

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended September 30, 2023

or

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

Commission File Number: 001-38860

TRADEWEB MARKETS INC.

(Exact name of registrant as specified in its charter)

Delaware

(State of other jurisdiction of incorporation or organization)

83-2456358

(I.R.S. Employer Identification No.)

1177 Avenue of the Americas
New York, New York

(Address of principal executive offices)

10036

(Zip Code)

(646) 430-6000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, par value \$0.00001	TW	Nasdaq Global Select Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

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

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

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

Class of Stock	Shares Outstanding as of October 19, 2023
Class A Common Stock, par value \$0.00001 per share	114,725,695
Class B Common Stock, par value \$0.00001 per share	96,933,192
Class C Common Stock, par value \$0.00001 per share	—
Class D Common Stock, par value \$0.00001 per share	23,080,571

TRADEWEB MARKETS INC.

FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2023

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INTRODUCTORY NOTE

The financial statements and other disclosures contained in this report include those of Tradeweb Markets Inc., which is the registrant, and those of its consolidating subsidiaries, including Tradeweb Markets LLC, which became the principal operating subsidiary of Tradeweb Markets Inc. on April 4, 2019 in a series of reorganization transactions (the “Reorganization Transactions”) that were completed in connection with Tradeweb Markets Inc.’s initial public offering (the “IPO”), which closed on April 8, 2019.

As a result of the Reorganization Transactions completed in connection with the IPO, Tradeweb Markets Inc. became a holding company whose only material assets consist of its equity interest in Tradeweb Markets LLC and related deferred tax assets. As the sole manager of Tradeweb Markets LLC, Tradeweb Markets Inc. operates and controls all of the business and affairs of Tradeweb Markets LLC and, through Tradeweb Markets LLC and its subsidiaries, conducts its business. As a result of this control, and because Tradeweb Markets Inc. has a substantial financial interest in Tradeweb Markets LLC, Tradeweb Markets Inc. consolidates the financial results of Tradeweb Markets LLC and its subsidiaries.

As used in this Quarterly Report on Form 10-Q, unless the context otherwise requires, references to:

- “We,” “us,” “our,” the “Company,” “Tradeweb” and similar references refer: (i) on or prior to the completion of the Reorganization Transactions to Tradeweb Markets LLC, which we refer to as “TWM LLC,” and, unless otherwise stated or the context otherwise requires, all of its subsidiaries and any predecessor entities, and (ii) following the completion of the Reorganization Transactions to Tradeweb Markets Inc., and, unless otherwise stated or the context otherwise requires, TWM LLC and all of its subsidiaries and any predecessor entities.
- “Bank Stockholders” refer collectively to entities affiliated with the following clients: Barclays Capital Inc., BofA Securities, Inc. (a subsidiary of Bank of America Corporation), Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, Deutsche Bank Securities Inc., Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC, RBS Securities Inc., UBS Securities LLC and Wells Fargo Securities, LLC, which, prior to the completion of the IPO, collectively held a 46% ownership interest in Tradeweb. Subsequent to August 2022, there were no LLC Interests (as defined below) held by Bank Stockholders.
- “Continuing LLC Owners” refer collectively to (i) those Original LLC Owners (as defined below), including Refinitiv (as defined below), certain of the Bank Stockholders and members of management, that continued to own LLC Interests after the completion of the IPO and Reorganization Transactions and that received shares of our Class C common stock, shares of our Class D common stock or a combination of both, as the case may be, in connection with the completion of the Reorganization Transactions, (ii) any subsequent transferee of any Original LLC Owner that has executed a joinder agreement to TWM LLC’s limited liability company agreement (the “TWM LLC Agreement”) and (iii) solely with respect to the Tax Receivable Agreement (as defined below), (x) those Original LLC Owners, including certain of the Bank Stockholders, that disposed of all of their LLC Interests for cash in connection with the IPO and (y) any party that has executed a joinder agreement to the Tax Receivable Agreement in accordance with the Tax Receivable Agreement.
- “Investor Group” refer to certain investment funds affiliated with The Blackstone Group Inc. (f/k/a The Blackstone Group L.P.), an affiliate of Canada Pension Plan Investment Board, an affiliate of GIC Special Investments Pte. Ltd. and certain co-investors, which prior to the LSEG Transaction (as defined below) collectively held indirectly a 55% ownership interest in Refinitiv.
- “LLC Interests” refer to the single class of common membership interests of TWM LLC. LLC Interests, other than those held by Tradeweb Markets Inc., are redeemable or exchangeable in accordance with the TWM LLC Agreement for shares of Class A common stock or Class B common stock, as the case may be, on a one-for-one basis.
- “LSEG Transaction” refer to the acquisition of the Refinitiv business by London Stock Exchange Group plc (“LSEG”), in an all share transaction, which closed on January 29, 2021.
- “Original LLC Owners” refer to the owners of TWM LLC prior to the Reorganization Transactions.
- “Refinitiv,” prior to the LSEG Transaction, refer to Refinitiv Holdings Limited, and unless otherwise stated or the context otherwise requires, all of its direct and indirect subsidiaries, and subsequent to the LSEG Transaction, refer to Refinitiv Parent Limited, and unless otherwise stated or the context otherwise requires, all of its subsidiaries. Refinitiv owns substantially all of the former financial and risk business of Thomson Reuters (as defined below), including, prior to and following the completion of the Reorganization Transactions, an indirect majority ownership interest in Tradeweb, and was controlled by the Investor Group prior to the LSEG Transaction.

- “Refinitiv Transaction” refer to the transaction pursuant to which Refinitiv indirectly acquired on October 1, 2018 substantially all of the financial and risk business of Thomson Reuters and Thomson Reuters indirectly acquired a 45% ownership interest in Refinitiv.
- “Thomson Reuters” or “TR” refer to Thomson Reuters Corporation, which prior to the LSEG Transaction indirectly held a 45% ownership interest in Refinitiv.

Numerical figures included in this Quarterly Report on Form 10-Q have been subject to rounding adjustments. Accordingly, numerical figures shown as totals in various tables may not be arithmetic aggregations of the figures that precede them. In addition, we round certain percentages presented in this Quarterly Report on Form 10-Q to the nearest whole number. As a result, figures expressed as percentages in the text may not total 100% or, when aggregated, may not be the arithmetic aggregation of the percentages that precede them.

USE OF NON-GAAP FINANCIAL MEASURES

This Quarterly Report on Form 10-Q contains “non-GAAP financial measures,” which are financial measures that are not calculated and presented in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

The Securities and Exchange Commission (“SEC”) has adopted rules to regulate the use of non-GAAP financial measures in filings with the SEC and in other public disclosures. These rules govern the manner in which non-GAAP financial measures are publicly presented and require, among other things:

- a presentation with equal or greater prominence of the most comparable financial measure or measures calculated and presented in accordance with GAAP; and
- a statement disclosing the purposes for which the registrant’s management uses the non-GAAP financial measure.

Specifically, we make use of the non-GAAP financial measures “Free Cash Flow,” “Adjusted EBITDA,” “Adjusted EBITDA margin,” “Adjusted EBIT,” “Adjusted EBIT margin,” “Adjusted Net Income” and “Adjusted Diluted EPS,” as well as the change in revenue, Adjusted EBITDA margin and Adjusted EBIT margin on a constant currency basis, in evaluating our historical results and future prospects. For the definition of Free Cash Flow and a reconciliation to cash flow from operating activities, its most directly comparable financial measure presented in accordance with GAAP, see Part I, Item 2. – “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Non-GAAP Financial Measures.” For the definitions of Adjusted EBITDA, Adjusted EBIT and Adjusted Net Income and reconciliations to net income and net income attributable to Tradeweb Markets Inc., as applicable, their most directly comparable financial measures presented in accordance with GAAP, see Part I, Item 2. – “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Non-GAAP Financial Measures.” For the definition of constant currency revenue change, see Part I, Item 2. – “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations.” Adjusted EBITDA margin and Adjusted EBIT margin are defined as Adjusted EBITDA and Adjusted EBIT, respectively, divided by revenue for the applicable period. For the definition of constant currency change in Adjusted EBITDA margin and Adjusted EBIT margin, see Part I, Item 2. – “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Non-GAAP Financial Measures.” Adjusted Diluted EPS is defined as Adjusted Net Income divided by the diluted weighted average number of shares of Class A common stock and Class B common stock outstanding for the applicable period (including the effect of potentially dilutive securities determined using the treasury stock method), plus the weighted average number of other participating securities reflected in earnings per share using the two-class method, plus the assumed full exchange of all outstanding LLC Interests held by non-controlling interests for shares of Class A common stock or Class B common stock.

We present Free Cash Flow because we believe it is a useful indicator of liquidity that provides information to management and investors about the amount of cash generated from our core operations after expenditures for capitalized software development costs and furniture, equipment and leasehold improvements.

We present Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT and Adjusted EBIT margin because we believe they assist investors and analysts in comparing our operating performance across reporting periods on a consistent basis by excluding items that we do not believe are indicative of our core operating performance. Management and our board of directors use Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT and Adjusted EBIT margin to assess our financial performance and believe they are helpful in highlighting trends in our core operating performance, while other measures can differ significantly depending on long-term strategic decisions regarding capital structure, the tax jurisdictions in which we operate and capital investments. Further, our executive incentive compensation program is based in part on components of Adjusted EBITDA and Adjusted EBITDA margin.

We use constant currency measures as supplemental metrics to evaluate our underlying performance between periods by removing the impact of foreign currency fluctuations. We believe that providing certain percentage changes on a constant currency basis provide useful comparisons of our performance and trends between periods.

We use Adjusted Net Income and Adjusted Diluted EPS as supplemental metrics to evaluate our business performance in a way that also considers our ability to generate profit without the impact of certain items. Each of the normal recurring adjustments and other adjustments described in the definition of Adjusted Net Income helps to provide management with a measure of our operating performance over time by removing items that are not related to day-to-day operations or are non-cash expenses.

Free Cash Flow, Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT, Adjusted EBIT margin, Adjusted Net Income, Adjusted Diluted EPS and constant currency measures have limitations as analytical tools, and you should not consider such measures either in isolation or as substitutes for analyzing our results as reported under GAAP. Some of these limitations include the following:

- Free Cash Flow, Adjusted EBITDA, Adjusted EBIT, Adjusted Net Income and Adjusted Diluted EPS do not reflect every expenditure, future requirements for capital expenditures or contractual commitments;
- Adjusted EBITDA, Adjusted EBIT, Adjusted Net Income and Adjusted Diluted EPS do not reflect changes in our working capital needs;
- Adjusted EBITDA and Adjusted EBIT do not reflect any interest expense, or the amounts necessary to service interest or principal payments on any debt obligations;
- Adjusted EBITDA and Adjusted EBIT do not reflect income tax expense, which is a necessary element of our costs and ability to operate;
- although depreciation and amortization are eliminated in the calculation of Adjusted EBITDA, and the depreciation and amortization related to acquisitions and the Refinitiv Transaction are eliminated in the calculation of Adjusted EBIT, the assets being depreciated and amortized will often have to be replaced in the future, and Adjusted EBITDA and Adjusted EBIT do not reflect any costs of such replacements;
- Adjusted EBITDA, Adjusted EBIT, Adjusted Net Income and Adjusted Diluted EPS do not reflect the noncash component of certain employee compensation expense or payroll taxes associated with certain option exercises;
- Adjusted EBITDA, Adjusted EBIT, Adjusted Net Income and Adjusted Diluted EPS do not reflect the impact of earnings or charges resulting from matters we consider not to be indicative, on a recurring basis, of our ongoing operations;
- Constant currency measures do not reflect the impact of foreign currency fluctuations; and
- other companies in our industry may calculate Free Cash Flow, Adjusted EBITDA, Adjusted EBIT, Adjusted Net Income, Adjusted Diluted EPS, constant currency measures or similarly titled measures differently than we do, limiting their usefulness as comparative measures.

We compensate for these limitations by relying primarily on our GAAP results and using Free Cash Flow, Adjusted EBITDA, Adjusted EBIT, Adjusted Net Income, Adjusted Diluted EPS and constant currency measures only as supplemental information.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). You can generally identify forward-looking statements by our use of forward-looking terminology such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “potential,” “predict,” “projection,” “seek,” “should,” “will” or “would,” or the negative thereof or other variations thereon or comparable terminology. In particular, statements about the markets in which we operate, including our expectations about market trends, our market opportunity and the growth of our various markets, our expansion into new markets, any pending acquisitions or other strategic transactions, any potential tax savings we may realize as a result of our organizational structure, our dividend policy, our share repurchase program and our expectations, beliefs, plans, strategies, objectives, prospects or assumptions regarding future events, our performance or otherwise, contained in this Quarterly Report on Form 10-Q are forward-looking statements.

We have based these forward-looking statements on our current expectations, assumptions, estimates and projections. While we believe these expectations, assumptions, estimates and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond our control. These and other important factors may cause our actual results, performance or achievements to differ materially from those expressed or implied by these forward-looking statements, or could affect our stock price.

Some of the factors that could cause actual results to differ materially from those expressed or implied by the forward-looking statements include:

- changes in economic, political, social and market conditions and the impact of these changes on trading volumes;
- our failure to compete successfully;
- our failure to adapt our business effectively to keep pace with industry changes;
- consolidation and concentration in the financial services industry;
- our dependence on dealer clients;
- design defects, errors, failures or delays with our platforms or solutions;
- our dependence on third parties for certain market data and certain key functions;
- our inability to achieve our environmental, social and governance goals;
- our ability to implement our business strategies profitably;
- our ability to successfully integrate any acquisition or to realize benefits from any strategic alliances, partnerships or joint ventures;
- our inability to maintain and grow the capacity of our trading platforms, systems and infrastructure;
- systems failures, interruptions, delays in services, cybersecurity incidents, catastrophic events and any resulting interruptions;
- inadequate protection of our intellectual property;
- extensive regulation of our industry;
- our ability to retain the services of our senior management team;
- limitations on operating our business and incurring additional indebtedness as a result of covenant restrictions under our \$500.0 million senior secured revolving credit facility (the “Revolving Credit Facility”) with Citibank, N.A., as administrative agent and collateral agent, and the other lenders party thereto;
- our dependence on distributions from TWM LLC to fund our expected dividend payments and to pay our taxes and expenses, including payments under the tax receivable agreement (the “Tax Receivable Agreement”) entered into in connection with the IPO;

- our ability to realize any benefit from our organizational structure;
- Refinitiv’s, and indirectly LSEG’s, control of us and our status as a controlled company; and
- other risks and uncertainties, including those listed under Part I, Item 1A. “Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2022 (the “2022 Form 10-K”), filed with the Securities and Exchange Commission (“SEC”) and in other filings we may make from time to time with the SEC.

Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. The forward-looking statements contained in this Quarterly Report on Form 10-Q are not guarantees of future events or performance and future events, our actual results of operations, financial condition or liquidity, and the development of the industry and markets in which we operate, may differ materially from the forward-looking statements contained in this Quarterly Report on Form 10-Q. In addition, even if future events, our results of operations, financial condition or liquidity, and events in the industry and markets in which we operate, are consistent with the forward-looking statements contained in this Quarterly Report on Form 10-Q, they may not be predictive of events, results or developments in future periods.

Any forward-looking statement that we make in this Quarterly Report on Form 10-Q speaks only as of the date of such statement. Except as required by law, we do not undertake any obligation to update or revise, or to publicly announce any update or revision to, any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this Quarterly Report on Form 10-Q.

Investors and others should note that we announce material financial and operational information using our investor relations website, press releases, SEC filings and public conference calls and webcasts. Information about Tradeweb, our business and our results of operations may also be announced by posts on Tradeweb’s accounts on the following social media channels: Instagram, LinkedIn and X (formerly Twitter). The information that we post through these social media channels may be deemed material. As a result, we encourage investors, the media and others interested in Tradeweb to monitor these social media channels in addition to following our investor relations website, press releases, SEC filings and public conference calls and webcasts. These social media channels may be updated from time to time on our investor relations website.

