third-party clearing brokers or settlement agents. Settlement typically occurs within one to two trading days after the trade date. Cash settlement of the transaction occurs upon receipt or delivery of the underlying instrument that was traded. Under both the self-clearing and the third-party clearing models, the Company may be exposed to credit risk in the event a counterparty does not fulfill its obligation to complete a transaction or if there is an 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 counterparty failures for the three months ended March 31, 2024 and 2023.

In the normal course of business, the Company enters into contracts that contain a variety of representations, warranties and indemnification provisions. 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.

14. Share Repurchase Programs

In January 2022, the Board of Directors authorized a share repurchase program for up to \$150.0 million that commenced in March 2022. During the three months ended March 31, 2024, the Company repurchased 46,844 shares of common stock in connection with its share repurchase program at a cost of \$10.1 million. Shares repurchased under each program will be held in treasury for future use.

15. Segment and Geographic Information

The Company operates electronic platforms for the trading of fixed-income securities and provides related data, analytics, compliance tools, post-trade services and technology services. The Company considers its operations to constitute a single business segment because of the highly integrated nature of these products and services, the financial markets in which the Company competes and 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.

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

For the three months ended March 31, 2024 and 2023, the U.K. was the only individual foreign country in which the Company had a subsidiary that accounted for 10.0% or more of the total revenues or total long-lived assets. 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. Revenues for the three months ended March 31, 2024 and 2023, and long-lived assets as of March 31, 2024 and December 31, 2023 were as follows:

	Thr	Three Months Ended March 31,				
		2024		2023		
		(In thousands)				
Revenues						
Americas	\$	166,833	\$	161,573		
Europe		37,728		36,736		
Asia		5,757		4,860		
Total	\$	210,318	\$	203,169		

	As of					
March	31, 2024	Dec	ember 31, 2023			
	(In tho	usand	s)			
\$	93,153	\$	87,513			
	13,724		14,717			
	362		441			
\$	107,239	\$	102,671			
	\$	March 31, 2024 (In tho \$ 93,153 13,724 362	March 31, 2024 (In thousand \$ 93,153 \$ 13,724 362			

16. Cash and Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash and cash equivalents together with restricted or segregated cash as reported within the Consolidated Statements of Financial Condition to the sum of the same such amounts shown in the Consolidated Statements of Cash Flows:

		As of				
	Statement of Financial Condition Location	March 31, 2024		· ·		
			(In the	ousa	nds)	
Cash and cash equivalents	Cash and cash equivalents	\$	376,679	\$	451,280	
Cash segregated for regulatory purposes	Cash segregated under federal regulations		45,629		45,122	
Deposits with clearing organizations and broker-dealers	Receivables from broker- dealers, clearing organizations and customers		112,713		115,151	
Other deposits	Prepaid expenses and other assets		143		119	
Total		\$	535,164	\$	611,672	

17. Subsequent Events

On April 19, 2024, the Company entered into an agreement to acquire an additional 49.0% interest in RFQ-hub Holdings LLC for approximately \$37.9 million of cash consideration. The acquisition is subject to various closing conditions, including the receipt of certain regulatory approvals. The acquisition is expected to close during the second half of 2024. Upon the closing of the acquisition, the Company will hold a 92.0% controlling stake in RFQ-hub Holdings LLC.

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 undertake no obligation to revise or update any forwardlooking statements contained in this report, except to the extent required by applicable law. Our Company's 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," and in our Form 10-K for the year ended December 31, 2023, including in Part I, Item 1A, "Risk Factors" and Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Executive Overview

MarketAxess operates leading electronic trading platforms delivering greater trading efficiency, a diversified pool of liquidity and significant cost savings to our clients across the global fixed-income markets. Over 2,000 institutional investor and broker-dealer firms use our patented trading technology to efficiently trade U.S. high-grade bonds, U.S. high-yield bonds, emerging market debt, Eurobonds, municipal bonds, U.S. government bonds and other fixed-income securities. Our award-winning Open Trading marketplace is widely regarded as the preferred all-to-all trading solution in the global credit markets, creating a unique liquidity pool for a broad range of credit market participants. We leverage our diverse set of trading protocols, automated and algorithmic trading solutions, intelligent data and index products and a range of post-trade services to provide an end-to-end trading solution to our robust network of platform participants.

We provide automated and algorithmic trading solutions that we believe, when combined with our integrated and actionable data offerings, will help our clients make faster, better-informed decisions on when and how to trade on our platforms. In 2023, we introduced X-Pro, our newest trading platform, to more seamlessly combine our trading protocols with our proprietary data and pre-trade analytics. We expect that our recent acquisition of Pragma, a quantitative trading technology provider specializing in algorithmic and analytical trading services, will accelerate our development of artificial intelligence driven execution algorithms across many of our key product areas.

We operate in a large and growing market that provides us with a significant opportunity for future growth, due, in part, to the relatively low levels of electronic trading in many of our largest current product areas. We offer Open Trading for most of our products in order to capitalize on this addressable market by increasing the number of potential trading counterparties and providing our clients with a menu of solutions at each step in the trading process. We believe that Open Trading drives meaningful price improvement for our clients and reduces risk in fixed-income markets by creating a global, diversified pool of liquidity whereby our institutional investor, dealer and alternative liquidity provider clients can all interact on an anonymous basis. Institutional investors can

also send trading inquiries directly to their traditional broker-dealer counterparties on a disclosed basis, while simultaneously accessing additional counterparties through our anonymous Open Trading solutions.

We also provide a number of integrated and actionable data offerings, including $CP+^{\text{TM}}$ and Axess All®, to assist clients with real-time pricing and trading decisions and transaction cost analysis. We have a range of post-trade services, including straight-through processing, post-trade matching, trade publication, regulatory transaction reporting and market and reference data across fixed-income and other products.

We derive revenue from commissions for transactions executed on our platforms, information services, post-trade services and technology services. Our expenses consist of employee compensation and benefits, depreciation and amortization, technology and communication expenses, professional and consulting fees, occupancy, marketing and advertising, clearing costs and general and administrative expenses.