PART I — FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

Tradeweb Markets Inc. and Subsidiaries
Condensed Consolidated Statements of Financial Condition
(in thousands, except share and per share amounts)
(Unaudited)

	September 30, 2023	December 31, 2022
Assets		
Cash and cash equivalents	\$ 1,493,410	\$ 1,257,229
Restricted cash	1,000	1,000
Receivable from brokers and dealers and clearing organizations	4,966	11,632
Deposits with clearing organizations	26,433	23,906
Accounts receivable, net of allowance for credit losses of \$187 and \$129 at September 30, 2023 and December 31, 2022, respectively	167,039	142,676
Furniture, equipment, purchased software and leasehold improvements, net of accumulated depreciation and amortization	36,151	37,413
Lease right-of-use assets	19,406	24,933
Software development costs, net of accumulated amortization	134,275	141,833
Goodwill	2,815,317	2,780,259
Intangible assets, net of accumulated amortization	1,032,354	1,072,818
Receivable and due from affiliates	3,165	2,728
Deferred tax asset	693,171	689,442
Other assets	77,866	74,262
Total assets	\$ 6,504,553	\$ 6,260,131
Liabilities and Equity		
Liabilities		
Payable to brokers and dealers and clearing organizations	\$ 4,966	\$ 11,264
Accrued compensation	121,227	150,884
Deferred revenue	31,404	22,827
Accounts payable, accrued expenses and other liabilities	46,668	46,690
Lease liabilities	22,040	27,943
Payable and due to affiliates	527	7,232
Deferred tax liability	18,004	21,251
Tax receivable agreement liability	447,976	425,724
Total liabilities	692,812	713,815
Commitments and contingencies (Note 13)		
Equity		
Preferred stock, \$0.00001 par value; 250,000,000 shares authorized; none issued or outstanding	—	—
Class A common stock, \$0.00001 par value; 1,000,000,000 shares authorized; 114,711,483 and 110,746,606 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	1	1
Class B common stock, \$0.00001 par value; 450,000,000 shares authorized; 96,933,192 and 96,933,192 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	1	1
Class C common stock, \$0.00001 par value; 350,000,000 shares authorized; none and 3,251,177 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	—	—
Class D common stock, \$0.00001 par value; 300,000,000 shares authorized; 23,080,571 and 23,092,704 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	—	—
Additional paid-in capital	4,706,499	4,577,270
Accumulated other comprehensive income (loss)	(10,836)	(10,113)
Retained earnings	570,149	386,632
Total stockholders' equity attributable to Tradeweb Markets Inc.	5,265,814	4,953,791
Non-controlling interests	545,927	592,525
Total equity	5,811,741	5,546,316
Total liabilities and equity	\$ 6,504,553	\$ 6,260,131

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

Tradeweb Markets Inc. and Subsidiaries
Condensed Consolidated Statements of Income
(in thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2023	2022	2023	2022
Revenues				
Transaction fees and commissions	\$ 263,485	\$ 228,015	\$ 776,544	\$ 717,489
Subscription fees	46,361	41,342	136,483	124,337
Refinitiv market data fees	15,460	15,370	46,515	46,354
Other	3,051	2,388	8,677	7,559
Total revenue	328,357	287,115	968,219	895,739
Expenses				
Employee compensation and benefits	116,016	102,720	334,433	330,601
Depreciation and amortization	46,559	44,778	137,850	133,998
Technology and communications	19,733	16,816	56,001	48,626
General and administrative	6,700	6,892	31,692	24,806
Professional fees	10,479	9,400	32,321	25,832
Occupancy	4,132	3,699	12,283	10,857
Total expenses	203,619	184,305	604,580	574,720
Operating income	124,738	102,810	363,639	321,019
Net interest income (expense)	17,465	3,413	45,065	3,507
Other income (loss), net	(1,907)	—	(2,022)	—
Income before taxes	140,296	106,223	406,682	324,526
Provision for income taxes	(28,666)	(24,657)	(90,920)	(63,915)
Net income	111,630	81,566	315,762	260,611
Less: Net income attributable to non-controlling interests	13,016	12,483	40,210	40,219
Net income attributable to Tradeweb Markets Inc.	\$ 98,614	\$ 69,083	\$ 275,552	\$ 220,392
Earnings per share attributable to Tradeweb Markets Inc. Class A and B common stockholders:				
Basic	\$ 0.47	\$ 0.34	\$ 1.31	\$ 1.08
Diluted	\$ 0.46	\$ 0.33	\$ 1.30	\$ 1.06
Weighted average shares outstanding:				
Basic	211,618,475	205,721,162	210,444,082	204,767,261
Diluted	213,491,634	208,329,469	212,276,908	207,748,037

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

Tradeweb Markets Inc. and Subsidiaries
Condensed Consolidated Statements of Comprehensive Income
(in thousands)
(Unaudited)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2023	2022	2023	2022
Net income	\$ 111,630	\$ 81,566	\$ 315,762	\$ 260,611
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments, with no tax benefit for each of the three and nine months ended September 30, 2023 and 2022	(4,456)	(12,406)	(623)	(26,181)
Other comprehensive income (loss), net of tax	(4,456)	(12,406)	(623)	(26,181)
Comprehensive income	107,174	69,160	315,139	234,430
Less: Net income attributable to non-controlling interests	13,016	12,483	40,210	40,219
Less: Foreign currency translation adjustments attributable to non-controlling interests	(438)	(1,521)	(24)	(3,288)
Comprehensive income attributable to Tradeweb Markets Inc.	\$ 94,596	\$ 58,198	\$ 274,953	\$ 197,499

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

Tradeweb Markets Inc. and Subsidiaries
Condensed Consolidated Statements of Changes in Equity
(in thousands, except share and per share amounts)
(Unaudited)

	Tradeweb Markets Inc. Stockholders' Equity				Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Non- Controlling Interests	Total Equity
	Par Value								
	Class A Common Stock	Class B Common Stock	Class C Common Stock	Class D Common Stock					
Balance at December 31, 2022	\$ 1	\$ 1	\$ —	\$ —	\$ 4,577,270	\$ (10,113)	\$ 386,632	\$ 592,525	\$ 5,546,316
Issuance of common stock from equity incentive plans	—	—	—	—	6,320	—	—	—	6,320
Share repurchases pursuant to share repurchase programs	—	—	—	—	—	—	(22,706)	—	(22,706)
Tax receivable agreement liability and deferred taxes arising from LLC Interest ownership exchanges and the issuance of common stock from equity incentive plans	—	—	—	—	15,082	—	—	—	15,082
Adjustments to non-controlling interests	—	—	—	—	6,910	(4)	—	(6,906)	—
Distributions to non-controlling interests	—	—	—	—	—	—	—	(2,283)	(2,283)
Dividends (\$0.09 per share)	—	—	—	—	—	—	(18,733)	—	(18,733)
Stock-based compensation expense	—	—	—	—	11,905	—	—	—	11,905
Payroll taxes paid for stock-based compensation	—	—	—	—	(39,878)	—	—	—	(39,878)
Net income	—	—	—	—	—	—	87,856	14,337	102,193
Foreign currency translation adjustments	—	—	—	—	—	2,352	—	297	2,649
Balance at March 31, 2023	\$ 1	\$ 1	\$ —	\$ —	\$ 4,577,609	\$ (7,765)	\$ 433,049	\$ 597,970	\$ 5,600,865
Issuance of common stock from equity incentive plans	—	—	—	—	1,262	—	—	—	1,262
Share repurchases pursuant to share repurchase programs	—	—	—	—	—	—	(7,602)	—	(7,602)
Tax receivable agreement liability and deferred taxes arising from LLC Interest ownership exchanges and the issuance of common stock from equity incentive plans	—	—	—	—	27,827	—	—	—	27,827
Adjustments to non-controlling interests	—	—	—	—	72,870	(120)	—	(72,750)	—
Distributions to non-controlling interests	—	—	—	—	—	—	—	(3,286)	(3,286)
Dividends (\$0.09 per share)	—	—	—	—	—	—	(19,048)	—	(19,048)
Stock-based compensation expense	—	—	—	—	16,097	—	—	—	16,097
Payroll taxes paid for stock-based compensation	—	—	—	—	(1,870)	—	—	—	(1,870)
Net income	—	—	—	—	—	—	89,082	12,857	101,939
Foreign currency translation adjustments	—	—	—	—	—	1,067	—	117	1,184
Balance at June 30, 2023	\$ 1	\$ 1	\$ —	\$ —	\$ 4,693,795	\$ (6,818)	\$ 495,481	\$ 534,908	\$ 5,717,368
Issuance of common stock from equity incentive plans	—	—	—	—	412	—	—	—	412
Share repurchases pursuant to share repurchase programs	—	—	—	—	—	—	(4,897)	—	(4,897)
Tax receivable agreement liability and deferred taxes arising from LLC Interest ownership exchanges and the issuance of common stock from equity incentive plans	—	—	—	—	2,801	—	—	—	2,801
Adjustments to non-controlling interests	—	—	—	—	(404)	—	—	404	—
Distributions to non-controlling interests	—	—	—	—	—	—	—	(1,963)	(1,963)
Dividends (\$0.09 per share)	—	—	—	—	—	—	(19,049)	—	(19,049)
Stock-based compensation expense	—	—	—	—	17,668	—	—	—	17,668
Payroll taxes paid for stock-based compensation	—	—	—	—	(7,773)	—	—	—	(7,773)
Net income	—	—	—	—	—	—	98,614	13,016	111,630
Foreign currency translation adjustments	—	—	—	—	—	(4,018)	—	(438)	(4,456)
Balance at September 30, 2023	\$ 1	\$ 1	\$ —	\$ —	\$ 4,706,499	\$ (10,836)	\$ 570,149	\$ 545,927	\$ 5,811,741

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

Tradeweb Markets Inc. and Subsidiaries
Condensed Consolidated Statements of Changes in Equity – (Continued)
(in thousands, except share and per share amounts)
(Unaudited)

	Tradeweb Markets Inc. Stockholders' Equity									
	Par Value				Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Non- Controlling Interests	Total Equity	
Class A Common Stock	Class B Common Stock	Class C Common Stock	Class D Common Stock							
Balance at December 31, 2021	\$ 1	\$ 1	\$ —	\$ —	\$ 4,401,366	\$ 1,604	\$ 242,623	\$ 663,348	\$ 5,308,943	
Issuance of common stock from equity incentive plans	—	—	—	—	692	—	—	—	692	
Share repurchases pursuant to share repurchase programs	—	—	—	—	—	—	(47,323)	—	(47,323)	
Tax receivable agreement liability and deferred taxes arising from LLC Interest ownership exchanges and the issuance of common stock from equity incentive plans	—	—	—	—	38,676	—	—	—	38,676	
Adjustments to non-controlling interests	—	—	—	—	30,005	—	—	(30,005)	—	
Distributions to non-controlling interests	—	—	—	—	—	—	—	(2,178)	(2,178)	
Dividends (\$0.08 per share)	—	—	—	—	—	—	(16,350)	—	(16,350)	
Stock-based compensation expense	—	—	—	—	13,682	—	—	—	13,682	
Payroll taxes paid for stock-based compensation	—	—	—	—	(95,758)	—	—	—	(95,758)	
Net income	—	—	—	—	—	—	82,965	14,480	97,445	
Foreign currency translation adjustments	—	—	—	—	—	(3,568)	—	(530)	(4,098)	
Balance at March 31, 2022	\$ 1	\$ 1	\$ —	\$ —	\$ 4,388,663	\$ (1,964)	\$ 261,915	\$ 645,115	\$ 5,293,731	
Issuance of common stock from equity incentive plans	—	—	—	—	6,924	—	—	—	6,924	
Share repurchases pursuant to share repurchase programs	—	—	—	—	—	—	(9,000)	—	(9,000)	
Tax receivable agreement liability and deferred taxes arising from LLC Interest ownership exchanges and the issuance of common stock from equity incentive plans	—	—	—	—	7,449	—	—	—	7,449	
Adjustments to non-controlling interests	—	—	—	—	(1,300)	—	—	1,300	—	
Distributions to non-controlling interests	—	—	—	—	—	—	—	(2,568)	(2,568)	
Dividends (\$0.08 per share)	—	—	—	—	—	—	(16,360)	—	(16,360)	
Stock-based compensation expense	—	—	—	—	20,887	—	—	—	20,887	
Payroll taxes paid for stock-based compensation	—	—	—	—	(2,218)	—	—	—	(2,218)	
Net income	—	—	—	—	—	—	68,344	13,256	81,600	
Foreign currency translation adjustments	—	—	—	—	—	(8,440)	—	(1,237)	(9,677)	
Balance at June 30, 2022	\$ 1	\$ 1	\$ —	\$ —	\$ 4,420,405	\$ (10,404)	\$ 304,899	\$ 655,866	\$ 5,370,768	
Issuance of common stock from equity incentive plans	—	—	—	—	2,059	—	—	—	2,059	
Share repurchases pursuant to share repurchase programs	—	—	—	—	—	—	(9,000)	—	(9,000)	
Tax receivable agreement liability and deferred taxes arising from LLC Interest ownership exchanges and the issuance of common stock from equity incentive plans	—	—	—	—	27,740	—	—	—	27,740	
Adjustments to non-controlling interests	—	—	—	—	79,606	(312)	—	(79,294)	—	
Distributions to non-controlling interests	—	—	—	—	—	—	—	(2,857)	(2,857)	
Dividends (\$0.08 per share)	—	—	—	—	—	—	(16,653)	—	(16,653)	
Stock-based compensation expense	—	—	—	—	14,622	—	—	—	14,622	
Payroll taxes paid for stock-based compensation	—	—	—	—	(2,272)	—	—	—	(2,272)	
Net income	—	—	—	—	—	—	69,083	12,483	81,566	
Foreign currency translation adjustments	—	—	—	—	—	(10,885)	—	(1,521)	(12,406)	
Balance at September 30, 2022	\$ 1	\$ 1	\$ —	\$ —	\$ 4,542,160	\$ (21,601)	\$ 348,329	\$ 584,677	\$ 5,453,567	

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

Tradeweb Markets Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(in thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2023	2022
Cash flows from operating activities		
Net income	\$ 315,762	\$ 260,611
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	137,850	133,998
Stock-based compensation expense	44,670	49,432
Deferred taxes	70,071	49,078
Other (income) loss, net	2,022	—
(Increase) decrease in operating assets:		
Receivable from/payable to brokers and dealers and clearing organizations, net	368	(1)
Deposits with clearing organizations	(2,502)	(5,074)
Accounts receivable	(22,330)	(29,938)
Receivable and due from affiliates/payable and due to affiliates, net	(8,071)	(5,167)
Other assets	(2,890)	(4,433)
Increase (decrease) in operating liabilities:		
Accrued compensation	(33,814)	(26,155)
Deferred revenue	8,510	3,856
Accounts payable, accrued expenses and other liabilities	(8,318)	(1,385)
Net cash provided by operating activities	501,328	424,822
Cash flows from investing activities		
Cash paid for acquisitions, net of cash acquired	(69,648)	—
Cash paid for foreign currency call option, net of sale proceeds	(1,289)	—
Purchases of furniture, equipment, software and leasehold improvements	(17,467)	(17,959)
Capitalized software development costs	(32,105)	(27,470)
Net cash used in investing activities	(120,509)	(45,429)
Cash flows from financing activities		
Share repurchases pursuant to share repurchase programs	(32,874)	(65,323)
Proceeds from stock-based compensation exercises	7,994	9,675
Dividends	(56,830)	(49,363)
Distributions to non-controlling interests	(7,532)	(7,603)
Payroll taxes paid for stock-based compensation	(49,184)	(100,248)
Payments on tax receivable agreement liability	(5,724)	(8,995)
Net cash used in financing activities	(144,150)	(221,857)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(488)	(19,357)
Net increase (decrease) in cash, cash equivalents and restricted cash	236,181	138,179
Cash, cash equivalents and restricted cash		
Beginning of period	1,258,229	973,048
End of period	\$ 1,494,410	\$ 1,111,227

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

Tradeweb Markets Inc. and Subsidiaries
Consolidated Statements of Cash Flows - (Continued)
(in thousands)
(Unaudited)

	Nine Months Ended	
	September 30,	
	2023	2022
Supplemental disclosure of cash flow information		
Income taxes paid, net of (refunds)	\$ 24,624	\$ 10,992
Non-cash investing and financing activities		
Furniture, equipment, software and leasehold improvement additions included in accounts payable	\$ 478	\$ 702
Unsettled share repurchases included in other liabilities	\$ 2,331	\$ —
Withholding taxes payable relating to stock-based compensation settlements included in accrued compensation	\$ 337	\$ —
Items arising from LLC Interest ownership changes:		
Establishment of liabilities under tax receivable agreement	\$ 27,976	\$ 35,894
Deferred tax asset	\$ 73,686	\$ 109,759
Reconciliation of cash, cash equivalents and restricted cash as shown on the statements of financial condition:	September 30,	December 31,
	2023	2022
Cash and cash equivalents	\$ 1,493,410	\$ 1,257,229
Restricted cash	1,000	1,000
Cash, cash equivalents and restricted cash shown in the statement of cash flows	<u>\$ 1,494,410</u>	<u>\$ 1,258,229</u>

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

Notes to Condensed Consolidated Financial Statements (Unaudited)

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Tradeweb Markets Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Organization

Tradeweb Markets Inc. (the “Corporation”) was incorporated as a Delaware corporation on November 7, 2018 to carry on the business of Tradeweb Markets LLC (“TWM LLC”) following the completion of a series of reorganization transactions on April 4, 2019 (the “Reorganization Transactions”), in connection with Tradeweb Markets Inc.’s initial public offering (the “IPO”), which closed on April 8, 2019. Following the Reorganization Transactions, Refinitiv (as defined below) owned an indirect majority ownership interest in the Company (as defined below).

On January 29, 2021, London Stock Exchange Group plc (“LSEG”) completed its acquisition of the Refinitiv business from a consortium, including certain investment funds affiliated with The Blackstone Group Inc. (f/k/a The Blackstone Group L.P.) (“Blackstone”) as well as Thomson Reuters Corporation (“TR”), in an all share transaction (the “LSEG Transaction”).

In connection with the LSEG Transaction, the Corporation became a consolidating subsidiary of LSEG. Prior to the LSEG Transaction, the Corporation was a consolidating subsidiary of BCP York Holdings (“BCP”), a company owned by certain investment funds affiliated with Blackstone, through BCP’s previous majority ownership interest in Refinitiv. As used herein, “Refinitiv,” prior to the LSEG Transaction, means Refinitiv Holdings Limited, and unless otherwise stated or the context otherwise requires, all of its direct and indirect subsidiaries, and subsequent to the LSEG Transaction, refers to Refinitiv Parent Limited, and unless otherwise stated or the context otherwise requires, all of its subsidiaries. Refinitiv owns substantially all of the former financial and risk business of Thomson Reuters (as defined below), including, prior to and following the completion of the Reorganization Transactions, an indirect majority ownership interest in the Company.

The Corporation is a holding company whose principal asset is LLC Interests (as defined below) of TWM LLC. As the sole manager of TWM LLC, the Corporation operates and controls all of the business and affairs of TWM LLC and, through TWM LLC and its subsidiaries, conducts the Corporation’s business. As a result of this control, and because the Corporation has a substantial financial interest in TWM LLC, the Corporation consolidates the financial results of TWM LLC and reports a non-controlling interest in the Corporation’s condensed consolidated financial statements. As of September 30, 2023, Tradeweb Markets Inc. owned 90.2% of TWM LLC and the non-controlling interest holders owned the remaining 9.8% of TWM LLC. As of December 31, 2022, Tradeweb Markets Inc. owned 88.7% of TWM LLC and the non-controlling interest holders owned the remaining 11.3% of TWM LLC.

Unless the context otherwise requires, references to the “Company” refer to Tradeweb Markets Inc. and its consolidated subsidiaries, including TWM LLC, following the completion of the Reorganization Transactions, and TWM LLC and its consolidated subsidiaries prior to the completion of the Reorganization Transactions.

The Company is a leader in building and operating electronic marketplaces for a global network of clients across the institutional, wholesale and retail client sectors. The Company’s principal subsidiaries include:

- Tradeweb LLC (“TWL”), a registered broker-dealer under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), a member of the Financial Industry Regulatory Authority (“FINRA”), a member of the Municipal Securities Rulemaking Board (“MSRB”), a registered independent introducing broker with the Commodities Future Trading Commission (“CFTC”) and a member of the National Futures Association (“NFA”).
- Dealerweb Inc. (“DW”) (formerly known as Hilliard Farber & Co., Inc.), a registered broker-dealer under the Exchange Act and a member of FINRA and MSRB. DW is also registered as an introducing broker with the CFTC and a member of the NFA.
- Tradeweb Direct LLC (“TWD”) (formerly known as BondDesk Trading LLC), a registered broker-dealer under the Exchange Act and a member of FINRA and MSRB.
- Tradeweb Europe Limited (“TEL”), a MiFID Investment Firm regulated by the Financial Conduct Authority (the “FCA”) in the UK and certain other global regulators and that maintains branches in Asia.
- TW SEF LLC (“TW SEF”), a Swap Execution Facility (“SEF”) regulated by the CFTC and certain other global regulators.
- DW SEF LLC (“DW SEF”), a SEF regulated by the CFTC and certain other global regulators.

- Tradeweb Japan K.K. (“TWJ”), a security house regulated by the Japanese Financial Services Agency (“JFSA”) and the Japan Securities Dealers Association (“JSDA”).
- Tradeweb EU B.V. (“TWEU”), a MiFID Investment Firm regulated by the Netherlands Authority for the Financial Markets (“AFM”), the De Nederlandsche Bank (“DNB”) and certain other global regulators and that maintains a branch in France.
- Tradeweb Execution Services Limited (“TESL”), an Investment Firm (“BIPRU Firm”) regulated by the FCA in the UK.
- Tradeweb Commercial Information Consulting (Shanghai) Co., Ltd. a wholly-owned foreign enterprise (WFOE) for the purpose of providing consulting and marketing activities in China. The offshore electronic trading platform is recognized by the People’s Bank of China for the provision of Bond Connect and CIBM Direct.
- Tradeweb Execution Services B.V. (“TESBV”), a MiFID investment firm authorized and regulated by the AFM, with permission to trade on a matched principal basis.
- Yieldbroker Pty Limited (“YB” or “Yieldbroker”), acquired in August 2023, a Tier 1 Australian Markets Licensee in Australia, regulated by the Australian Securities & Investments Commission (“ASIC”), that maintains a branch in Singapore which is regulated by the Monetary Authority of Singapore (“MAS”) as a Regulated Market Operator.

In May 2023, the Company announced that it had entered into a definitive agreement to acquire all of the outstanding equity interests of Yieldbroker. Yieldbroker is a leading Australian trading platform for Australian and New Zealand government bonds and interest rate derivatives covering the institutional and wholesale client sectors. This acquisition combines Australia and New Zealand’s highly attractive, fast-growing markets with Tradeweb’s international reach and scale. The A\$123.6 million, all-cash transaction closed on August 31, 2023 (the “Yieldbroker Acquisition”), following the satisfaction of closing conditions and regulatory reviews. See Note 4 – Acquisitions for additional details on this acquisition.

In June 2021, the Company acquired Nasdaq’s U.S. fixed income electronic trading platform, formerly known as eSpeed (the “NFI Acquisition”), which is a fully executable central limit order book (CLOB) for electronic trading in on-the-run (OTR) U.S. government bonds. The NFI Acquisition included the acquisition of Execution Access, LLC, (“EA”), a registered broker-dealer under the Exchange Act and a member of FINRA. In November 2022, EA merged with and into DW with DW being the surviving entity.

A majority interest of Refinitiv (formerly the Thomson Reuters Financial & Risk Business) was acquired by BCP on October 1, 2018 (the “Refinitiv Transaction”) from TR. The Refinitiv Transaction resulted in a new basis of accounting for certain of the Company’s assets and liabilities beginning on October 1, 2018. See Note 2 – Significant Accounting Policies for a description of pushdown accounting applied as a result of the Refinitiv Transaction.

In connection with the Reorganization Transactions, TWM LLC’s limited liability company agreement (the “TWM LLC Agreement”) was amended and restated to, among other things, (i) provide for a new single class of common membership interests in TWM LLC (the “LLC Interests”), (ii) exchange all of the then existing membership interests in TWM LLC for LLC Interests and (iii) appoint the Corporation as the sole manager of TWM LLC. LLC Interests, other than those held by the Corporation, are redeemable or exchangeable in accordance with the TWM LLC Agreement for shares of Class A common stock, par value \$0.00001 per share, of the Corporation (the “Class A common stock”) or Class B common stock, par value \$0.00001 per share, of the Corporation (the “Class B common stock”), as the case may be, on a one-for-one basis.

As used herein, references to “Continuing LLC Owners” refer collectively to (i) those owners of TWM LLC prior to the Reorganization Transactions (the “Original LLC Owners”), including an indirect subsidiary of Refinitiv, certain investment and commercial banks (collectively, the “Bank Stockholders”), and members of management, that continued to own LLC Interests after the completion of the IPO and Reorganization Transactions and that received shares of Class C common stock, par value \$0.00001 per share, of the Corporation (the “Class C common stock”), shares of Class D common stock, par value \$0.00001 per share, of the Corporation (the “Class D common stock”) or a combination of both, as the case may be, in connection with the completion of the Reorganization Transactions, (ii) any subsequent transferee of any Original LLC Owner that has executed a joinder agreement to the TWM LLC Agreement and (iii) solely with respect to the Tax Receivable Agreement (as defined in Note 6 – Tax Receivable Agreement), (x) those Original LLC Owners, including certain of the Bank Stockholders, that disposed of all of their LLC Interests for cash in connection with the IPO and (y) any party that has executed a joinder agreement to the Tax Receivable Agreement in accordance with the Tax Receivable Agreement.

As of September 30, 2023:

- The public investors collectively owned 114,711,483 shares of Class A common stock, representing 8.7% of the combined voting power of Tradeweb Markets Inc.'s issued and outstanding common stock and indirectly, through Tradeweb Markets Inc., owned 48.9% of the economic interest in TWM LLC;
- Refinitiv collectively owned 96,933,192 shares of Class B common stock and 22,988,329 shares of Class D common stock, representing 91.2% of the combined voting power of Tradeweb Markets Inc.'s issued and outstanding common stock and directly and indirectly, through Tradeweb Markets Inc., owned 51.1% of the economic interest in TWM LLC; and
- Other stockholders that continued to own LLC Interests also collectively owned 92,242 shares of Class D common stock, representing 0.1% of the combined voting power of Tradeweb Markets Inc.'s issued and outstanding common stock. Collectively, these stockholders directly owned less than 0.1% of the economic interest in TWM LLC.

In addition, the Company's basic and diluted earnings per share calculations for the three and nine months ended September 30, 2023 were impacted by 265,681 and 266,453, respectively, of weighted average shares resulting from unvested restricted stock units and unsettled vested performance-based restricted stock units that were considered participating securities for purposes of calculating earnings per share in accordance with the two-class method. The Company's diluted earnings per share calculations for the three and nine months ended September 30, 2023 also include 1,873,159 and 1,832,826, respectively, of weighted average shares resulting from the dilutive effect of its equity incentive plans. See Note 14 – Earnings Per Share for additional details.

2. Significant Accounting Policies

The following is a summary of significant accounting policies:

Basis of Presentation

The condensed consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany transactions and balances have been eliminated in consolidation. As discussed in Note 1 – Organization, as a result of the Reorganization Transactions, Tradeweb Markets Inc. consolidates TWM LLC and its subsidiaries and TWM LLC is considered to be the predecessor to Tradeweb Markets Inc. for financial reporting purposes. Tradeweb Markets Inc. had no business transactions or activities and no substantial assets or liabilities prior to the Reorganization Transactions. The condensed consolidated financial statements represent the financial condition and results of operations of the Company and report a non-controlling interest related to the LLC Interests held by Continuing LLC Owners.

These condensed 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, 2022. The consolidated financial information as of December 31, 2022 has been derived from audited financial statements not included herein. These unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and the rules and regulations of the U.S. Securities and Exchange Commission ("SEC") with respect to interim financial reporting and Form 10-Q. In accordance with such rules and regulations, certain disclosures that are normally included in annual financial statements have been omitted. These unaudited condensed consolidated financial statements reflect all normal and recurring adjustments that are, in the opinion of management, necessary for a fair statement of the results for the interim periods presented. Operating results for interim periods are not necessarily indicative of the results that may be expected for the full year.

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 disclosures of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates and the difference may be material to the condensed consolidated financial statements.

Reclassifications

Certain reclassifications have been made to the December 31, 2022 consolidated statement of financial condition, and related financial information, to conform to the current period presentation. These primarily include reclassifying approximately \$2.7 million of related party balances from other assets to receivable and due from affiliates and \$5.8 million of related party balances from accounts payable, accrued expenses and other liabilities to payable and due to affiliates. These reclassifications had no impact on total assets, total liabilities or total equity on the consolidated statement of financial condition, nor did they have any impact on the consolidated statements of income, comprehensive income, changes in equity or cash flows.

Business Combinations

Business combinations are accounted for under the purchase method of accounting pursuant to Accounting Standards Codification (“ASC”) 805, *Business Combinations* (“ASC 805”). 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. The fair value of assets acquired and liabilities assumed is determined based on assumptions that reasonable market participants would use in the principal (or most advantageous) market for the asset or liability. Determining the fair value of certain assets acquired and liabilities assumed is judgmental in nature and often involves the use of significant estimates and assumptions, including assumptions with respect to future cash flows, discount rates, growth rates, customer attrition rates and asset lives.

Transaction costs incurred to effect a business combination are expensed as incurred and are included as a component of professional fees or general and administrative expenses in the condensed consolidated statements of income.

Pushdown Accounting

In connection with the Refinitiv Transaction, a majority interest of Refinitiv was acquired by BCP on October 1, 2018 from TR. The Refinitiv Transaction was accounted for by Refinitiv in accordance with the acquisition method of accounting pursuant to ASC 805, and pushdown accounting was applied to Refinitiv to record the fair value of the assets and liabilities of Refinitiv as of October 1, 2018, the date of the Refinitiv Transaction. The Company, as a consolidating subsidiary of Refinitiv, also accounted for the Refinitiv Transaction using pushdown accounting which resulted in a new fair value basis of accounting for certain of the Company’s assets and liabilities beginning on October 1, 2018. Under the pushdown accounting applied, the excess of the fair value of the Company above the fair value accounting basis of the net assets and liabilities of the Company as of October 1, 2018 was recorded as goodwill. The fair value of assets acquired and liabilities assumed was determined based on assumptions that reasonable market participants would use in the principal (or most advantageous) market for the asset or liability. The adjusted valuations primarily affected the values of the Company’s long-lived and indefinite-lived intangible assets, including software development costs.

Cash and Cash Equivalents

Cash and cash equivalents consists of cash and highly liquid investments (such as short-term money market instruments) with remaining maturities at the time of purchase of three months or less.

Allowance for Credit Losses

The Company continually monitors collections and payments from its clients and maintains an allowance for credit losses. The allowance for credit losses is based on an estimate of the amount of potential credit losses in existing accounts receivable, as determined from a review of aging schedules, past due balances, historical collection experience and other specific account data. Careful analysis of the financial condition of the Company’s counterparties is also performed.

Additions to the allowance for credit losses are charged to credit loss expense, which is included in general and administrative expenses in the condensed consolidated statements of income. Aged balances that are determined to be uncollectible are written off against the allowance for credit losses. See Note 12 – Credit Risk for additional information.

Receivable from and Payable to Brokers and Dealers and Clearing Organizations

Receivable from and payable to brokers and dealers and clearing organizations consists of proceeds from transactions executed on the Company’s wholesale platform which failed to settle due to the inability of a transaction party to deliver or receive the transacted security. These securities transactions are generally collateralized by those securities. Until the failed transaction settles, a receivable from (and a matching payable to) brokers and dealers and clearing organizations is recognized for the proceeds from the unsettled transaction.

Deposits with Clearing Organizations

Deposits with clearing organizations are comprised of cash deposits.

Furniture, Equipment, Purchased Software and Leasehold Improvements

Furniture, equipment, purchased software and leasehold improvements are carried at cost less accumulated depreciation. Depreciation for furniture, equipment and purchased software is computed on a straight-line basis over the estimated useful lives of the related assets, ranging from three to seven years. Leasehold improvements are amortized over the lesser of the estimated useful lives of the leasehold improvements or the remaining term of the lease for office space.

Furniture, equipment, purchased software and leasehold improvements are tested for impairment whenever events or changes in circumstances suggest that an asset's carrying value may not be fully recoverable.

As of September 30, 2023 and December 31, 2022, accumulated depreciation related to furniture, equipment, purchased software and leasehold improvements totaled \$89.4 million and \$73.8 million, respectively. Depreciation expense for furniture, equipment, purchased software and leasehold improvements was \$5.4 million and \$5.0 million for the three months ended September 30, 2023 and 2022, respectively, and \$15.9 million and \$14.6 million for the nine months ended September 30, 2023 and 2022, respectively.

Software Development Costs

The Company capitalizes costs associated with the development of internal use software at the point at which the conceptual formulation, design and testing of possible software project alternatives have been completed. The Company capitalizes employee compensation and related benefits and third party consulting costs incurred during the application development stage which directly contribute to such development. Such costs are amortized on a straight-line basis over three years. Software development costs acquired as part of the Yieldbroker Acquisition and the NFI Acquisition are both amortized over one year. Costs capitalized as part of the Refinitiv Transaction pushdown accounting allocation are amortized over nine 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 fully recoverable, or that their useful lives are shorter than originally expected. Non-capitalized software costs and routine maintenance costs are expensed as incurred.

As of September 30, 2023 and December 31, 2022, accumulated amortization related to software development costs totaled \$207.9 million and \$166.6 million, respectively. Amortization expense for software development costs was \$14.1 million and \$13.0 million for the three months ended September 30, 2023 and 2022, respectively, and \$41.3 million and \$39.0 million for the nine months ended September 30, 2023 and 2022, respectively.