Our objective is to provide the leading global electronic trading platforms for fixed-income securities, connecting broker-dealers and institutional investors more easily and efficiently, while offering a broad array of trading information and technology services to market participants across the trading cycle. The key elements of our strategy are discussed in Part I, Item 1. "Business – Our Strategy" of our Form 10-K for the year ended December 31, 2023.

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 impact trading volume. These factors could have a material adverse or positive 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, the duration of bonds traded, economic and political conditions in the United States, Europe and elsewhere, and the consolidation or contraction of our broker-dealer and institutional investor clients.

During the first quarter of 2024, the new issue calendar was very active across U.S. credit. U.S. high-grade and U.S. high-yield new issuance were \$530.9 billion and \$87.6 billion, up 34.0% and 116.5%, respectively, from the prior year. A strong new issue calendar can negatively impact our market share in the short-term, but is expected to positively impact secondary trading volumes over the long term. Strong new issuance and low levels of credit spread volatility negatively impacted our U.S. high-yield volumes and estimated market share in the first quarter of 2024. The low levels of credit spread volatility contributed to a decrease in exchange-trade fund ("ETF") market maker activity on our platforms, and we believe our institutional investor clients decreased their secondary market trading activity in light of the increased availability of new issues during the quarter. The decrease in U.S. high-yield activity also negatively impacted our total credit average variable fee per million.

There has been increased demand for green bonds in the fixed-income markets in which we operate.

Because the majority of our assets are short-term in nature, they are not significantly affected by inflation. However, the rate of inflation impacts our expenses, such as employee compensation, technology and communications expenses, which may not be readily recoverable in the prices of our services. To the extent inflation continues to result in high interest rates or has other adverse effects on the securities markets or the economy, it may adversely affect our financial position and results of operations.

We expect that current cash and investment balances, in combination with cash flows that are generated from operations and the ability to borrow under our 2023 Credit Agreement, will be sufficient to meet our liquidity needs and planned capital expenditure requirements for at least the next twelve months. We ended the quarter with \$749.9 million in available borrowing capacity under the 2023 Credit Agreement and capital significantly in excess of our regulatory requirements.

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.

We primarily compete on the basis of our client network, the liquidity provided by our dealer, and, to a lesser extent, institutional investor clients, the total transaction costs associated with our services, the breadth of products, protocols and services offered, as well as the quality, reliability, security and ease of use of our platforms. We believe that our ability to grow volumes and revenues will largely depend on our performance with respect to these factors.

There has been increased demand for portfolio trading workflows over the last few years, which has resulted in heightened competition among trading platforms to enhance their portfolio trading offerings and expand them across different geographies and products. During periods of relatively lower credit spread volatility, clients are beginning to use portfolio trading workflows in lieu of more established trading protocols designed to generate price competition on individual bonds. Our dealer clients have also increased their usage of matching sessions offered by competing platforms in recent periods. To the extent that our clients increase their use of portfolio trading and matching session protocols offered by other platforms, our market share in those products could decrease.

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

Regulatory Environment

Our business is subject to extensive regulations in the United States and internationally, which may expose us to significant regulatory risk and cause additional legal costs to ensure compliance. The existing legal framework that governs the financial markets is periodically reviewed and amended, resulting in the enactment and enforcement of new laws and regulations that apply to our business. In January 2022, the SEC proposed rules that will expand Regulation ATS and Regulation SCI to alternative trading systems (ATS) that trade government securities and amend the SEC rule regarding the definition of an "exchange" to include Communication Protocol Systems, such as our request-for-quote protocols. Based on these proposed rules, we expect that we will have to operate all of our trading protocols in compliance with Regulation ATS and we could become subject to Regulation SCI for certain parts of our business in the future. The SEC has also adopted final rule amendments that, effective May 2024, will shorten the standard settlement cycle for most broker-dealer securities transactions from two business days after the trade date (T+2) to one business day after the trade date (T+1). The shortening of the settlement cycle will lead to a reduction in the length of exposure to trading counterparties and lower margin requirements for our clearing operations, but it is also expected to increase the operational costs and complexities associated with cross border transactions conducted on our platforms. The SEC also recently adopted final rules regarding the central clearing of certain secondary market transactions involving U.S. Treasury securities. This central clearing mandate will impact certain of our participants who do not centrally clear such trades today, and some have expressed concerns about the potential impact of additional clearing costs. The impact of any of these reform efforts on us and our operations remains uncertain.

As a result of the U.K.'s departure from the E.U. in 2020 (commonly referred to as "Brexit"), we obtained authorizations from the AFM for our subsidiaries in the Netherlands in 2019. We now provide regulated services to our clients within the E.U. in reliance on the cross-border services passport held by our Dutch subsidiaries. Brexit has led to an ongoing divergence between the U.K. and E.U. financial regulations, which has made it more difficult and costly to comply with the extensive government regulation to which we are subject. The cost and complexity of operating across increasingly divergent regulatory regimes has increased and is likely to continue to increase in the future.

Compliance with regulations may require us to dedicate additional financial and operational resources, which may adversely affect our profitability. For example, the E.U.'s Digital Operational Resilience Act (DORA), which will become applicable to portions of our business in 2025, will require us to dedicate additional financial and operational resources to meet the significant additional information communication technologies services-related governance, risk management, resilience testing and sub-contracting requirements created by the legislation. However, we also believe new regulations may increase demand for our platforms and we believe we are well positioned to benefit from those regulatory changes that cause market participants to seek electronic trading platforms that meet the various regulatory requirements.

For further description of the regulations which govern our business, see Part1, Item I. "Business - Government Regulation" of our Form 10-K for the year ended December 31, 2023.

Technology Environment

We must continue to enhance and improve our electronic trading platforms. The markets in which we compete are characterized by increasingly complex protocols, systems and technology infrastructure requirements. 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 and regulatory standards and practices on a cost-effective and timely basis. For example, in 2023, we introduced MarketAxess X-Pro, our new trading platform, which provides traders with a flexible user experience, intuitive

workflows and access to our proprietary data and pre-trade analytics. We plan to continue to focus on technology infrastructure initiatives and improving our platforms with the goal of further enhancing our leading market position.