Goodwill

Goodwill includes the excess of the fair value of the Company above the fair value accounting basis of the net assets and liabilities of the Company as previously applied under pushdown accounting in connection with the Refinitiv Transaction. Goodwill also includes the cost of acquired companies in excess of the fair value of identifiable net assets at the acquisition date, including the Yieldbroker Acquisition and the NFI Acquisition. Goodwill is not amortized, but is tested for impairment annually on October 1st and between annual tests, whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. Goodwill is tested at the reporting unit level, which is defined as an operating segment or one level below the operating segment. The Company consists of one reporting unit for goodwill impairment testing purposes. An impairment loss is recognized if the estimated fair value of a reporting unit is less than its net book value. Such loss is calculated as the difference between the estimated fair value of goodwill and its carrying value.

Goodwill was last tested for impairment on October 1, 2022 and no impairment of goodwill was identified.

Intangible Assets

Intangible assets with a finite life are amortized over the estimated lives, ranging from four to thirteen years. These intangible assets subject to amortization are tested for impairment whenever events or changes in circumstances suggest that an asset's or asset group's carrying value may not be fully recoverable. Intangible assets with an indefinite useful life are tested for impairment at least annually. An impairment loss is recognized if the sum of the estimated discounted cash flows relating to the asset or asset group is less than the corresponding book value.

As of September 30, 2023 and December 31, 2022, accumulated amortization related to intangible assets totaled \$514.9 million and \$434.2 million, respectively. Amortization expense for definite-lived intangible assets was \$27.1 million and \$26.8 million for the three months ended September 30, 2023 and 2022, respectively and \$80.7 million and \$80.4 million for the nine months ended September 30, 2023 and 2022, respectively.

Equity Investments Without Readily Determinable Fair Values

Equity Investments without a readily determinable fair value are measured at cost, less impairment, plus or minus observable price changes (in orderly transactions) of an identical or similar investment of the same issuer. If the Company determines that the equity investment is impaired on the basis of a qualitative assessment, the Company will recognize an impairment loss equal to the amount by which the investment's carrying amount exceeds its fair value. Equity investments are included as a component of other assets on the condensed consolidated statements of financial condition.

Securities Sold Under Agreements to Repurchase

From time to time, the Company sells securities under agreements to repurchase in order to facilitate the clearance of securities. Securities sold under agreements to purchase are treated as collateralized financings and are presented in the condensed consolidated statements of financial condition at the amounts of cash received. Receivables and payables arising from these agreements are not offset in the condensed consolidated statements of financial condition.

Leases

At lease commencement, a right-of-use asset and a lease liability are recognized for all leases with an initial term in excess of 12 months based on the initial present value of the fixed lease payments over the lease term. The lease right-of-use asset also reflects the present value of any initial direct costs, prepaid lease payments and lease incentives. The Company's leases do not provide a readily determinable implicit discount rate. Therefore, management estimates the Company's incremental borrowing rate used to discount the lease payments based on the information available at lease commencement. The Company includes the term covered by an option to extend a lease when the option is reasonably certain to be exercised. The Company has elected not to separate non-lease components from lease components for all leases. Significant assumptions and judgments in calculating the lease right-of-use assets and lease liabilities include the determination of the applicable borrowing rate for each lease. Operating lease expense is recognized on a straight-line basis over the lease term and included as a component of occupancy expense in the consolidated statements of income.

Deferred Offering Costs

Deferred offering costs consist of legal, accounting and other costs directly related to the Company's efforts to raise capital. These costs are recognized as a reduction in additional paid-in capital within the condensed consolidated statements of financial condition when the offering is effective. No offering costs were incurred during the three and nine months ended September 30, 2023 and 2022.

Revenue Recognition

The Company's classification of revenues in the condensed consolidated statements of income represents revenues from contracts with customers disaggregated by type of revenue. See Note 5 – Revenue for additional details regarding revenue types and the Company's policies regarding revenue recognition.

Translation of Foreign Currency and Foreign Exchange Derivative Contracts

Revenues, expenses, assets and liabilities denominated in non-functional currencies are recorded in the appropriate functional currency for the legal entity at the rate of exchange prevailing at the transaction date. Monetary assets and liabilities that are denominated in non-functional currencies are then remeasured at the end of each reporting period at the exchange rate prevailing at the end of the reporting period. Foreign currency remeasurement gains or losses on monetary assets and liabilities in nonfunctional currencies are recognized in the condensed consolidated statements of income within general and administrative expenses. The realized and unrealized gains/losses totaled \$0.7 million gain and a \$0.6 million loss during the three months ended September 30, 2023 and 2022, respectively and realized and unrealized losses during the nine months ended September 30, 2023 and 2022 totaled \$1.0 million and \$2.3 million, respectively. Since the condensed consolidated financial statements are presented in U.S. dollars, the Company also translates all non-U.S. dollar functional currency revenues, expenses, assets and liabilities into U.S. dollars. All non-U.S. dollar functional currency revenue and expense amounts are translated into U.S. dollars monthly at the average exchange rate for the month. All non-U.S. dollar functional currency assets and liabilities are translated at the rate prevailing at the end of the reporting period. Gains or losses on translation in the financial statements, when the functional currency is other than the U.S. dollar, are included as a component of other comprehensive income.

The Company enters into foreign currency forward contracts to mitigate its U.S. dollar and British pound sterling versus euro exposure, generally with a duration of less than 12 months. In June 2023, the Company also entered into a foreign currency call option on Australian dollars, see Note 4 – Acquisitions for additional details. The Company's foreign exchange derivative contracts are not designated as hedges for accounting purposes. Changes in the fair value during the period of foreign currency forward contracts, which were entered into for foreign exchange risk management purposes relating to operating activities, are recognized in the condensed consolidated statements of income within general and administrative expenses and changes in the fair value during the period of the foreign currency call option on Australian dollars, which was entered into for foreign exchange risk management purposes relating to investing activities, are recognized in the condensed consolidated statements of income within other income/loss. The Company does not use derivative instruments for trading or speculative purposes. Realized and unrealized gains on foreign currency forward contracts during the three months ended September 30, 2023 and 2022 totaled \$3.9 million and \$6.8 million, respectively, and realized and unrealized gains on foreign currency forward contracts during the nine months ended September 30, 2023 and 2022 totaled \$4.9 million and \$12.9 million, respectively. Realized and unrealized losses on the foreign currency call option on the Australian dollar call option during the three and nine months ended September 30, 2023 totaled \$1.9 million and \$1.3 million, respectively. As of September 30, 2023 and December 31, 2022, the counterparty on each of the foreign exchange derivative contracts was an affiliate of LSEG and therefore the corresponding assets or liabilities on such contracts were included in receivable and due from affiliates or payable and due to affiliates, respectively, on the accompanying condensed consolidated statements of financial condition. See Note 11 – Fair Value of Financial Instruments for additional details on the Company's derivative instruments.

Income Tax

The Corporation is subject to U.S. federal, state and local income taxes with respect to its taxable income, including its allocable share of any taxable income of TWM LLC, and is taxed at prevailing corporate tax rates. TWM LLC is a multiple member limited liability company taxed as a partnership and accordingly any taxable income generated by TWM LLC is passed through to and included in the taxable income of its members, including the Corporation. Income taxes also include unincorporated business taxes on income earned or losses incurred for conducting business in certain state and local jurisdictions, income taxes on income earned or losses incurred in foreign jurisdictions on certain operations and federal and state income taxes on income earned or losses incurred, both current and deferred, on subsidiaries that are taxed as corporations for U.S. tax purposes.

The Company records deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities. The Company measures deferred taxes using the enacted tax rates and laws that will be in effect when such temporary differences are expected to reverse. The Company evaluates the need for valuation allowances based on the weight of positive and negative evidence. The Company records valuation allowances wherever management believes it is more likely than not that the Company will not be able to realize its deferred tax assets in the foreseeable future.

The Company records uncertain tax positions on the basis of a two-step process whereby (i) the Company determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with the related tax authority.

The Company recognizes interest and penalties related to income taxes within the provision for income taxes in the condensed consolidated statements of income. Accrued interest and penalties are included within accounts payable, accrued expenses and other liabilities in the condensed consolidated statements of financial condition.

The Company has elected to treat taxes due on future U.S. inclusions in taxable income under the global intangible low-taxed income (“GILTI”) provision of the Tax Cuts and Jobs Act of 2017 as a current period expense when incurred.

On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (“IRA”) into law. The IRA establishes a 15% corporate minimum tax effective for taxable years beginning after December 31, 2022, and imposes a 1% excise tax on the repurchase after December 31, 2022 of stock by publicly traded U.S. corporations. The 1% excise tax did not have a material impact to our financial condition, results of operations and cash flows as of and for the three and nine months ended September 30, 2023. The Company will continue to evaluate the impact of the 15% corporate minimum tax on subsequent periods.

On October 8, 2021, the Organization for Economic Cooperation and Development announced an accord endorsing and providing an implementation plan focused on global profit allocation, and implementing a global minimum tax rate of at least 15% for large multinational corporations on a jurisdiction-by-jurisdiction basis, known as the “Two Pillar Plan.” On December 15, 2022, the European Council formally adopted a European Union directive on the implementation of the plan by January 1, 2024. The Company may be subject to the provisions of the Two Pillar Plan, and related tax impacts per local country adoption, as it is a consolidating subsidiary of LSEG. The Company will continue to monitor and evaluate the impact of the Two Pillar Plan on future periods as further information becomes available.

Stock-Based Compensation

The stock-based payments received by the employees of the Company are accounted for as equity awards. The Company measures and recognizes the cost of employee services received in exchange for awards of equity instruments based on their estimated fair values measured as of the grant date. These costs are recognized as an expense over the requisite service period, with an offsetting increase to additional paid-in capital. The grant-date fair value of stock-based awards that do not require future service (i.e., vested awards) are expensed immediately. Forfeitures of stock-based compensation awards are recognized as they occur.

For grants made during the post-IPO period, the fair value of the equity instruments is determined based on the price of the Class A common stock on the grant date.

Prior to the IPO, the Company awarded options to management and other employees (collectively, the “Special Option Award”) under the Amended and Restated Tradeweb Markets Inc. Option Plan (the “Option Plan”). The significant assumptions used to estimate the fair value as of grant date of the options awarded prior to the IPO did not reflect changes that would have occurred to these assumptions as a result of the IPO. The non-cash stock-based compensation expense associated with the Special Option Award began being expensed in the second quarter of 2019.

The Company uses the Black-Scholes pricing model to value some of its option awards. Determining the appropriate fair value model and calculating the fair value of the option awards requires the input of highly subjective assumptions, including the expected life of the option awards and the stock price volatility.

For performance-based restricted stock units that vest based on market conditions, the Company recognizes stock-based compensation based on the estimated grant date fair value of the awards computed with the assistance of a valuation specialist using a Monte Carlo simulation on a binomial model. The significant assumptions used to estimate the fair value of the performance-based restricted stock units that vest based on market conditions are years of maturity, annualized volatility and the risk-free interest rate. The maturity period represents the period of time that the award granted was modeled into the future, the risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of measurement corresponding with the maturity period of the award and the expected volatility is based upon historical volatility of the Company’s Class A common stock.

Earnings Per Share

Basic and diluted earnings per share are computed in accordance with the two-class method as unvested restricted stock units and unsettled vested performance-based restricted stock units issued to certain retired executives are entitled to non-forfeitable dividend equivalent rights and are considered participating securities prior to being issued and outstanding shares of common stock. The two-class method is an earnings allocation formula that treats a participating security as having rights to earnings that otherwise would have been available to common shareholders. Basic earnings per share is computed by dividing the net income attributable to the Company's outstanding shares of Class A and Class B common stock by the weighted-average number of the Company's shares outstanding during the period. For purposes of computing diluted earnings per share, the weighted-average number of the Company's shares reflects the dilutive effect that could occur if all potentially dilutive securities were converted into or exchanged or exercised for the Company's Class A or Class B common stock.

The dilutive effect of stock options and other stock-based payment awards is calculated using the treasury stock method, which assumes the proceeds from the exercise of these instruments are used to purchase common shares at the average market price for the period. The dilutive effect of LLC Interests is evaluated under the if-converted method, where the securities are assumed to be converted at the beginning of the period, and the resulting common shares are included in the denominator of the diluted earnings per share calculation for the entire period presented. Performance-based awards are considered contingently issuable shares and their dilutive effect is included in the denominator of the diluted earnings per share calculation for the entire period, if those shares would be issuable as of the end of the reporting period, assuming the end of the reporting period was also the end of the contingency period.

Shares of Class C and Class D common stock do not have economic rights in Tradeweb Markets Inc. and, therefore, are not included in the calculation of basic earnings per share.

Fair Value Measurement

The fair value of a financial instrument is the amount 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 (the exit price). Instruments that the Company owns (long positions) are marked to bid prices, and instruments that the Company has sold, but not yet purchased (short positions) are marked to offer prices. Fair value measurements do not include transaction costs.

The fair value hierarchy under ASC 820, *Fair Value Measurement* ("ASC 820"), prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy under ASC 820 are described below.

Basis of Fair Value Measurement

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

- Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;
- Level 2: Quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly;
- Level 3: Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

Recent Accounting Pronouncements

In June 2022, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2022-03, *Fair Value Measurement (Topic 820): Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions* (“ASU 2022-03”), which clarifies that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value and that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. ASU 2022-03 also requires the disclosure of the fair value, as reflected in the statement of financial condition, of equity securities subject to contractual sale restrictions and the nature and the disclosure of the remaining duration of those restrictions. ASU 2022-03 is effective for the Company beginning on January 1, 2024 and early adoption is permitted for both interim and annual financial statements that have not yet been issued. The ASU is to be applied prospectively, with any adjustments from the adoption recognized in earnings on the date of adoption. As of September 30, 2023, the Company has not yet adopted ASU 2022-03 and does not expect that the adoption of this ASU will have a material impact on the Company’s consolidated financial statements.

3. Restricted Cash

Cash has been segregated in a special reserve bank account for the benefit of brokers and dealers under SEC Rule 15c3-3. The Company computes the proprietary accounts of broker-dealers (“PAB”) reserve, which requires the Company to maintain minimum segregated cash in the amount of excess total credits per the reserve computation. As of both September 30, 2023 and December 31, 2022, cash in the amount of \$1.0 million, has been segregated in the PAB reserve account, exceeding the requirements pursuant to SEC Rule 15c3-3.

4. Acquisitions

Yieldbroker

On August 31, 2023, the Company completed its acquisition of all of the outstanding equity interests of Yieldbroker Pty Limited. The all-cash purchase price of A\$123.6 million (\$80.1 million U.S. dollars as translated as of August 31, 2023) was net of cash acquired and prior to working capital and other closing adjustments. Working capital adjustments will be finalized during the fourth quarter of 2023.

Yieldbroker Pty Limited is a corporation registered under the Corporations Act 2001 in Australia and a Tier 1 Australian Markets Licensee in Australia, regulated by the ASIC, that maintains a branch in Singapore which is regulated by the MAS as a Regulated Market Operator. Yieldbroker operates a leading Australian trading platform for Australian and New Zealand government bonds and interest rate derivatives covering the institutional and wholesale client sectors.

The acquisition was accounted for as a business combination and the Company utilized the assistance of a third-party valuation specialist to determine the fair value of the assets acquired and liabilities assumed at the date of the closing of the acquisition. The fair values were determined based on assumptions that reasonable market participants would use in the principal (or most advantageous) market and primarily included significant unobservable inputs (Level 3). Customer relationships were valued using the income approach, specifically a multi-period excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then examines the excess return that is attributable to the intangible asset being valued. The discount rate used reflects the amount of risk associated with the hypothetical cash flows for the customer relationships relative to the overall business. In developing a discount rate for the customer relationships, the Company estimated a weighted-average cost of capital for the overall business and employed an intangible asset risk premium to this rate when discounting the excess earnings related to customer relationships. The resulting discounted cash flows were then tax-affected at the applicable statutory rate.

The preliminary purchase price was allocated as follows:

	Purchase Price Allocation
	(in thousands)
Cash and cash equivalents	\$ 12,753
Accounts receivable	1,631
Equipment	384
Lease right-of-use assets	1,453
Software development costs	588
Goodwill	35,058
Intangible assets - Customer relationships	39,746
Intangible assets - Tradename	492
Deferred tax asset	3,361
Other assets	701
Accrued compensation	(3,485)
Deferred revenue	(72)
Accounts payable, accrued expenses and other liabilities	(8,713)
Lease liabilities	(1,496)
Total cash paid	82,401
Less: Cash acquired	(12,753)
Less: Preliminary working capital and other closing adjustments	10,432
Purchase price, net of cash acquired and excluding working capital and other closing adjustments	\$ 80,080

The primary areas of the preliminary purchase price allocation that are not yet finalized as of September 30, 2023 relate primarily to the valuation of the identifiable intangible assets and software and final working capital adjustments. The allocation of the purchase price will be finalized upon completion of the analysis of the acquired assets within one year of the date of the closing of the acquisition.