As the overall share of electronic trading grows in global credit products, we are experiencing continued demand for, and growth in, our automated and algorithmic trading solutions. We also support a large and growing base of dealer market making algorithms. In the first quarter of 2024, trading volumes in Auto-X, one of our automated trading protocols, rose to \$93.6 billion, up 36.4% from \$68.7 billion in the first quarter of 2023. There were 231 active client firms using Auto-X in the first quarter of 2024, up 60.4% from the prior year. In the first quarter of 2024, there were 10.8 million dealer algorithmic responses on our platforms, up 50.2% from the first quarter of 2023.

We experience cybersecurity threats and incidents from time to time. However, as of the date of this report, MarketAxess has not experienced a cybersecurity threat or incident that has materially affected the Company in at least the past three years. Cybersecurity incidents could impact revenue and operating income and increase costs. We therefore continue to make investments in our cybersecurity infrastructure and training of employees, which may result in increased costs, to strengthen our cybersecurity measures.

See also Part I, Item 1A. - "Risk Factors, Technology, IT Systems and Cybersecurity Risks" and Part I, Item 1C - "Cybersecurity." of our Form 10-K for the year ended December 31, 2023.

Trends in Our Business

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

- the number of participants on our platforms and their willingness to use our platforms instead of competitors' platforms or other execution methods;
- the frequency and competitiveness of the price responses by participants on our platforms;
- the number of markets that are available for our clients to trade on our platforms;
- the overall level of activity in these markets;
- the duration of the bonds trading on our platforms; and
- the particular fee plan and protocol under which we earn commissions and distribution fees.

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 platforms, 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.

As further described under "— Critical Factors Affecting our Industry and our Company — Economic, Political and Market Factors" and "— Results of Operations — Three Months Ended March 31, 2024 Compared to Three Months Ended March 31, 2023," our trading volumes and average variable transaction fee per million decreased compared to the three months ended March 31, 2023.

Components of Our Results of Operations

Commission Revenue

Commissions are recognized on a trade date basis, are generally calculated as a percentage of the notional dollar volume of bonds traded on our platforms and vary based on the type, size, yield and maturity of the bond traded, as well as individual client incentives. 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 Open Trading 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. For the majority of U.S. Treasury matched principal trades, commissions are invoiced and recorded on a monthly basis.

Credit Commissions.

Credit includes U.S. high-grade corporate bonds, high-yield bonds, emerging markets bonds, Eurobonds, municipal bonds and leveraged loans. Our U.S. high-grade corporate bond fee plans generally incorporate variable transaction fees and fixed distribution fees billed to our broker-dealer clients on a monthly basis. Certain broker-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.

Commissions for high-yield bonds, emerging markets bonds, Eurobonds, municipal bonds and leveraged loans generally vary based on the type of the instrument traded using standard fee schedules. Our high-yield fee plan structure is similar to our U.S. high-grade fee plans. Certain dealers participate in a high-yield fee plan that incorporates a variable transaction fee and a fixed distribution fee, while other dealers participate in a plan that does not contain monthly distribution fees and instead incorporates additional per transaction execution fees and minimum monthly fee commitments.

The average credit fees per million may vary in the future due to changes in yield, years-to-maturity and nominal size of high-grade bonds traded on our platforms and changes in product mix or trading protocols.

Credit distribution fees include any unused monthly fee commitments under our variable fee plans.

Rates Commissions. Rates includes U.S. Treasury, U.S. agency and European government bonds. Commissions for rates products generally vary based on the type of the instrument traded. U.S. Treasury fee plans are typically volume tiered and can vary based on the trading protocol. The average rates fee per million may vary in the future due to changes in product mix or trading protocols.

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 Commissions. Other commissions include equities and foreign exchange commissions for Pragma's algorithmic trading services. Commissions for equities and foreign exchange are volume-tiered and consist of variable transaction fees that are billed monthly.

Information Services

We generate revenue from data licensed to our broker-dealer clients, institutional investor clients and data-only subscribers; professional and consulting services; technology software licenses; and maintenance and support services. These revenues are either for subscription-based services transferred over time, and may be net of volume-based discounts, or one-time services. Revenues for services transferred over time are recognized ratably over the contract period while revenues for services transferred at a point in time are recognized in the period the services are provided. Customers are generally billed monthly, quarterly, or annually; revenues billed in advance are deferred and recognized ratably over the contract period.

Post-trade Services

We generate revenue from regulatory transaction reporting, trade publication and post-trade matching services. Customers are generally billed in the current month or monthly in arrears and revenue is recognized in the period that the transactions are processed. Revenues billed in advance are deferred and recognized ratably over the contract period. We also generate one-time implementation fees for onboarding clients, which are invoiced and recognized in the period the implementation is complete.

Technology Services

Technology services includes technology services revenue generated by Pragma and revenue generated from telecommunications line charges to broker-dealer clients.

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, which range from one to 15 years, using either a straight-line or accelerated amortization method based on the pattern of economic benefit that we expect to realize from such assets. 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 software and licenses, maintenance on software and hardware, cloud hosting costs, data feeds provided by outside vendors, U.S. government bonds technology platform licensing fees, data center hosting costs and our internal network connections. 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 platforms, 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 branding 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 platforms, information services and post-trade services.

Clearing Costs. Clearing costs consist of fees that we are charged by third-party clearing brokers and depositories for the clearing and settlement of matched principal trades, regulatory reporting fees and variable transaction fees assessed by the provider of our third-party middle office system.

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

Expenses may continue to grow in the future, notably in employee compensation and benefits as we increase headcount to support investment in new products, operational support and geographic expansion, depreciation and amortization due to increased investment in new products and enhancements to our trading platforms, and technology and communication costs. Expenses may also grow due to increased regulatory complexity, acquisitions or the continued effects of inflation.

Other Income (Expense)

Interest Income. Interest income consists of interest income earned on our cash and cash equivalents, restricted cash, deposits and investments.

Interest Expense.

Interest expense consists of financing charges incurred on short-term borrowings.

Equity in Earnings of Unconsolidated Affiliate. Equity in earnings of unconsolidated affiliate represents the proportionate share of our equity method investee's net income.