The acquired software development costs will be amortized over a useful life of one year, the acquired tradename will be amortized over a useful life of four years and the customer relationships will be amortized over a useful life of 13 years. The goodwill recognized in connection with the Yieldbroker Acquisition is primarily attributable to the acquisition of an assembled workforce and expected future customers, future technology and synergies from the integration of the operations of Yieldbroker into the Company's operations and its single business segment. All of the goodwill recognized in connection with the Yieldbroker Acquisition is expected to be deductible for income tax purposes.

During the three and nine months ended September 30, 2023, the Company recognized \$0.5 million and \$2.2 million, respectively, in transaction costs incurred to effect the Yieldbroker Acquisition, which are included as a component of professional fees in the accompanying condensed consolidated statements of income. During both the three and nine months ended September 30, 2023, the Company also recognized \$0.8 million in transaction costs incurred to effect the Yieldbroker Acquisition, which are included as a component of general and administrative expenses in the accompanying condensed consolidated statements of income.

The Yieldbroker Acquisition was not material to the Company's condensed consolidated financial statements and therefore pro forma and current period results of this acquisition have not been presented.

On June 1, 2023, the Company entered into a foreign currency call option on Australian dollars, giving the Company an option to buy A\$120.7 million, in order to partially mitigate the Company's U.S. dollar versus Australian dollar foreign exchange exposure on the then-anticipated payment of the Australian dollar denominated purchase price for the Yieldbroker Acquisition. The counterparty on the foreign currency call option contract was an affiliate of LSEG. On August 25, 2023, the Company unwound the out-of-the-money foreign currency call option and received \$1.1 million from an affiliate of LSEG. Realized and unrealized losses on the Australian dollar call option during the three and nine months ended September 30, 2023 totaled \$1.9 million and \$1.3 million, respectively, included within other income/loss. See Note 11 – Fair Value of Financial Instruments for additional details.

5. Revenue

Revenue Recognition

The Company enters into contracts with its clients to provide a stand-ready connection to its electronic marketplaces, which facilitates the execution of trades by its clients. The access to the Company's electronic marketplaces includes market data, continuous pricing data refreshes and the processing of trades thereon. The stand-ready connection to the electronic marketplaces is considered a single performance obligation satisfied over time as the client simultaneously receives and consumes the benefit from the Company's performance as access is provided (that is, the performance obligation constitutes a series of services that are substantially the same in nature and are provided over time using the same measure of progress). For its services, the Company earns subscription fees for granting access to its electronic marketplaces. Subscription fees, which are generally fixed fees, are recognized as revenue on a monthly basis, in the period that access is provided. The frequency of subscription fee billings varies from monthly to annually, depending on contract terms. Fees received by the Company which are not yet earned are included in deferred revenue on the condensed consolidated statements of financial condition until the revenue recognition criteria have been met. The Company also earns transaction fees and/or commissions from transactions executed on the Company's electronic marketplaces. The Company earns commission revenue from its electronic and voice brokerage services on a riskless principal basis. Riskless principal revenues are derived on matched principal transactions where revenues are earned on the spread between the buy and sell price of the transacted product. Transaction fees and commissions are generated both on a variable and fixed price basis and vary by geographic region, product type and trade size. Fixed monthly transaction fees or commissions, or monthly transaction fees or commission minimums, are earned on a monthly basis in the period the stand-ready trading services are provided and are generally billed monthly. For variable transaction fees or commissions, the Company charges its clients amounts calculated based on the mix of products traded and the volume of transactions executed. Variable transaction fee or commission revenue is recognized and recorded on a trade-date basis when the individual trade occurs and is generally billed when the trade settles or is billed monthly. Variable discounts or rebates on transaction fees or commissions are earned and applied monthly or quarterly, resolved within the same reporting period and are recorded as a reduction to revenue in the period the relevant trades occur.

The Company earns fees from Refinitiv relating to the sale of market data to Refinitiv, which redistributes that data. Included in these fees, which are billed quarterly, are real-time market data fees which are recognized monthly on a straight-line basis, as Refinitiv receives and consumes the benefit evenly over the contract period, as the data is provided. Also included in these fees are fees for historical data sets which are recognized when the historical data set is provided to Refinitiv. Significant judgments used in accounting for this contract include the following determinations:

- The provision of real-time market data feeds and annual historical data sets are distinct performance obligations.
- The performance obligations under this contract are recognized over time from the initial delivery of the data feeds or each historical data set until the end of the contract term.
- The transaction price for the performance obligations is determined by using a market assessment analysis. Inputs in this analysis include a consultant study which determined the overall value of the Company's market data and pricing information for historical data sets provided by other companies.

Some revenues earned by the Company have fixed fee components, such as monthly minimums or fixed monthly fees, and variable components, such as transaction-based fees. The breakdown of revenues between fixed and variable revenues for the three and nine months ended September 30, 2023 and 2022 is as follows:

	Three Months Ended September 30, 2023		Three Months Ended September 30, 2022	
	(in thousands)		(in thousands)	
	Variable	Fixed	Variable	Fixed
Revenues				
Transaction fees and commissions	\$ 225,934	\$ 37,551	\$ 192,191	\$ 35,824
Subscription fees	465	45,896	470	40,872
Refinitiv market data fees	—	15,460	—	15,370
Other	328	2,723	212	2,176
Total revenue	<u>\$ 226,727</u>	<u>\$ 101,630</u>	<u>\$ 192,873</u>	<u>\$ 94,242</u>

	Nine Months Ended September 30, 2023		Nine Months Ended September 30, 2022	
	(in thousands)		(in thousands)	
	Variable	Fixed	Variable	Fixed
Revenues				
Transaction fees and commissions	\$ 665,749	\$ 110,795	\$ 607,126	\$ 110,363
Subscription fees	1,395	135,088	1,430	122,907
Refinitiv market data fees	—	46,515	—	46,354
Other	794	7,883	677	6,882
Total revenue	<u>\$ 667,938</u>	<u>\$ 300,281</u>	<u>\$ 609,233</u>	<u>\$ 286,506</u>

Deferred Revenue

The Company records deferred revenue when cash payments are received or due in advance of services to be performed. The revenue recognized and the remaining deferred revenue balances are shown below:

	Amount (in thousands)
Deferred revenue balance - December 31, 2022	\$ 22,827
New billings	100,331
Revenue recognized	(91,832)
Deferred revenue acquired in connection with the Yieldbroker Acquisition	72
Effect of foreign currency exchange rate changes	6
Deferred revenue balance - September 30, 2023	<u>\$ 31,404</u>

During the nine months ended September 30, 2023, the Company recognized \$22.2 million in total revenue that was deferred as of December 31, 2022. During the nine months ended September 30, 2022, the Company recognized \$23.1 million in total revenue that was deferred as of December 31, 2021.

6. Income Taxes

The Corporation is subject to U.S. federal, state and local income taxes with respect to its taxable income, including its allocable share of any taxable income of TWM LLC, and is taxed at prevailing corporate tax rates. The Company's actual effective tax rate will be impacted by the Corporation's ownership share of TWM LLC, which will continue to increase as Continuing LLC Owners that continue to hold LLC Interests redeem or exchange their LLC Interests for shares of Class A common stock or Class B common stock, as applicable, or the Corporation purchases LLC Interests from such Continuing LLC Owners. The Company's consolidated effective tax rate will also vary from period to period depending on changes in the mix of earnings, tax legislation and tax rates in various jurisdictions. The Company's provision for income taxes includes U.S., federal, state, local and foreign taxes.

The Company's effective tax rate for the three months ended September 30, 2023 and 2022 was approximately 20.4% and 23.2%, respectively. The effective tax rate for the three months ended September 30, 2023 differed from the U.S. federal statutory rate of 21.0% primarily due to the return-to-provision adjustment and the effect of non-controlling interests, partially offset by the effect of state, local and foreign taxes. The effective tax rate for the three months ended September 30, 2022 differed from the U.S. federal statutory rate of 21.0% primarily due to the effect of state, local and foreign taxes and the return-to-provision adjustments, partially offset by the effect of non-controlling interests and the tax impact of the issuance of common stock from equity incentive plans.

The Company's effective tax rate for the nine months ended September 30, 2023 and 2022 was approximately 22.4% and 19.7%, respectively. The effective tax rate for the nine months ended September 30, 2023 differed from the U.S. federal statutory rate of 21.0% primarily due to state, local and foreign taxes, partially offset by the effect of non-controlling interests, the exercise of equity compensation and the return-to-provision adjustment. The effective tax rate for the nine months ended September 30, 2022 differed from the U.S. federal statutory rate of 21.0% primarily due to the tax impact of the issuance of common stock from equity incentive plans, return-to-provision adjustments and the effect of non-controlling interests, partially offset by state, local and foreign taxes.

The Company has obtained, and expects to obtain, an increase in its share of the tax basis of the assets of TWM LLC when LLC Interests are redeemed or exchanged by Continuing LLC Owners and in connection with certain other qualifying transactions. This increase in tax basis has had, and may in the future have, the effect of reducing the amounts that the Corporation would otherwise pay in the future to various tax authorities. Pursuant to the Tax Receivable Agreement, the Corporation is required to make cash payments to the Continuing LLC Owners equal to 50% of the amount of U.S. federal, state and local income or franchise tax savings, if any, that the Corporation actually realizes (or in some circumstances are deemed to realize) as a result of certain future tax benefits to which the Corporation may become entitled. The Corporation expects to benefit from the remaining 50% of tax benefits, if any, that the Corporation may actually realize. See Note 7 – Tax Receivable Agreement for further details. The tax benefit has been recognized in deferred tax assets on the condensed consolidated statement of financial condition.

In connection with the Reorganization Transactions, a Refinitiv entity was contributed to the Corporation, pursuant to which the Corporation received 96,933,192 LLC Interests and Refinitiv received 96,933,192 shares of Class B common stock ("Refinitiv Contribution"). As a result of the Refinitiv Contribution, the Company assumed the tax liabilities of the contributed entity. During the second quarter of 2023, the contributed entity reached an audit settlement with the State of New Jersey for the tax years 2008 - 2015. As of September 30, 2023 and December 31, 2022, none and \$2.7 million, respectively, is included in accounts payable, accrued expenses and other liabilities on the condensed consolidated statements of financial condition relating to these tax liabilities. The Company is indemnified by Refinitiv for these tax liabilities that were assumed by the Company as a result of the Refinitiv Contribution. As of September 30, 2023 and December 31, 2022, none and \$2.7 million, respectively, is included in receivable and due from affiliates on the condensed consolidated statements of financial condition associated with this related party indemnification.

7. Tax Receivable Agreement

In connection with the Reorganization Transactions, the Corporation entered into a tax receivable agreement (the “Tax Receivable Agreement”) with TWM LLC and the Continuing LLC Owners, which provides for the payment by the Corporation to a Continuing LLC Owner of 50% of the amount of U.S. federal, state and local income or franchise tax savings, if any, that the Corporation actually realizes (or in some circumstances is deemed to realize) as a result of (i) increases in the tax basis of TWM LLC’s assets resulting from (a) the purchase of LLC Interests from such Continuing LLC Owner, including with the net proceeds from the IPO and any subsequent offerings or (b) redemptions or exchanges by such Continuing LLC Owner of LLC Interests for shares of Class A common stock or Class B common stock or for cash, as applicable, and (ii) certain other tax benefits related to the Corporation making payments under the Tax Receivable Agreement. Payments under the Tax Receivable Agreement are made within 150 days after the filing of the tax return based on the actual tax savings realized by the Corporation. The first payment of the Tax Receivable Agreement was made in January 2021. Substantially all payments due under the Tax Receivable Agreement are payable over fifteen years following the purchase of LLC Interests from Continuing LLC Owners or redemption or exchanges by Continuing LLC Owners of LLC Interests.

The Corporation accounts for the income tax effects resulting from taxable redemptions or exchanges of LLC Interests by Continuing LLC Owners for shares of Class A common stock or Class B common stock or cash, as the case may be, and purchases by the Corporation of LLC Interests from Continuing LLC Owners by recognizing an increase in deferred tax assets, based on enacted tax rates at the date of each redemption, exchange, or purchase, as the case may be. Further, the Corporation evaluates the likelihood that it will realize the benefit represented by the deferred tax asset, and, to the extent that the Corporation estimates that it is more likely than not that it will not realize the benefit, it reduces the carrying amount of the deferred tax asset with a valuation allowance.

The impact of any changes in the total projected obligations recorded under the Tax Receivable Agreement as a result of actual changes in the mix of the Company’s earnings, tax legislation and tax rates in various jurisdictions, or other factors that may impact the Corporation’s actual tax savings realized, are reflected in income before taxes on the condensed consolidated statements of income in the period in which the change occurs. As of September 30, 2023 and December 31, 2022, the tax receivable agreement liability on the condensed consolidated statements of financial condition totaled \$448.0 million and \$425.7 million, respectively. During each of the three and nine months ended September 30, 2023 and 2022, no tax receivable agreement liability adjustment was recognized in the condensed consolidated statements of income.

8. Non-Controlling Interests

In connection with the Reorganization Transactions, Tradeweb Markets Inc. became the sole manager of TWM LLC and, as a result of this control, and because Tradeweb Markets Inc. has a substantial financial interest in TWM LLC, consolidates the financial results of TWM LLC into its condensed consolidated financial statements. The non-controlling interests balance reported on the condensed consolidated statements of financial condition represents the economic interests of TWM LLC held by the holders of LLC Interests other than Tradeweb Markets Inc. Income or loss is attributed to the non-controlling interests based on the relative ownership percentages of LLC Interests held during the period by Tradeweb Markets Inc. and the other holders of LLC Interests.

The following table summarizes the ownership interest in Tradeweb Markets LLC:

	September 30, 2023		September 30, 2022	
	LLC Interests	Ownership %	LLC Interests	Ownership %
Number of LLC Interests held by Tradeweb Markets Inc.	211,644,675	90.2 %	208,177,751	88.8 %
Number of LLC Interests held by non-controlling interests	23,080,571	9.8 %	26,347,881	11.2 %
Total LLC Interests outstanding	234,725,246	100.0 %	234,525,632	100.0 %

LLC Interests held by the Continuing LLC Owners are redeemable in accordance with the TWM LLC Agreement at the election of the members for shares of Class A common stock or Class B common stock, as applicable, on a one-for-one basis or, at the Company’s option, a cash payment in accordance with the terms of the TWM LLC Agreement.

The following table summarizes the impact on Tradeweb Market Inc.'s equity due to changes in the Corporation's ownership interest in TWM LLC:

Net Income Attributable to Tradeweb Markets Inc. and Transfers (to) from the Non-Controlling Interests	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(in thousands)			
Net income attributable to Tradeweb Markets Inc.	\$ 98,614	\$ 69,083	\$ 275,552	\$ 220,392
Transfers (to) from non-controlling interests:				
Increase/(decrease) in Tradeweb Markets Inc.'s additional paid-in capital as a result of ownership changes in TWM LLC	(404)	79,606	79,376	108,311
Net transfers (to) from non-controlling interests	(404)	79,606	79,376	108,311
Change from net income attributable to Tradeweb Markets Inc. and transfers (to) from non-controlling interests	\$ 98,210	\$ 148,689	\$ 354,928	\$ 328,703

9. Stockholders' Equity and Stock-Based Compensation Plans

The rights and privileges of the Company's stockholders' equity and LLC Interests are described in the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022 and there have been no changes to those rights and privileges during the nine months ended September 30, 2023.