Other, Net. Other, net consists of realized and unrealized gains and losses on trading security investments and foreign currency forward contracts, foreign currency transaction gains or losses, investment advisory fees, credit facility administrative fees, gains or losses on revaluations of contingent consideration payable and other miscellaneous revenues and expenses.

Critical Accounting 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 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. Critical accounting estimates for us include stock-based compensation.

Stock-based compensation

We maintain the 2020 Plan, which provides for the grant of full value awards, stock options and other stock-based awards to encourage employees, consultants and non-employee directors to participate in our long-term success. We make critical accounting estimates related to performance shares and performance stock units granted under the 2020 Plan.

In 2022, 2023 and 2024, annual performance stock units (the "PSUs") were granted to the executive officers and certain senior managers. Each PSU is earned or forfeited based on our level of achievement of certain predetermined metrics, including pre-tax adjusted operating margin, U.S. credit market share and revenue growth excluding U.S. credit. The vested share pay-out ranges from zero to 200% of the PSU target. The number of PSUs that vest, if any, is determined by the level of achievement of the performance metrics during the three-year performance periods, as certified by the Compensation and Talent Committee following the conclusion of the performance period. In addition, participants must provide continued service through the vesting date, subject to death, disability and qualified retirement exceptions, as applicable. Compensation expense for the PSUs is measured using the fair value of our stock at the grant date and estimates of future performance and actual share payouts. Each period, we make estimates of the current expected share payouts and adjust the life-to-date compensation expense recognized since the grant date. As of March 31, 2024, a 10.0% change in the expected final share payouts would increase or decrease the life-to-date compensation expense by \$1.7 million. The estimated final share payouts for the 2022 and 2023 awards as of March 31, 2024 decreased 9.2% compared to December 31, 2023.

Recent Accounting Pronouncements

See Note 2 for a discussion of any recent accounting pronouncements relevant to our Consolidated Financial Statements.

Segment Results

We operate electronic platforms 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 products and services, the financial markets in which we compete and our worldwide business activities. We believe that results by geographic region or client sector are not necessarily meaningful in understanding our business. See Note 15 to the Consolidated Financial Statements for certain geographic information about our business required by GAAP.

Results of Operations

Three Months Ended March 31, 2024 Compared to Three Months Ended March 31, 2023

The following table summarizes our financial results for the three months ended March 31, 2024 and 2023:

	Three Months Ended March 31,							
		2024		2023	-	\$ hange	% Change	
		(\$ ir	n tho	ousands, exc	ept pe	r share am	ounts)	
Revenues	\$	210,318	\$	203,169	\$	7,149	3.5 %	
Expenses		117,818		107,813		10,005	9.3	
Operating income		92,500		95,356		(2,856)	(3.0)	
Other income (expense)		4,217		2,839		1,378	48.5	
Income before income								
taxes		96,717		98,195		(1,478)	(1.5)	
Provision for income taxes		24,102		24,567		(465)	(1.9)	
Net income	\$	72,615	\$	73,628	\$	(1,013)	(1.4)%	
				_				
Net income per common								
share – Diluted	\$	1.92	\$	1.96	\$	(0.04)	(2.0)%	

Changes in average foreign currency exchange rates compared to the U.S. dollar had the effect of increasing revenues and expenses by 0.8 million and 0.6 million, respectively, for the three months ended March 0.1, 0.1

Revenues

Our revenues for the three months ended March 31, 2024 and 2023, and the resulting dollar and percentage changes, were as follows:

1 5	,					
	2024		2	023		
			(\$ in thou	sands)		
		% of		% of	\$	%
		Revenues		Revenues	Change	Change
Commissions	\$ 184,873	87.9 %	\$ 181,991	89.6 %	\$2,882	1.6 %
Information services	11,881	5.6	11,010	5.4	871	7.9
Post-trade services	10,730	5.1	9,980	4.9	750	7.5
Technology services	2,834	1.4	188	0.1	2,646	NM
Total revenues	\$ 210,318	100.0 %	\$ 203,169	100.0 %	\$7,149	3.5
NM - not meaningful						

Commissions. Our commission revenues for the three months ended March 31, 2024 and 2023, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended March 31,							
	_	2024		2023 (\$ in the		\$ hange	% Change	
Variable transaction fees				(ψ 111 011	Jusui	ius,		
Credit	\$	141,504	\$	140,970	\$	534	0.4 %	
Rates		5,166		6,258		(1,092)	(17.4)	
Other		4,849		_		4,849	NM	
Total variable transaction fees		151,519		147,228		4,291	2.9	
Fixed distribution fees								
Credit		33,288		34,684		(1,396)	(4.0)	
Rates		66		79		(13)	(16.5)	
Total fixed distribution fees		33,354		34,763		(1,409)	(4.1)	
Total commissions	\$	184,873	\$	181,991	\$	2,882	1.6 %	

NM - not meaningful

Credit variable transaction fees increased \$0.5 million driven by a 7.4% increase in total credit trading volume, partially offset by a 6.6% decrease in total credit average variable transaction fee per million. Open Trading credit volume totaled \$269.4 billion during the three months ended March 31, 2024, down 3.6%, and Open Trading credit variable transaction fees represented 31.5% and 36.5% of total variable transaction fees for the three months ended March 31, 2024 and 2023, respectively. Rates variable transaction fees decreased \$1.1 million driven principally by a 29.0% decrease in trading volumes, partially offset by a 16.3% increase in average variable transaction fee per million. Other variable transaction fees include equities and foreign exchange commissions earned by Pragma.

Credit fixed distribution fees decreased \$1.4 million mainly due to the consolidation of two global dealers and lower unused minimums in U.S. high-grade on increased activity, partially offset by dealer migrations to fixed fee plans.

Our trading volumes for the three months ended March 31, 2024 and 2023 were as follows:

	Three Months Ended March 31,							
	2024	2023	\$ Change	% Change				
		(\$ in m	illions)					
Trading volume data								
Credit								
High-grade	\$ 455,998	\$ 392,715	\$ 63,283	16.1 %				
High-yield	85,379	122,873	(37,494)	(30.5)				
Emerging markets	221,427	191,841	29,586	15.4				
Eurobonds	128,849	118,366	10,483	8.9				
Other credit	26,335	28,683	(2,348)	(8.2)				
Total credit	917,988	854,478	63,510	7.4				
Rates								
U.S. government bonds	1,045,796	1,491,292	(445,496)	(29.9)				
Agency and other government bonds	31,626	27,061	4,565	16.9				

Total rates	1,077,422	1,518,353	(440,931)	(29.0)
Total trading volume	\$ 1,995,410	\$ 2,372,831	\$ (377,421)	(15.9)%
Number of U.S. Trading Days	61	62		
Number of U.K. Trading Days	63	64		

For volume reporting purposes, transactions in foreign currencies are converted to U.S. dollars at average monthly rates.

The 16.1% increase in our U.S. high-grade volume was principally due to an increase in estimated market volumes, partially offset by a decrease in our estimated market share. Estimated U.S. high-grade market volume as reported by FINRA's Trade Reporting and Compliance Engine (TRACE) increased by 19.3% to \$2.4 trillion for the three months ended March 31, 2024 compared to the three months ended March 31, 2023. Our estimated market share of total U.S. high-grade corporate bond volume decreased to 19.3% for the three months ended March 31, 2024 from 19.9% for the three months ended March 31, 2023. U.S. high-yield volume decreased by 30.5% mainly due to a decrease in our estimated market share. Lower levels of credit spread volatility drove a significant decrease in ETF market maker client activity on our platform, which negatively impacted our U.S. high-yield market share. Emerging markets volumes increased by 15.4%, mainly due to an increase in local markets trading volumes. Eurobond volumes increased by 8.9%. Other credit volumes decreased by 8.2% due to lower estimated municipal bond market volumes, partially offset by an increase in our estimated municipal bond market share. Rates trading volume decreased 29.0%, primarily due to a decrease in our estimated market share.

Our average variable transaction fee per million for the three months ended March 31, 2024 and 2023 was as follows:

	Three Months Ended March 31,										
		2024		2023	_C	\$ hange_	% Change				
Average variable transaction fee per million											
Credit	\$	154.15	\$	164.98	\$	(10.83)	(6.6) %				
Rates		4.79		4.12		0.67	16.3				

Credit average variable transaction fee per million decreased by 6.6% to \$154.15 per million for the three months ended March 31, 2024, mainly due to a decrease in the duration of U.S. high-grade bonds traded on our platforms and product mix-shift in other credit products.

Information Services. Information services revenue increased by \$0.9 million for the three months ended March 31, 2024, mainly due to net new data contract revenue of \$0.7 million and the positive impact of foreign currency fluctuations of \$0.2 million.

Post-Trade Services. Post-trade services revenue increased by \$0.8 million for the three months ended March 31, 2024, principally due to net new contract revenue of \$0.6 million and the positive impact of foreign currency fluctuations of \$0.2 million.

Technology Services. Technology services revenue increased by \$2.6 million for the three months ended March 31, 2024 due to technology services revenue generated by Pragma.

Expenses

The following table summarizes our expenses for the three months ended March 31, 2024 and 2023:

		Three Months Ended March 31,											
	·					\$	%						
		2024		2023	(Change	Change						
	·			(\$ in t	housa	nds)							
Expenses													
	\$	61,264	\$	52,315	\$	8,949	17.1 %						

Employee	
compensation and	
benefits	

Depreciation and amortization	18,200	16,461	1,739	10.6
Technology and communications	17,051	14,999	2,052	13.7
Professional and consulting fees	6,395	7,127	(732)	(10.3)
Occupancy	3,425	3,611	(186)	(5.2)
Marketing and advertising	1,833	2,995	(1,162)	(38.8)
Clearing costs	4,911	4,545	366	8.1
General and administrative	4,739	5,760	(1,021)	(17.7)
Total expenses	\$ 117,818	\$ 107,813	\$ 10,005	9.3 %

Employee compensation and benefits increased by \$8.9 million, primarily due to increases in salaries, taxes and benefits on higher employee headcount of \$7.1 million and higher employee incentive compensation of \$2.1 million.

Depreciation and amortization increased by \$1.7 million, primarily due to higher amortization of software development costs of \$1.0 million and higher amortization of intangibles of \$0.9 million, partially offset by lower depreciation of office hardware of \$0.2 million.

Technology and communications expenses increased by \$2.1 million, primarily due to higher connectivity costs related to Pragma of \$0.7 million, higher software subscription costs of \$0.7 million, higher market data costs of \$0.3 million and higher equipment lease costs of \$0.2 million.

Professional and consulting fees decreased by \$0.7 million, primarily due to lower IT consultant expense of \$1.8 million, offset by higher audit and tax fees of \$0.7 million and higher acquisition related legal and consulting costs of \$0.5 million.

Marketing expenses decreased by \$1.2 million, primarily due to lower advertising and public relations costs.

General and administrative expenses decreased by \$1.0 million, primarily due to lower reserves related to a dispute with a vendor of \$0.5 million, lower value-added taxes of \$0.2 million and lower travel and entertainment costs of \$0.1 million.

Other Income (Expense)

Our other income (expense) for the three months ended March 31, 2024 and 2023, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended March 31,									
	:	2024		2023	C	\$ hange	% Change			
				(\$ in tl	nous	ands)				
Interest income	\$	5,973	\$	4,249	\$	1,724	40.6	%		
Interest expense		(316)		(130)		(186)	143.1			
Equity in earnings of unconsolidated affiliate		370		204		166	81.4			
Other, net		(1,810)		(1,484)		(326)	22.0			
Total other income (expense)	\$	4,217	\$	2,839	\$	1,378	48.5	%		

Interest income increased by \$1.7 million driven by higher interest rates.

Interest expense increased by \$0.2 million primarily due to higher financing charges incurred under our short-term borrowings.

Other, net decreased by \$0.3 million due to higher credit facility fees.