Common Stock

The following table details the movement in the Company's outstanding shares of common stock during the period:

	Class A	Class B	Class C	Class D	Total
Balance at December 31, 2022	110,746,606	96,933,192	3,251,177	23,092,704	234,023,679
Activities related to exchanges of LLC Interests	8,733	—	—	(8,733)	—
Issuance of common stock from equity incentive plans	986,090	—	—	—	986,090
Share repurchases pursuant to share repurchase programs	(313,311)	—	—	—	(313,311)
Balance at March 31, 2023	111,428,118	96,933,192	3,251,177	23,083,971	234,696,458
Activities related to exchanges of LLC Interests	3,254,577	—	(3,251,177)	(3,400)	—
Issuance of common stock from equity incentive plans	92,687	—	—	—	92,687
Share repurchases pursuant to share repurchase programs	(107,365)	—	—	—	(107,365)
Balance at June 30, 2023	114,668,017	96,933,192	—	23,080,571	234,681,780
Activities related to exchanges of LLC Interests	—	—	—	—	—
Issuance of common stock from equity incentive plans	108,520	—	—	—	108,520
Share repurchases pursuant to share repurchase programs	(65,054)	—	—	—	(65,054)
Balance at September 30, 2023	114,711,483	96,933,192	—	23,080,571	234,725,246

	Class A	Class B	Class C	Class D	Total
Balance at December 31, 2021	106,286,821	96,933,192	1,654,825	28,873,139	233,747,977
Activities related to exchanges of LLC Interests	552,606	—	—	(552,606)	—
Issuance of common stock from equity incentive plans	1,068,080	—	—	—	1,068,080
Share repurchases pursuant to share repurchase programs	(559,428)	—	—	—	(559,428)
Balance at March 31, 2022	107,348,079	96,933,192	1,654,825	28,320,533	234,256,629
Activities related to exchanges of LLC Interests	3,700	—	—	(3,700)	—
Issuance of common stock from equity incentive plans	367,374	—	—	—	367,374
Share repurchases pursuant to share repurchase programs	(103,458)	—	—	—	(103,458)
Balance at June 30, 2022	107,615,695	96,933,192	1,654,825	28,316,833	234,520,545
Activities related to exchanges of LLC Interests	3,623,777	—	1,596,352	(5,220,129)	—
Issuance of common stock from equity incentive plans	134,896	—	—	—	134,896
Share repurchases pursuant to share repurchase programs	(129,809)	—	—	—	(129,809)
Balance at September 30, 2022	111,244,559	96,933,192	3,251,177	23,096,704	234,525,632

On April 3, 2023, the stockholder that owned 3,251,177 LLC Interests and 3,251,177 shares of Class C common stock, redeemed its LLC Interests for 3,251,177 shares of Class A common stock, and the shares of Class C common stock previously held by the stockholder were cancelled.

Stock-Based Compensation Plans

Under the Tradeweb Markets Inc. 2019 Omnibus Equity Incentive Plan, the Company is authorized to issue up to 8,841,864 new shares of Class A common stock to employees, officers and non-employee directors. Under this plan, the Company may grant awards in respect of shares of Class A common stock, including performance-based restricted stock units, stock options, restricted stock units (“RSUs”) and dividend equivalent rights. The awards may have performance-based and/or time-based vesting conditions. RSUs and performance-based restricted stock units each represent promises to issue actual shares of Class A common stock at the end of a vesting period. Stock options have a maximum contractual term of 10 years.

On February 16, 2022, the Company announced that Mr. Olesky would retire as Chief Executive Officer (“CEO”) of the Company, effective December 31, 2022, resulting in an acceleration of the total unamortized stock-based compensation associated with equity awards granted to him. The unamortized expense was accelerated over a revised estimated service period that ended on August 11, 2022, representing Mr. Olesky’s required six month notice period under the Company’s 2019 Omnibus Equity Incentive Plan. In addition, in December 2022, \$5.5 million in stock-based compensation awards, relating to 2022 performance, were granted to Mr. Olesky and immediately recognized into expense upon grant.

During the year ended December 31, 2022, the Company recorded a total of \$15.0 million in accelerated stock-based compensation expenses (“CEO Retirement Accelerated Stock-Based Compensation Expense”) and related payroll that would not have been recognized if Mr. Olesky had not announced his retirement, including \$2.0 million and \$9.4 million recognized during the three and nine months ended September 30, 2022, respectively. There was no CEO Retirement Accelerated Stock-Based Compensation Expense recorded during the three and nine months ended September 30, 2023.

In addition to the performance-based restricted stock units previously awarded pursuant to the 2019 Omnibus Equity Incentive Plan, which vest based on the financial performance of the Company (“PRSUs”), during the nine months ended September 30, 2023, on March 15, 2023, the Company granted to certain executives, an aggregate of 251,113 performance-based restricted stock units that vest based on market conditions (“PSUs”). PSUs are promises to issue actual shares of Class A common stock which cliff vest on January 1 of the third calendar year from the calendar year of the date of grant. The number of shares a participant will receive upon vesting is determined by a performance modifier, which is adjusted as a result of the Company’s total shareholder return over a three-year performance period. The performance modifier can vary between 0% (minimum) and 250% (maximum) of the target (100%) award amount. The PSUs granted on March 15, 2023 had a grant date fair value of \$98.33 per share, or \$24.7 million in total, which will be expensed on a straight-line basis through December 31, 2025, the end of the three-year performance period. The grant date fair value of the March 2023 PSUs was estimated using the Monte Carlo simulation model and the significant valuation assumptions used in the valuation were a maturity of 2.8 years annualized volatility of 28.81% and a risk-free interest rate of 3.77%. There were no PSUs granted during the three months ended September 30, 2023 or the three and nine months ended September 30, 2022.

During the three months ended September 30, 2023, the Company granted 1,743 RSUs at a weighted-average grant-date fair value of \$86.43. No PRSUs were granted during the three months ended September 30, 2023. During the nine months ended September 30, 2023, the Company granted 571,980 RSUs and 326,050 PRSUs at a weighted-average grant-date fair value of \$69.66 and \$69.56, respectively. RSU awards granted to employees will generally vest one-third each year over a three-year period, and RSU awards granted to non-employee directors will vest after one year. PRSUs generally cliff vest on January 1 of the third calendar year from the calendar year of the date of grant and the number of shares a participant will receive upon vesting is determined by a performance modifier, which is adjusted as a result of the financial performance of the Company in the grant year. The performance modifier can vary between 0% (minimum) and 200% (maximum) of the target (100%) award amount for awards granted during 2022 and prior years. PRSUs granted during 2023 have a 250% maximum performance modifier.

A summary of the Company’s total stock-based compensation expense, including the CEO Retirement Accelerated Stock-Based Compensation Expense, is presented below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(in thousands)			
Total stock-based compensation expense	\$ 17,348	\$ 14,757	\$ 44,670	\$ 49,432

The stock-based compensation expense above excludes \$0.4 million and \$1.0 million of stock-based compensation expense capitalized to software development costs during the three and nine months ended September 30, 2023, respectively.

Share Repurchase Program

On December 5, 2022, the Company announced that its board of directors authorized a new share repurchase program (the “2022 Share Repurchase Program”), after completing in October 2022, the \$150.0 million of total repurchases of the Company’s Class A common stock previously authorized in February 2021 (the “2021 Share Repurchase Program”). The 2022 Share Repurchase Program was authorized to continue to offset annual dilution from stock-based compensation plans, as well as to opportunistically repurchase the Company’s Class A common stock. The 2022 Share Repurchase Program authorizes the purchase of up to \$300.0 million of the Company’s Class A common stock at the Company’s discretion and has no termination date. The 2022 Share Repurchase Program can be effected through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), through privately negotiated transactions or through accelerated share repurchases, each in accordance with applicable securities laws and other restrictions. The amounts, timing and manner of the repurchases will be subject to general market conditions, the prevailing price and trading volumes of the Company’s Class A common stock and other factors. The 2022 Share Repurchase Program does not require the Company to acquire a specific number of shares and may be suspended, amended or discontinued at any time. During the three months ended September 30, 2023 and 2022, the Company acquired a total of 65,054 and 129,809 shares of Class A common stock, at an average price of \$75.28 and \$69.33, for purchases totaling \$4.9 million and \$9.0 million, respectively. During the nine months ended September 30, 2023 and 2022, the Company acquired a total of 485,730 and 792,695 shares of Class A common stock, at an average price of \$72.48 and \$82.41, for purchases totaling \$35.2 million and \$65.3 million, respectively.

Each share of Class A common stock repurchased pursuant to the 2021 and 2022 Share Repurchase Programs was funded with the proceeds, on a dollar-for-dollar basis, from the repurchase by Tradeweb Markets LLC of an LLC Interest from the Corporation in order to maintain the one-to-one ratio between outstanding shares of the Class A common stock and Class B common stock and the LLC Interests owned by the Corporation. Subsequent to their repurchase, the shares of Class A common stock and the LLC Interests were all cancelled and retired. As of September 30, 2023, a total of \$239.8 million remained available for repurchase pursuant to the 2022 Share Repurchase Program.

For shares repurchased pursuant to the 2021 and 2022 Share Repurchase Programs, the excess of the repurchase price paid over the par value of the Class A common stock is recorded as a reduction to retained earnings.

Other Share Repurchases

During the three months ended September 30, 2023 and 2022, the Company withheld 92,373 and 33,348 shares, respectively, of common stock from employee stock option, PRSU and RSU awards, at an average price per share of \$84.15 and \$68.13, respectively, and an aggregate value of \$7.8 million and \$2.3 million, respectively, based on the price of the Class A common stock on the date the relevant withholding occurred. During the nine months ended September 30, 2023 and 2022, the Company withheld 693,456 and 1,048,837 shares, respectively, of common stock from employee stock option, PRSU and RSU awards, at an average price per share of \$71.38 and \$95.59, respectively, and an aggregate value of \$49.5 million and \$100.3 million, respectively, based on the price of the Class A common stock on the date the relevant withholding occurred.

These shares are withheld in order for the Company to cover the payroll tax withholding obligations upon the exercise of stock options and settlement of RSUs and PRSUs and such shares were not withheld in connection with the share repurchase programs discussed above.

10. Related Party Transactions

The Company enters into transactions with its affiliates from time to time which are considered to be related party transactions.

As of September 30, 2023 and December 31, 2022, the following balances with such affiliates were included in the condensed consolidated statements of financial condition in the following line items:

	September 30, 2023	December 31, 2022
	(in thousands)	
Accounts receivable	\$ 1,812	\$ 70
Receivable and due from affiliates	3,165	2,728
Other assets	74	261
Accounts payable, accrued expenses and other liabilities	1,467	335
Deferred revenue	5,099	5,076
Payable and due to affiliates	527	7,232

The following balances with such affiliates were included in the condensed consolidated statements of income in the following line items:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(in thousands)			
Revenue:				
Subscription fees	\$ 460	\$ 282	\$ 1,931	\$ 799
Refinitiv market data fees ⁽¹⁾	15,460	15,370	46,515	46,354
Other fees	218	110	468	353
Expenses:⁽²⁾				
Employee compensation and benefits	9	—	26	613
Technology and communications	1,496	1,231	4,147	3,546
General and administrative	4	47	4	244
Professional fees	9	1	10	46
Occupancy	21	—	41	—

(1) The Company maintains a market data license agreement with Refinitiv. Under the agreement, the Company delivers to Refinitiv certain market data feeds which Refinitiv redistributes to its customers. The Company earns license fees and royalties for these feeds.

(2) The Company maintains agreements with Refinitiv to provide the Company with certain real estate, payroll, benefits administration and other administrative services.

11. Fair Value of Financial Instruments

Financial Instruments Measured at Fair Value

The Company's financial instruments measured at fair value on the condensed consolidated statements of financial condition as of September 30, 2023 and December 31, 2022 have been categorized based upon the fair value hierarchy as follows:

	Quoted Prices in active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
(in thousands)				
As of September 30, 2023				
Assets				
Cash equivalents – Money market funds	\$ 1,361,198	\$ —	\$ —	\$ 1,361,198
Receivable and due from affiliates – Foreign exchange derivative contracts	—	3,019	—	3,019
Total assets measured at fair value	\$ 1,361,198	\$ 3,019	\$ —	\$ 1,364,217
Liabilities				
Payable and due to affiliates – Foreign exchange derivative contracts	\$ —	\$ —	\$ —	\$ —
Total liabilities measured at fair value	\$ —	\$ —	\$ —	\$ —
As of December 31, 2022				
Assets				
Cash equivalents – Money market funds	\$ 1,106,916	\$ —	\$ —	\$ 1,106,916
Total assets measured at fair value	\$ 1,106,916	\$ —	\$ —	\$ 1,106,916
Liabilities				
Payable and due to affiliates – Foreign exchange derivative contracts	\$ —	\$ 1,002	\$ —	\$ 1,002
Total liabilities measured at fair value	\$ —	\$ 1,002	\$ —	\$ 1,002

The Company's money market funds are classified within level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets.

The Company enters into foreign currency forward contracts to mitigate its U.S. dollar and British pound sterling versus euro exposure, generally with a duration of less than 12 months. The valuations for the Company's foreign currency forward contracts are primarily based on the difference between the exchange rate associated with the contract and the exchange rate at the current period end for the tenor of the contract. Foreign currency forward contracts are categorized as Level 2 in the fair value hierarchy. As of September 30, 2023 and December 31, 2022, the counterparty on each of these foreign exchange derivative contracts was an affiliate of LSEG and therefore the corresponding assets or liabilities on such contracts were included in receivable and due from affiliates or payable and due to affiliates, respectively, on the accompanying condensed consolidated statements of financial condition.

The following table summarizes the aggregate U.S. dollar equivalent notional amount of the Company's foreign exchange derivative contracts not designated as hedges for accounting purposes:

	September 30, 2023	December 31, 2022
(in thousands)		
Foreign currency forward contracts – Gross notional amount	\$ 178,620	\$ 162,845

The Company's foreign exchange derivative contracts are not designated as hedges for accounting purposes and changes in the fair value of these contracts during the period are recognized in the condensed consolidated statements of income. The total realized and unrealized gains (losses) on foreign exchange derivative contracts recorded within the condensed consolidated statements of income are as follows:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2023	2022	2023	2022
	(in thousands)			
Foreign currency forward contracts not designated in accounting hedge relationship – General and administrative (expenses)/income	\$ 3,883	\$ 6,767	\$ 4,921	\$ 12,937
Foreign currency call option contract not designated in accounting hedge relationship – Other income/(loss) ⁽¹⁾	\$ (1,907)	\$ —	\$ (1,289)	\$ —

(1) On June 1, 2023, the Company entered into a foreign currency call option on Australian dollars, in order to partially mitigate the Company's U.S. dollar versus Australian dollar foreign exchange exposure on the then-anticipated payment of the Australian dollar denominated purchase price for the Yieldbroker Acquisition. On August 25, 2023, the Company unwound the out-of-the-money foreign currency call option and received \$1.1 million. See Note 4 – Acquisitions for additional details.

Financial Instruments Not Measured at Fair Value

The Company's financial instruments not measured at fair value on the condensed consolidated statements of financial condition as of September 30, 2023 and December 31, 2022 have been categorized based upon the fair value hierarchy as follows:

	Carrying Value	Quoted Prices in active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
(in thousands)					
As of September 30, 2023					
Assets					
Cash and restricted cash	\$ 133,212	\$ 133,212	\$ —	\$ —	\$ 133,212
Receivable from brokers and dealers and clearing organizations	4,966	—	4,966	—	4,966
Deposits with clearing organizations	26,433	26,433	—	—	26,433
Accounts receivable	167,039	—	167,039	—	167,039
Other assets – Memberships in clearing organizations	2,423	—	—	2,423	2,423
Total	\$ 334,073	\$ 159,645	\$ 172,005	\$ 2,423	\$ 334,073
Liabilities					
Payable to brokers and dealers and clearing organizations	\$ 4,966	\$ —	\$ 4,966	\$ —	\$ 4,966
Total	\$ 4,966	\$ —	\$ 4,966	\$ —	\$ 4,966
As of December 31, 2022					
Assets					
Cash and restricted cash	\$ 151,313	\$ 151,313	\$ —	\$ —	\$ 151,313
Receivable from brokers and dealers and clearing organizations	11,632	—	11,632	—	11,632
Deposits with clearing organizations	23,906	23,906	—	—	23,906
Accounts receivable	142,676	—	142,676	—	142,676
Other assets – Memberships in clearing organizations	2,406	—	—	2,406	2,406
Total	\$ 331,933	\$ 175,219	\$ 154,308	\$ 2,406	\$ 331,933
Liabilities					
Payable to brokers and dealers and clearing organizations	\$ 11,264	\$ —	\$ 11,264	\$ —	\$ 11,264
Total	\$ 11,264	\$ —	\$ 11,264	\$ —	\$ 11,264

The carrying value of financial instruments not measured at fair value classified within level 1 or level 2 of the fair value hierarchy approximates fair value because of the relatively short term nature of the underlying assets or liabilities. The memberships in clearing organizations, which are included in other assets on the condensed consolidated statements of financial condition, are classified within level 3 of the fair value hierarchy because the valuation requires assumptions that are both significant and unobservable.

Financial Instruments Without Readily Determinable Fair Values

Included in other assets on the condensed consolidated statements of financial condition are equity investments without readily determinable fair values of \$20.0 million as of both September 30, 2023 and December 31, 2022.

12. Credit Risk

Cash and cash equivalents includes cash and money market instruments held by a limited number of global financial institutions, including cash amounts in excess of federally insured limits. To mitigate this concentration of credit risk, the Company invests through high-credit-quality financial institutions, monitors the concentration of credit exposure of investments with any single obligor and diversifies as determined appropriate.