Provision for Income Taxes

The provision for income taxes and effective tax rate for the three months ended March 31, 2024 and 2023 were as follows:

	Three Months Ended March 31,										
					\$	%					
	2024		2023	(Change	Change					
			(\$ in tl	nousa	nds)						
Provision for income											
taxes	\$ 24,102	\$	24,567	\$	(465)	(1.9)%					

Effective tax rate 24.9 % 25.0 %

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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 three months ended March 31, 2024, we have met our funding requirements through cash on hand, internally generated funds and short-term borrowings. Cash and cash equivalents and investments totaled \$512.5 million as of March 31, 2024. Our investments generally consist of investment-grade corporate bonds and U.S. Treasury securities. We limit the amounts that can be invested in any single issuer and invest in short- to intermediate-term instruments whose fair values are less sensitive to interest rate changes.

In August 2023, we entered into the 2023 Credit Agreement, which provides aggregate commitments totaling \$750.0 million, including a revolving credit facility, a \$5.0 million letter of credit sub-limit for standby letters of credit and a \$380.0 million sub-limit for swingline loans. The 2023 Credit Agreement will mature on August 9, 2026, with our option to request up to two additional 364-day extensions at the discretion of each lender and subject to customary conditions. As of March 31, 2024, we had \$0.1 million in letters of credit outstanding and \$749.9 million in available borrowing capacity under the 2023 Credit Agreement. Borrowings under the 2023 Credit Agreement will bear interest at a rate per annum equal to the alternate base rate or the adjusted term SOFR rate, plus an applicable margin that varies with our consolidated total leverage ratio. The 2023 Credit Agreement requires that we satisfy certain covenants, including a requirement to not exceed a maximum consolidated total leverage ratio. We were in compliance with all applicable covenants at March 31, 2024. See Note 11 to the Consolidated Financial Statements for a discussion of the 2023 Credit Agreement.

In connection with their self-clearing operations, certain of our operating subsidiaries maintain agreements with a settlement bank to allow the subsidiaries to borrow an aggregate of up to \$500.0 million on an uncommitted basis, collateralized by eligible securities pledged by the subsidiaries to the settlement bank, subject to certain haircuts. Borrowings under these agreements will bear interest at a base rate per annum equal to the higher of the upper range of the Federal Funds Rate, 0.25% or one-month SOFR, plus 1.00%. As of March 31, 2024, the subsidiaries had no borrowings outstanding and up to \$500.0 million in available uncommitted borrowing capacity under such agreements. See Note 11 to the Consolidated Financial Statements for a discussion of these agreements.

Under arrangements with their settlement banks, certain of our operating subsidiaries may receive overnight financing in the form of bank overdrafts. As of March 31, 2024, we had no overdrafts payable outstanding.

As a result of our self-clearing and settlement activities, we are required to finance certain transactions, maintain deposits with various clearing organizations and clearing broker-dealers and maintain a special reserve bank account for the benefit of customers pursuant to Rule 15c3-3 of the Exchange Act. As of March 31, 2024, the aggregate amount of the positions financed, deposits and customer reserve balances associated with our self-clearing and settlement activities was \$244.9 million. These requirements can fluctuate based on trading activity, market volatility or other factors which may impact our liquidity or require us to use our capital resources.

Cash Flows for the Three Months Ended March 31, 2024 Compared to the Three Months Ended March 31, 2023

Our cash flows were as follows:

Three Months Ended March 31,									
		\$	%						
2024	2023	Change	Change						
			•						

(\$ in thousands)

Net cash (used in)/provided by operating	Ī				
activities	\$	(4,949)	\$ 7,527	\$ (12,476)	NM
Net cash (used in) investing activities		(15,830)	(32,754)	16,924	(51.7) %
Net cash (used in) financing activities		(52,543)	(48,142)	(4,401)	9.1
Effect of exchange rate changes on cash and					
cash equivalents		(3,186)	3,345	(6,531)	NM
Net decrease for the period	\$	(76,508)	\$ (70,024)	\$ (6,484)	9.3 %

NM - not meaningful

The \$12.5 million decrease in net cash (used in)/provided by operating activities was primarily due to a change in net receivables from broker-dealers, clearing organizations and customers associated with our clearing activities of \$9.1 million and a decrease in income and other tax liabilities of \$14.9 million, offset by lower accounts receivable of \$11.4 million.

The \$16.9 million decrease in net cash used in investing activities was primarily due to lower net purchases of available-for-sale investments of \$21.2 million, offset by higher capital expenditures of \$4.3 million.

The \$4.4 million increase in net cash used in financing activities was principally due to higher repurchases of common stock of \$10.1 million and higher cash dividends of \$1.1 million, offset by lower withholding tax payments on full value awards vesting of \$5.6 million and higher exercises of stock options of \$1.3 million.

The \$6.5 million change in the effect of exchange rate changes on cash and cash equivalents was driven by changes in the cumulative translation adjustment.

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.

Other Factors Influencing Liquidity and Capital Resources

We believe that our current resources are adequate to meet our liquidity needs and requirements, including commitments for capital expenditures, in the short-term (during the next 12 months). However, our future liquidity and capital requirements will depend on a number of factors, including liquidity requirements associated with our self-clearing operations and expenses associated with product development and expansion and new business opportunities that are intended to further diversify our revenue streams. 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. In addition, in the long-term (beyond 12 months), we believe our liquidity needs and requirements will be affected by the factors discussed above.

Certain of our U.S. subsidiaries are registered as broker-dealers and therefore are subject to the applicable rules and regulations of the SEC and FINRA. These rules contain minimum net capital requirements, as defined in the applicable regulations. Certain of our foreign subsidiaries are regulated by the FCA in the U.K. or other foreign regulators and must maintain financial resources, as defined in the applicable regulations, in excess of the applicable financial resources requirement. As of March 31, 2024, 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, 2024, our subsidiaries maintained aggregate net capital and financial resources that were \$545.0 million in excess of the required levels of \$35.7 million.

Each of our U.S. and foreign regulated subsidiaries are subject to local regulations which generally limit, or require the prior notification to or approval from such regulated entity's principal regulator before, the 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. As of March 31, 2024, the amount of unrestricted cash held by our non-U.S. subsidiaries was \$216.9 million.

We execute securities transactions between our institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller in trades. Our operating subsidiaries settle such transactions using their self-clearing operations or through the use of third-party clearing brokers or settlement agents. Settlement typically occurs within one to two trading days after the trade date. Cash settlement of the transaction occurs upon receipt or delivery of the underlying instrument that was traded. Under both the self-clearing and the third-party clearing models, we may be exposed to credit risk in the event a counterparty does not fulfill its obligation to complete a transaction or if there is an error in executing a matched principal transaction. Pursuant to the terms of the securities clearing agreements, each third-party clearing broker has the right to charge us for any losses they suffer resulting from a counterparty's failure on any of our trades. We did not record any liabilities or losses with regard to counterparty failures for the three months ended March 31, 2024 and 2023. Substantially all of our open securities failed-to-deliver and securities failed-to-receive transactions as of March 31, 2024 have subsequently settled at the contractual amounts.

In the normal course of business, we enter into contracts that contain a variety of representations, warranties and indemnification provisions. Our maximum exposure from any claims under these arrangements is unknown, as this would involve claims that have not yet occurred.

We have leases for corporate offices and equipment with initial lease terms ranging from one year to 15 years. We have total future contractual rent payments on these leases of \$102.8 million, with \$13.0 million due within the next 12 months and \$89.8 million due beyond 12 months.

We enter into foreign currency forward contracts to economically hedge our exposure to variability in certain foreign currency transaction gains and losses. As of March 31, 2024, the notional value of our foreign currency forward contract outstanding was \$63.3 million and the fair value of the liability was \$0.2 million.

In January 2022, our Board authorized a share repurchase program for up to \$150.0 million that commenced in March 2022. Shares repurchased under the program will be held in treasury for future use. As of March 31, 2024, we had \$89.9 million of remaining capacity under the program.

In April 2024, our Board approved a quarterly cash dividend of \$0.74 per share payable on June 5, 2024 to stockholders of record as of the close of business on May 22, 2024. Any future declaration and payment of dividends will be at the sole discretion of our Board.

On April 19, 2024, the Company entered into an agreement to acquire an additional 49.0% interest in RFQ-hub Holdings LLC for approximately \$37.9 million of cash consideration. The acquisition is subject to various closing conditions, including the receipt of certain regulatory approvals. The acquisition is expected to close during the second half of 2024. Upon the closing of the acquisition, the Company will hold a 92.0% controlling stake in RFQ-hub Holdings LLC.

Non-GAAP Financial Measures

In addition to reporting financial results in accordance with GAAP, we use certain non-GAAP financial measures: earnings before interest, taxes, depreciation and amortization ("EBITDA"), EBITDA margin and free cash flow. We define EBITDA margin as EBITDA divided by revenues. We define free cash flow as net cash provided by/(used in) operating activities excluding the net change in trading investments and net change in securities failed-to-deliver and securities failed-to-receive from broker-dealers, clearing organizations and customers, less expenditures for furniture, equipment and leasehold improvements and capitalized software development costs. We believe these non-GAAP financial measures, when taken into consideration with the corresponding GAAP financial measures, are important in understanding our operating results. EBITDA, EBITDA margin and free cash flow are not measures of financial performance or liquidity under GAAP and therefore should not be considered an alternative to net income or cash flow from operating activities as an indicator of operating performance or liquidity. We believe that these non-GAAP financial measures, when taken into consideration with the corresponding GAAP financial measures, provide additional information regarding our operating results because they assist both investors and management in analyzing and evaluating the performance of our business.

The table set forth below presents a reconciliation of our net income to EBITDA and net income margin to EBITDA margin, as defined above, for the three months ended March 31, 2024 and 2023:

		Three Months Ended March 31,					
	_	2024 2023					
	-	(\$ in the	nds)				
Net income	\$	72,615	\$	73,628			
Interest income		(5,973)		(4,249)			
Interest expense		316		130			
Provision for income taxes		24,102		24,567			
Depreciation and amortization		18,200		16,461			
EBITDA	\$	109,260	\$	110,537			
Net income margin		34.5 %		36.2 %			
Interest income		(2.8)		(2.1)			
Interest expense		0.2		0.1			
Provision for income taxes		11.4		12.1			
Depreciation and amortization		8.6		8.1			
EBITDA margin	_	51.9 %		54.4 %			

The table set forth below presents a reconciliation of our net cash provided by operating activities to free cash flow, as defined above, for the three months ended March 31, 2024 and 2023:

Three Months	Ended March 31,
2024	2023

	(\$ in thousands)			
Net cash (used in)/provided by operating activities	\$	(4,949)	\$	7,527
Exclude: Net change in trading investments		(255)		419
Exclude: Net change in fail-to-deliver/receive from				
broker-dealers, clearing organizations and customers		51,288		46,767
Less: Purchases of furniture, equipment and leasehold				
improvements		(1,197)		(217)
Less: Capitalization of software development costs		(13,963)		(10,690)
Free Cash Flow	\$	30,924	\$	43,806

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, 2024, we had \$99.4 million of investments in U.S. Treasuries that were classified as trading securities and \$25.4 million of investments in corporate bonds that were classified as available-for-sale. Adverse movements, such as a decrease in the value of these securities or a downturn or disruption in the markets for these securities, could result in a substantial loss. A 10.0% decrease in the market value of our U.S Treasuries or available-for-sale investments would result in losses of approximately \$9.9 million and \$2.5 million, respectively. 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 and cash equivalents, restricted cash and deposits. As of March 31, 2024, our cash and cash equivalents, restricted cash and deposits amounted to \$535.2 million. A hypothetical 100 basis point change in interest rates would increase or decrease our annual interest income by approximately \$5.4 million, assuming no change in the amount or composition of our cash and cash equivalents, restricted cash and deposits.

As of March 31, 2024, 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 \$0.3 million, assuming no change in the amount or composition of the investments. The hypothetical unrealized gain (loss) of \$0.3 million would be recognized in accumulated other comprehensive loss on the Consolidated Statements of Financial Condition.

A similar hypothetical 100 basis point increase or decrease in interest rates would decrease or increase the fair value of the trading securities portfolio by approximately \$0.8 million. The hypothetical unrealized gain (loss) of \$0.8 million would be recognized in other, net 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 expenses, operating income and the value of balance sheet items denominated in foreign currencies.