In the normal course of business the Company, as agent, executes transactions with, and on behalf of, other brokers and dealers. If the agency transactions do not settle because of failure to perform by either counterparty, the Company will recognize a receivable from (and a matching payable to) brokers and dealers and clearing organizations for the proceeds from the unsettled transaction, until the failed transaction settles. The Company may be obligated to discharge the obligation of the non-performing party and, as a result, may incur a loss if the market value of the security is different from the contract amount of the transaction. However, from time to time, the Company enters into repurchase and/or reverse repurchase agreements to facilitate the clearance of securities relating to fails to deliver or receive. We seek to manage credit exposure related to these agreements to repurchase (or reverse repurchase), including the risk related to a decline in market value of collateral (pledged or received), by entering into agreements to repurchase with overnight or short-term maturity dates and only entering into repurchase transactions with netting members of the Fixed Income Clearing Corporation ("FICC"). The FICC operates a continuous net settlement system, whereby as trades are submitted and compared, the FICC becomes the counterparty.

A substantial number of the Company's transactions are collateralized and executed with, and on behalf of, a limited number of broker-dealers. The Company's exposure to credit risk associated with the nonperformance of these clients in fulfilling their contractual obligations pursuant to securities transactions can be directly impacted by volatile trading markets, which may impair the clients' ability to satisfy their obligations to the Company.

The Company does not expect nonperformance by counterparties in the above situations. However, the Company's policy is to monitor its market exposure and counterparty risk. In addition, the Company has a policy of reviewing, as considered necessary, the credit standing of each counterparty with which it conducts business.

Allowance for Credit Losses

The Company may be exposed to credit risk regarding its receivables, which are primarily receivables from financial institutions, including investment managers and broker-dealers. The Company maintains an allowance for credit losses based upon an estimate of the amount of potential credit losses in existing accounts receivable, as determined from a review of aging schedules, past due balances, historical collection experience and other specific account data. Careful analysis of the financial condition of the Company's counterparties is also performed.

Account balances are pooled based on the following risk characteristics:

1. Geographic location
2. Transaction fee type (billing type)
3. Legal entity

Write-Offs

Once determined uncollectible, aged balances are written off against the allowance for credit losses. This determination is based on careful analysis of individual receivables and aging schedules, which are disaggregated based on the risk characteristics described above. Based on current policy, this generally occurs when the receivable is 360 days past due.

As of September 30, 2023 and December 31, 2022, the Company maintained an allowance for credit losses with regard to these receivables of \$0.2 million and \$0.1 million, respectively. For the three months ended September 30, 2023 and 2022, credit loss expense was \$13,000 and \$60,000, respectively. For the nine months ended September 30, 2023 and 2022 credit loss expense was \$60,000 and \$34,000, respectively.

13. Commitments and Contingencies

From time to time, the Company is subject to various claims, lawsuits and other legal proceedings, including reviews, investigations and proceedings by governmental and self-regulatory agencies regarding its business. While the ultimate resolution of these matters cannot presently be determined, the Company does not believe that, taking into account any applicable insurance coverage, any of the pending legal proceedings, including the matters set forth below, could reasonably be expected to have a material adverse effect on its business, financial condition or results of operations.

In the normal course of business, the Company enters into agreements with its customers which provide the customers with indemnification rights, including in the event that the electronic marketplaces of the Company infringe upon the intellectual property or other proprietary right of a third party. The Company's exposure under these agreements is unknown as this would involve estimating future claims against the Company which have not yet occurred. However, based on its experience, the Company expects the risk of a material loss to be remote.

The Company has been named as a defendant, along with other financial institutions, in two consolidated antitrust class actions relating to trading practices in United States Treasury securities auctions. The cases were dismissed in March 2021, with the Court granting the Plaintiffs leave to further amend the complaint by no later than May 14, 2021. The plaintiffs filed an amended complaint on or about May 14, 2021, and the Company moved to dismiss the amended complaint on June 14, 2021. By order dated March 31, 2022, the Court granted the Company's motion and dismissed all of the claims against it in the amended complaint. The Court also denied the plaintiffs' request for leave to file a further amended complaint. On April 28, 2022, the Plaintiffs filed a Notice of Appeal of the decision and filed their opening brief on the appeal in the United States Court of Appeals for the Second Circuit on August 18, 2022. The Company filed its brief in response on November 17, 2022. Plaintiffs filed their brief in reply in further support of their appeal on December 14, 2022. Oral argument in the appeal was held on October 3, 2023, and the Second Circuit now has the appeal under advisement. We believe that we have meritorious defenses to the claims set forth in the complaint and intend to continue to vigorously defend our position.

Additionally, the Company was dismissed from a class action relating to an interest rate swaps matter in 2017, but that matter continues against the remaining defendant financial institutions.

The Company records its best estimate of a loss, including estimated defense costs, when the loss is considered probable and the amount of such loss can be reasonably estimated. Based on its experience, the Company believes that the amount of damages claimed in a legal proceeding is not a meaningful indicator of the potential liability. At this time, the Company cannot reasonably predict the timing or outcomes of, or estimate the amount of loss, or range of loss, if any, related to its pending legal proceedings, including the matters described above, and therefore does not have any contingency reserves established for any of these matters.

Revolving Credit Facility

On April 8, 2019, the Company entered into a five year, \$500.0 million senior secured revolving credit facility ("Revolving Credit Facility") with a syndicate of banks. The Revolving Credit Facility was subsequently amended on November 7, 2019 and March 31, 2023. The Revolving Credit Facility provides additional borrowing capacity to be used to fund ongoing working capital needs, letters of credit and for general corporate purposes, including potential future acquisitions and expansions.

Under the terms of the credit agreement that governs the Revolving Credit Facility, borrowings under the Revolving Credit Facility bear interest at a rate equal to, at the Company's option, either (a) a base rate equal to the greatest of (i) the administrative agent's prime rate, (ii) the federal funds effective rate plus ½ of 1.00% and (iii) one month Term SOFR plus 1.00% plus a credit adjustment spread of 0.10%, in each case plus 0.75%, (b) Term SOFR plus 1.75% plus a credit adjustment spread of 0.10%, subject to a 0.00% floor, (c) SONIA plus 1.75%, subject to a 0.00% floor or (d) EURIBOR plus 1.75%, subject to a 0.00% floor. The credit agreement also includes a commitment fee of 0.25% for available but unborrowed amounts and other administrative fees that are payable quarterly. The Revolving Credit Facility is available until April 2024, provided the Company is in compliance with all covenants. Financial covenant requirements include maintaining minimum ratios related to interest coverage and leverage.

As of both September 30, 2023 and December 31, 2022, there were \$0.5 million in letters of credit issued under the Revolving Credit Facility and no borrowings outstanding.

Leases

The Company has operating leases for corporate offices and data centers with initial lease terms ranging from one to ten years. The following table presents the future minimum lease payments and the maturity of lease liabilities as of September 30, 2023:

	<u>Amount</u> <u>(in thousands)</u>
Remainder of 2023	\$ 3,495
2024	8,925
2025	4,046
2026	3,264
2027	3,261
Thereafter	223
Total future lease payments	<u>23,214</u>
Less imputed interest	<u>(1,174)</u>
Lease liability	<u>\$ 22,040</u>

Other Commitments

On March 31, 2023, the Company entered into a joint venture agreement (the “JV Agreement”) with subsidiaries of Bloomberg Inc. and MarketAxess Holdings Inc. to jointly establish and fund an independent company (the “CTP JV”) for the purpose of participating in the public procurement procedure to become the fixed income consolidated tape (“CTP”) provider in the European Union. The CTP JV will be incorporated prior to the European Securities and Markets Authority (“ESMA”) tender process and in accordance with project planning. The operation of the CTP JV is contingent upon selection through the ESMA tender process and regulatory approvals.

14. Earnings Per Share

The following table summarizes the calculations of basic and diluted earnings per share of Class A and Class B common stock for Tradeweb Markets Inc.:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
(in thousands, except share and per share amounts)				
Numerator:				
Net income attributable to Tradeweb Markets Inc.	\$ 98,614	\$ 69,083	\$ 275,552	\$ 220,392
Less: Distributed and undistributed earnings allocated to unvested RSUs and unsettled vested PRSUs ⁽¹⁾	(124)	(82)	(348)	(111)
Net income attributable to outstanding shares of Class A and Class B common stock - Basic and Diluted	<u>\$ 98,490</u>	<u>\$ 69,001</u>	<u>\$ 275,204</u>	<u>\$ 220,281</u>
Denominator:				
Weighted average shares of Class A and Class B common stock outstanding - Basic	211,618,475	205,721,162	210,444,082	204,767,261
Dilutive effect of PRSUs	504,945	746,043	380,740	796,090
Dilutive effect of options	1,110,175	1,661,705	1,240,923	1,940,970
Dilutive effect of RSUs	258,039	200,559	211,163	243,716
Dilutive effect of PSUs	—	—	—	—
Weighted average shares of Class A and Class B common stock outstanding - Diluted	<u>213,491,634</u>	<u>208,329,469</u>	<u>212,276,908</u>	<u>207,748,037</u>
Earnings per share - Basic	<u>\$ 0.47</u>	<u>\$ 0.34</u>	<u>\$ 1.31</u>	<u>\$ 1.08</u>
Earnings per share - Diluted	<u>\$ 0.46</u>	<u>\$ 0.33</u>	<u>\$ 1.30</u>	<u>\$ 1.06</u>

(1) During the three months ended September 30, 2023 and 2022, there was a total of 265,681 and 246,238, respectively, and during the nine months ended September 30, 2023 and 2022, there was a total of 266,453 and 121,115, respectively, weighted average unvested RSUs and unsettled vested PRSUs that were considered a participating security for purposes of calculating earnings per share in accordance with the two-class method.

LLC Interests held by Continuing LLC Owners are redeemable in accordance with the TWM LLC Agreement, at the election of such holders, for shares of Class A or Class B common stock, as applicable, of Tradeweb Markets Inc. The potential dilutive effect of LLC Interests are evaluated under the if-converted method. The potential dilutive effect of PRSUs, shares underlying options, RSUs and PSUs are evaluated under the treasury stock method.

The following table summarizes the PRSUs, shares underlying options, RSUs, PSUs and weighted-average LLC Interests that were anti-dilutive for the periods indicated. As a result, these shares, which were outstanding, were excluded from the computation of diluted earnings per share for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Anti-dilutive Shares:				
PRSUs	—	324,467	—	—
Options	—	—	—	—
RSUs	110,927	321,920	110,927	38,761
PSUs	144,666	—	144,666	—
LLC Interests	23,080,571	28,750,603	24,179,583	29,667,383

Shares of Class C and Class D common stock do not have economic rights in Tradeweb Markets Inc. and, therefore, are not included in the calculation of basic earnings per share and are not participating securities for purposes of the computation of diluted earnings per share.

15. Regulatory Capital Requirements

TWL, DW and TWD are subject to the Uniform Net Capital Rule 15c3-1 under the Exchange Act. TEL and TESL are subject to certain financial resource requirements with the FCA in the UK, TWJ is subject to certain financial resource requirements with the FCA in Japan, TWEU and TESBV are subject to certain finance resource requirements with the AFM in the Netherlands and YB is subject to certain financial resource requirements with ASIC. At September 30, 2023 and December 31, 2022, the regulatory capital requirements and regulatory capital for these entities are as follows:

As of September 30, 2023	TWL	DW	TWD	TEL	TWJ	TWEU	TESL	TESBV	YB
	(in thousands)								
Regulatory Capital	\$ 41,514	\$ 149,497	\$ 40,524	\$ 74,995	\$ 7,166	\$ 11,381	\$ 1,740	\$ 1,558	\$ 1,974
Regulatory Capital Requirement	2,639	2,852	741	33,024	2,022	5,358	917	860	1,014
Excess Regulatory Capital	\$ 38,875	\$ 146,645	\$ 39,783	\$ 41,971	\$ 5,144	\$ 6,023	\$ 823	\$ 698	\$ 960
	(in thousands)								
	(in thousands)								
As of December 31, 2022	TWL	DW	TWD	TEL	TWJ	TWEU	TESL	TESBV	
	(in thousands)								
Regulatory Capital	\$ 41,933	\$ 131,026	\$ 44,094	\$ 59,904	\$ 7,320	\$ 8,794	\$ 1,607	\$ 1,677	
Regulatory Capital Requirement	3,669	3,574	775	32,589	1,695	4,517	904	801	
Excess Regulatory Capital	\$ 38,264	\$ 127,452	\$ 43,319	\$ 27,315	\$ 5,625	\$ 4,277	\$ 703	\$ 876	

As SEFs, TW SEF and DW SEF are required to maintain adequate financial resources and liquid financial assets in accordance with CFTC regulations. The required and maintained financial resources and liquid financial assets at September 30, 2023 and December 31, 2022 are as follows:

	As of September 30, 2023		As of December 31, 2022	
	TW SEF	DW SEF	TW SEF	DW SEF
	(in thousands)			
Financial Resources	\$ 40,661	\$ 12,861	\$ 30,837	\$ 14,714
Required Financial Resources	12,500	8,694	12,500	8,080
Excess Financial Resources	\$ 28,161	\$ 4,167	\$ 18,337	\$ 6,634
Liquid Financial Assets	\$ 17,915	\$ 7,523	\$ 15,566	\$ 9,493
Required Liquid Financial Assets	3,125	2,174	3,125	2,020
Excess Liquid Financial Assets	\$ 14,790	\$ 5,349	\$ 12,441	\$ 7,473

16. Business Segment and Geographic Information

The Company operates electronic marketplaces for the trading of products across the rates, credit, equities and money markets asset classes and provides related pre-trade and post-trade services. The Company's operations constitute a single business segment because of the integrated nature of these marketplaces and services.

Information regarding revenue by client sector is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(in thousands)			
Revenues				
Institutional	\$ 195,094	\$ 172,814	\$ 577,774	\$ 551,322
Wholesale	77,975	64,584	227,404	205,532
Retail	32,332	28,495	94,875	75,267
Market Data	22,956	21,222	68,166	63,618
Total revenue	328,357	287,115	968,219	895,739
Operating expenses	203,619	184,305	604,580	574,720
Operating income	\$ 124,738	\$ 102,810	\$ 363,639	\$ 321,019

The Company operates in the U.S. and internationally, primarily in the Europe and Asia regions. Revenues are attributed to geographic area based on the jurisdiction where the underlying transactions take place. The results by geographic region are not meaningful in understanding the Company's business. Long-lived assets are attributed to the geographic area based on the location of the particular subsidiary.

The following table provides revenue by geographic area:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(in thousands)			
Revenues				
U.S.	\$ 207,842	\$ 185,097	\$ 617,463	\$ 565,540
International	120,515	102,018	350,756	330,199
Total revenue	\$ 328,357	\$ 287,115	\$ 968,219	\$ 895,739

The following table provides information on the attribution of long-lived assets by geographic area:

	September 30,	December 31,
	2023	2022
	(in thousands)	
Long-lived assets		
U.S.	\$ 4,022,318	\$ 4,044,230
International	15,185	13,026
Total	\$ 4,037,503	\$ 4,057,256

17. Subsequent Events

On October 26, 2023, the board of directors of Tradeweb Markets Inc. declared a cash dividend of \$0.09 per share of Class A common stock and Class B common stock for the third quarter of 2023. This dividend will be payable on December 15, 2023 to stockholders of record as of December 1, 2023.

On October 26, 2023, Tradeweb Markets Inc., as the sole manager, approved a distribution by TWM LLC to its equityholders, including Tradeweb Markets Inc., in an aggregate amount of \$49.9 million, as adjusted by required state and local tax withholdings that will be determined prior to the record date of December 1, 2023, payable on December 13, 2023.

On October 25, 2023, the Company entered into a master data license agreement (the “Master Data Agreement”) with Refinitiv US LLC and Refinitiv US Organization LLC (together, the “Refinitiv Parties”), which effective as of November 1, 2023 amends and restates in its entirety the Second Amended and Restated Market Data Agreement, dated November 1, 2018, by and among Tradeweb Markets and the Refinitiv Parties, as amended. Pursuant to the Master Data Agreement, on October 25, 2023, Tradeweb Markets and the Refinitiv Parties entered into separate data schedules (the “Current Data Schedules”) under which Tradeweb Markets will license certain data sets to Refinitiv US LLC and its relevant affiliates (collectively, the “Refinitiv Subscriber”) in exchange for either fixed license fees or fees payable based on a percentage of revenue generated by the Refinitiv Subscriber. As of the date hereof, Tradeweb Markets will provide the Refinitiv Subscriber with certain market data (including real time feeds) for multiple fixed income and derivatives products under a partially exclusive license pursuant to which the Refinitiv Subscriber is permitted to distribute such market data to its customers subject to the terms of the Master Data Agreement. Tradeweb Markets will also earn revenues from the Refinitiv Subscriber for servicing certain of its customers, as well as earn a share of revenue generated from the licensing of 19901 data sets to clients, which utilizes Tradeweb Markets data.