During the twelve months ended March 31, 2024, approximately 15.9% of our revenues and 25.4% 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 10.0% increase or decrease in the U.S. dollar against all other currencies would have increased or decreased revenue by approximately \$12.1 million and operating expenses by approximately \$11.3 million.

Credit Risk

Through certain of our subsidiaries, we execute securities transactions between our institutional investor and broker-dealer clients on a matched principal basis by serving as counterparty to both the buyer and the seller in trades. Our operating subsidiaries settle such transactions using their self-clearing operations or through the use of third-party clearing brokers or settlement agents. Settlement typically occurs within one to two 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 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, procedures and automated controls in place to identify and manage our credit risk. There can be no assurance that these policies, procedures and automated controls 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 include cash and money market instruments that are primarily maintained at three major global banks. Given this concentration, we are exposed to certain credit risk in relation to our deposits at these banks.

Derivative Risk

Our limited derivative risk stems from our activities in the foreign currency forward contract market. We use this market to economically hedge our foreign exchange gains and losses on the Consolidated Statements of Operations that arise from our U.S. dollar versus British Pound Sterling exposure from the activities of our U.K. subsidiaries. As of March 31, 2024, the notional amount of our foreign currency forward contract was \$63.3 million. We do not hold derivative instruments for purposes other than economically hedging foreign currency risk.

Item 4. Controls and Procedures

- (a) Evaluation of Disclosure Controls and Procedures. Our management, including the Chief Executive Officer and Interim 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 Exchange Act, as of March 31, 2024. Based on that evaluation, the Chief Executive Officer and Interim 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 Interim 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, 2024 identified in connection with the evaluation thereof by our management, including the Chief Executive Officer and Interim 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. 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. See Note 13 to the Consolidated Financial Statements for a discussion of our commitments and contingencies.

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, 2023. For a discussion of the risk factors affecting the Company, see "Risk Factors" in Part I, Item 1A of our 2023 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, 2024, 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 or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (In thousands)	
January 1, 2024 - January 31, 2024	54,206	\$	270.24	_	\$	100,016
February 1, 2024 - February 29, 2024	22,258		216.05	14,597		96,867
March 1, 2024 - March 31, 2024	32,814		216.94	32,247		89,869
Total	109,278	\$	243.20	46,844		

During the three months ended March 31, 2024, we repurchased 109,278 shares of common stock. The repurchases included 46,844 shares repurchased in connection with our share repurchase program and 62,434 shares surrendered by employees to satisfy the withholding tax obligations upon the vesting of full value awards and upon the exercise of stock options.

In January 2022, our Board of Directors authorized a share repurchase program for up to \$150.0 million that commenced in March 2022. Shares repurchased under this program will be held in treasury for future use. As of March 31, 2024, we had \$89.9 million of remaining capacity under the program.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

(c) Trading Plans

In the first quarter of 2024, no director or officer (as defined in Exchange Act Rule 16a-1(f)) of the Company adopted or terminated a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement for the purchase or sale of securities of the Company, within the meaning of Item 408 of Regulation S-K.

Item 6. Exhibits

Exhibit Index:

Number	Description
10.1	Letter Agreement dated as of February 21, 2024, by and between Ilene Fiszel Bieler and MarketAxess Holdings Inc. (incorporated by reference to Exhibit 10.1 to the registrant's Current Report in Form 8-K dated February 21, 2024).†#
10.2	Severance Protection Agreement, dated as of February 21, 2024, by and between Ilene Fiszel Bieler and MarketAxess Holdings Inc. (incorporated by reference to Exhibit 10.3 to the registrant's Current Report in Form 8-K dated February 21, 2024)
10.3	Proprietary Information and Non-Competition Agreement, dated as of February 21, 2024, by and between Ilene Fiszel Bieler and MarketAxess Holdings Inc. (incorporated by reference to Exhibit 10.4 to the registrant's Current Report in Form 8-K dated February 21, 2024)
10.4	Form of 2024 Restricted Stock Unit Agreement (Non-Deferred) for U.Sbased executive officers other than Richard M. McVey pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the registrant's Current Report in Form 8-K dated February 21, 2024
10.5*	Form of 2024 Restricted Stock Unit Agreement (Non-Deferred) for Richard M. McVey pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plan
10.6*	Form of 2024 Restricted Stock Unit Agreement for U.Kbased executive officers pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plan
10.7*	Form of 2024 Performance Stock Unit Agreement for U.Sbased executive officers other than Richard M. McVey pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plan†
10.8*	Form of 2024 Performance Stock Unit Agreement for Richard M. McVey pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plan†
10.9*	Form of 2024 Performance Stock Unit Agreement for U.Kbased executive officers pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plant
10.10*	Form of 2024 Incentive Stock Option Agreement for U.S. based Executive Officers other than Mr. McVey pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plan
10.11*	Form of 2024 Incentive Stock Option Agreement for Mr. McVey pursuant to the MarketAxess Holdings Inc. 2020 Equity Incentive Plan#
31.1*	Certification by Chief Executive Officer and Interim 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 and Interim 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.IN	Smiline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL Document

101.SCH*tline XBRL Taxonomy Extension Schema Document

Document

The cover page from the Company's Quarterly report on Form 10-Q for the quarter ended March 31, 2024 has been formatted in Inline XBRL and is included in Exhibits 101.

- * Filed herewith.
- † Certain schedules and other similar attachments to this exhibit have been omitted from this filing pursuant to Item 601(a)(5) of Regulation S-K. The registrant will provide a copy of such omitted documents to the Securities and Exchange Commission upon request.
- # Certain confidential information, identified by bracketed asterisks "[*****]" has been omitted from this exhibit pursuant to Item 601(b)(10) of Regulation S-K because it is both (i) not material and (ii) is the type that the registrant treats as private or confidential.

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: May 7, 2024 By: /s/ CHRISTOPHER R. CONCANNON

Christopher R. Concannon

Chief Executive Officer and Interim Chief

Financial Officer

(principal executive officer and interim

principal financial officer)

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