The Master Data Agreement is effective as of November 1, 2023 and will continue in effect until the earlier of its termination in accordance with its terms and five years after the termination of all data schedules thereunder. The initial license and service periods under the Current Data Schedules run from November 1, 2023 through October 31, 2025 and unless otherwise agreed to by the parties, also includes the option for a twelve-month transition period following the initial period to allow for an orderly transition of the market data distribution arrangements contemplated under the applicable Current Data Schedule. The Master Data Agreement includes customary termination provisions, including termination of a data schedule in the event of a material breach of such data schedule that is not cured within 30 days of receipt of written notice.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from the results described in or implied by the forward-looking statements. Factors that could cause or contribute to those differences include, but are not limited to, those identified below and those discussed in the section titled "Cautionary Note Regarding Forward-Looking Statements" included elsewhere in this Quarterly Report on Form 10-Q and the section titled "Item 1A. Risk Factors" in Part I of the 2022 Form 10-K.

Overview

We are a leader in building and operating electronic marketplaces for our global network of clients across the financial ecosystem. Our network is comprised of clients across the institutional, wholesale and retail client sectors, including many of the largest global asset managers, hedge funds, insurance companies, central banks, banks and dealers, proprietary trading firms and retail brokerage and financial advisory firms, as well as regional dealers. Our marketplaces facilitate trading across a range of asset classes, including rates, credit, equities and money markets. We are a global company serving clients in over 65 countries with offices in North America, Europe, Asia and Australia. We believe our proprietary technology and culture of collaborative innovation allow us to adapt our offerings to enter new markets, create new platforms and solutions and adjust to regulations quickly and efficiently. We support our clients by providing solutions across the trade lifecycle, including pre-trade, execution, post-trade and data.

Our institutional client sector serves institutional investors in over 65 countries around the globe and across over 25 currencies. We connect institutional investors with pools of liquidity using our flexible order and trading systems. Our clients trust the integrity of our markets and recognize the value they get by trading electronically: enhanced transparency, competitive pricing, efficient trade execution and regulatory compliance.

In our wholesale client sector, we provide a broad range of electronic, voice and hybrid platforms to more than 300 dealers and financial institutions with more than 100 actively trading on our electronic or hybrid markets with our Dealerweb platform. This platform was launched in 2008 following the acquisition of inter-dealer broker Hilliard Farber & Co., Inc. In 2011, we acquired the brokerage assets of Rafferty Capital Markets and in June 2021, we acquired Nasdaq's U.S. fixed income electronic trading platform (formerly known as eSpeed) (the "NFI Acquisition"). Today, Dealerweb actively competes across a range of rates, credit, money markets, derivatives and equity markets.

In our retail client sector, we provide advanced trading solutions for financial advisory firms and traders with our Tradeweb Direct platform. We entered the retail sector in 2006 and launched our Tradeweb Direct platform following the 2013 acquisition of BondDesk Group LLC, which was built to bring innovation and efficiency to the wealth management community. Tradeweb Direct has provided financial advisory firms access to live offerings, accurate pricing in the marketplace and fast execution.

Our markets are large and growing. Electronic trading continues to increase across the markets in which we operate as a result of market demand for greater transparency, higher execution quality, operational efficiency and lower costs, as well as regulatory changes. We believe our deep client relationships, asset class breadth, geographic reach, regulatory knowledge and scalable technology position us to continue to be at the forefront of the evolution of electronic trading. Our platforms provide transparent, efficient, cost-effective and compliant trading solutions across multiple products, regions and regulatory regimes. As market participants seek to trade across multiple asset classes, reduce their costs of trading and increase the effectiveness of their trading, including through the use of data and analytics, we believe the demand for our platforms and electronic trading solutions will continue to grow.

Trends and Other Factors Impacting Our Performance

Yieldbroker

On August 31, 2023, we completed the acquisition of all of the outstanding equity interests of Yieldbroker Pty Limited (“Yieldbroker” or the “Yieldbroker Acquisition”). The all-cash purchase price of A\$123.6 million (\$80.1 million U.S. dollars as translated as of August 31, 2023) was net of cash acquired and prior to working capital and other closing adjustments.

Yieldbroker is a Tier 1 Australian Markets Licensee in Australia, regulated by the Australian Securities & Investments Commission (“ASIC”), that maintains a branch in Singapore which is regulated by the Monetary Authority of Singapore (“MAS”) as a Regulated Market Operator. Yieldbroker operates a leading Australian trading platform for Australian and New Zealand government bonds and interest rate derivatives covering the institutional and wholesale client sectors. This acquisition combines Australia and New Zealand’s highly attractive, fast-growing markets with Tradeweb’s international reach and scale. The one month of activity from the Yieldbroker Acquisition did not have a significant impact to our results of operations for the three months ended September 30, 2023. See Note 4 – Acquisitions to the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for additional details on this acquisition.

CEO and Chairperson Transition

On February 16, 2022, we announced that Mr. Lee Olesky would retire as Chief Executive Officer (“CEO”) of the Company, effective December 31, 2022. On February 11, 2022, the board of directors elected our then-current President, Mr. Billy Hult, to succeed Mr. Olesky as CEO of the Company, effective January 1, 2023. On May 9, 2023, Mr. Olesky informed the board of directors that he would resign from his position as Chairperson and as a member of the board of directors, effective as of June 30, 2023. On May 12, 2023, the board of directors elected Jacques Aigrain to succeed Mr. Olesky as Chairperson of the board of directors.

During the year ended December 31, 2022, we recorded a total of \$15.0 million in accelerated stock-based compensation expenses (“CEO Retirement Accelerated Stock-Based Compensation Expense”) and related payroll that would not have been recognized if Mr. Olesky had not announced his retirement, including \$2.0 million and \$9.4 million recognized during the three and nine months ended September 30, 2022, respectively. There was no CEO Retirement Accelerated Stock-Based Compensation Expense recorded during the three and nine months ended September 30, 2023.

Economic Environment

Our business is impacted by the overall market activity and, in particular, trading volumes and market volatility. Lower volatility may result in lower trading volume for our clients and may negatively impact our operating performance and financial condition. Factors that may impact market activity during the remainder of 2023 include, among other things, evolving monetary policies of central banks, economic, political and social conditions, legislative, regulatory or government policy changes and concerns with respect to the banking industry, including as a result of any bank failures.

Because the majority of our financial assets are short-term in nature, they are not significantly affected by inflation. However, the rate of inflation may affect our expenses, such as employee compensation and benefits, technology and communication expenses and occupancy costs, which may not be readily recoverable in the prices of our services. We believe any effects of inflation on our results of operations and financial condition have not been significant during any of the periods presented in this Quarterly Report on Form 10-Q. To the extent inflation, along with other factors, continue to result in rising interest rates and have other adverse effects on the securities markets and the overall economy, they may adversely affect our results of operations and financial condition.

While our business is impacted by the overall activity of the market and market volatility, our revenues consist of a mix of fixed and variable fees that partially mitigates this impact. More importantly, we are actively engaged in the further electronification of trading activities, which will help mitigate this impact as we believe secular growth trends can partially offset market volatility risk.

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 enforcement of new laws and regulations that apply to our business. The current regulatory environment in the United States and abroad may be subject to future legislative and regulatory changes driven by U.S. and global issues and priorities. The impact of any changes in the legal or regulatory landscape on us and our operations remains uncertain. Compliance with regulations may require us to dedicate additional financial and operational resources, which may adversely affect our profitability. In addition, compliance with regulations may require our clients to dedicate significant financial and operational resources, which may negatively affect their ability to pay our fees and use our platforms and, as a result, our profitability. However, under certain circumstances regulation may increase demand for our platforms and solutions, and we believe we are well positioned to benefit from any potential increased electrification due to regulatory changes as market participants seek platforms that meet regulatory requirements and solutions that help them comply with their regulatory obligations.

Competitive Environment

We and our competitors compete to introduce innovations in market structure and new electronic trading capabilities. While we endeavor to be a leader in innovation, new trading capabilities of our competitors are also adopted by market participants. On the one hand, this increases liquidity and electrification for all participants, but it also puts pressure on us to further invest in our technology and to innovate to ensure the continued growth of our network of clients and continued improvement of liquidity, electronic processing and pricing on our platforms. Our ability to compete is influenced by key factors such as (i) developments in trading platforms and solutions, (ii) the liquidity we provide on transactions, (iii) the transaction costs we incur in providing our solutions, (iv) the efficiency in execution of transactions on our platforms, (v) our ability to hire and retain talent and (vi) our ability to maintain the security of our platforms and solutions. Our competitive position is also influenced by the familiarity and integration of our clients with our electronic, voice and hybrid systems. When either a client wants to trade in a new product or we want to introduce a new product, trading protocol or other solution, we believe we benefit from our clients' familiarity with our offerings as well as our integration into their order management systems and back offices.

Technology and Cybersecurity Environment

Our business and its success are largely impacted by the introduction of increasingly complex and sophisticated technology systems and infrastructures and new business models. Offering specialized trading venues and solutions through the development of new and enhanced platforms is essential to maintaining our level of competitiveness in the market and attracting new clients seeking platforms that provide advanced automation and better liquidity. We believe we will continue to increase demand for our platforms and solutions and the volume of transactions on our platforms, and thereby enhance our client relationships, by responding to new trading and information requirements through utilizing technological advances and emerging industry standards and practices in an effective and efficient way. We plan to continue to focus on and invest in technology infrastructure initiatives and continually improve and expand our platforms and solutions to further enhance our market position.

We experience cyber-threats and attempted security breaches. If these were successful, these cybersecurity incidents could impact revenue and operating income and increase costs. We therefore continue to make investments to strengthen our cybersecurity infrastructure, which may result in increased costs.

Foreign Currency Exchange Rate Environment

We earn revenues, pay expenses, hold assets and incur liabilities in currencies other than the U.S. dollar. Accordingly, fluctuations in foreign currency exchange rates can affect our results of operations from period to period. In particular, fluctuations in exchange rates for non-U.S. dollar currencies may reduce the U.S. dollar value of revenues, earnings and cash flows we receive from non-U.S. markets, increase our operating expenses (as measured in U.S. dollars) in those markets, negatively impact our competitiveness in those markets or otherwise adversely impact our results of operations or financial condition. Future fluctuations of foreign currency exchange rates and their impact on our results of operations and financial condition are inherently uncertain. As we continue to grow the size of our global operations, these fluctuations may be material. See Part I, Item 3. "Quantitative and Qualitative Disclosures About Market Risk — Foreign Currency and Derivative Risk" elsewhere in this Quarterly Report on Form 10-Q.

Taxation

In connection with the Reorganization Transactions, we became the sole manager of TWM LLC. As a result, beginning with the second quarter of 2019, we became subject to U.S. federal, state and local income taxes with respect to our allocable share of any taxable income of TWM LLC and are taxed at prevailing corporate tax rates. Our actual effective tax rate is impacted by our ownership share of TWM LLC, which has increased over time primarily due to Continuing LLC Owners redeeming or exchanging their LLC Interests for shares of Class A common stock or Class B common stock, as applicable, and our purchase of LLC Interests from Continuing LLC Owners. Furthermore, in connection with the IPO, we entered into the Tax Receivable Agreement pursuant to which we began to make payments in January 2021, and we expect future payments to be significant. We intend to continue to cause TWM LLC to make distributions in an amount sufficient to allow us to pay our tax obligations, operating expenses, including payments under the Tax Receivable Agreement, and our quarterly cash dividends, as and when declared by our board of directors.

On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (“IRA”) into law. The IRA establishes a 15% corporate minimum tax effective for taxable years beginning after December 31, 2022, and imposes a 1% excise tax on the repurchase after December 31, 2022 of stock by publicly traded U.S. corporations. The 1% excise tax did not have a material impact to our financial condition, results of operations and cash flows as of and for the three and nine months ended September 30, 2023. The Company will continue to evaluate the impact of the 15% corporate minimum tax on subsequent periods. The adoption of the IRA will not have an impact to our non-GAAP adjusted effective tax rate used for purposes of calculating our non-GAAP measure of Adjusted Net Income.

On October 8, 2021, the Organization for Economic Cooperation and Development announced an accord endorsing and providing an implementation plan focused on global profit allocation, and implementing a global minimum tax rate of at least 15% for large multinational corporations on a jurisdiction-by-jurisdiction basis, known as the “Two Pillar Plan.” On December 15, 2022, the European Council formally adopted a European Union directive on the implementation of the plan by January 1, 2024. The Company may be subject to the provisions of the Two Pillar Plan, and related tax impacts per local country adoption, as it is a consolidating subsidiary of LSEG. The Company will continue to monitor and evaluate the impact of the Two Pillar Plan on future periods as further information becomes available.

Components of our Results of Operations

Revenues

Our revenue is derived primarily from transaction fees, commissions, subscription fees and market data fees.

Transaction Fees and Commissions

We earn transaction fees from transactions executed on our trading platforms through various fee plans. Transaction fees are generated on both a variable and fixed price basis and vary by geographic region, product type and trade size. For most of our products, clients pay both fixed minimum monthly transaction fees and variable transaction fees on a per transaction basis in excess of the monthly minimum. For certain of our products, clients also pay a subscription fee in addition to the minimum monthly transaction fee. For other products, instead of a minimum monthly transaction fee, clients pay a subscription fee and a fixed transaction fee or variable transaction fees on a per transaction basis. For variable transaction fees, we charge clients fees based on the mix of products traded and the volume of transactions executed.

Transaction volume is determined by using either a measure of the notional volume of the products traded or a count of the number of trades. We typically charge higher fees for products that are less actively traded. In addition, because transaction fees are sometimes subject to fee plans with tiered pricing based on product mix, volume, monthly minimums and monthly maximum fee caps, average transaction fees per million generated for a client may vary each month depending on the mix of products and volume traded. Furthermore, because transaction fees vary by geographic region, product type and trade size, our revenues may not correlate with volume growth.

We earn commission revenue from our electronic and voice brokerage services on a riskless principal basis. Riskless principal revenues are derived on matched principal transactions where revenues are earned on the spread between the buy and sell price of the transacted product. For TBA-MBS, U.S. treasury and repurchase agreement transactions executed by our wholesale clients, we also generate revenue from fixed commissions that are generally invoiced monthly.

Subscription Fees

We earn subscription fees primarily for granting clients access to our markets for trading and market data. For a limited number of products, we only charge subscription fees and no transaction fees or commissions. Subscription fees are generally generated on a fixed price basis.

For purposes of our discussion of our results of operations, we include Refinitiv market data fees in subscription fees. We earn fixed license fees from our market data license agreement with Refinitiv. We also earn royalties from Refinitiv for referrals of new Eikon (a Refinitiv data platform) customers based on customer conversion rates. Royalties may fluctuate from period to period depending on the numbers of customer conversions achieved by Refinitiv during the applicable royalty fee earning period, which is typically five years from the date of the initial referral.

Operating Expenses

Employee Compensation and Benefits

Employee compensation and benefits expense consists of wages, employee benefits, bonuses, commissions, stock-based compensation cost and related taxes. Factors that influence employee compensation and benefits expense include revenue and earnings growth, hiring new employees and trading activity which generates broker commissions. We expect employee compensation and benefits expense to increase as we hire additional employees to support revenue and earnings growth. As a result, employee compensation and benefits can vary from period to period.

Depreciation and Amortization

Depreciation and amortization expense consists of costs relating to the depreciation and amortization of acquired and internally developed software, other intangible assets, leasehold improvements, furniture and equipment.

General and Administrative

General and administrative expense consists of travel and entertainment, marketing, value-added taxes, state use taxes, foreign currency transaction gains and losses, gains and losses on foreign exchange derivative contracts entered into for foreign exchange risk management purposes relating to operating activities, charitable contributions, other administrative expenses and credit loss expense. We expect general and administrative expense to increase as we expand the number of our employees and product offerings and grow our operations.

Technology and Communications

Technology and communications expense consists of costs relating to software and hardware maintenance, our internal network connections, data center costs, clearance and other trading platform related transaction costs and data feeds provided by third-party service providers, including Refinitiv. Factors that influence technology and communications expense include trading volumes and our investments in innovation, data strategy and cybersecurity.

Professional Fees

Professional fees consist primarily of accounting, tax and legal fees and fees paid to technology and software consultants to maintain our trading platforms and infrastructure, as well as costs related to business acquisition transactions.

Occupancy

Occupancy expense consists of operating lease rent and related costs for office space and data centers leased in North America, Europe, Asia and Australia.

Tax Receivable Agreement Liability Adjustment

The tax receivable agreement liability adjustment reflects changes in the tax receivable agreement liability recorded in our condensed consolidated statement of financial condition as a result of changes in the mix of earnings, tax legislation and tax rates in various jurisdictions, which impacted our tax savings. There was no tax receivable agreement liability adjustment during each of the three and nine months ended September 30, 2023 and 2022.

Net Interest Income (Expense)

Interest income consists of interest earned from our cash deposited with large commercial banks and money market funds. Interest expense consists of commitment fees payable on, and, if applicable, interest payable on any borrowings outstanding under the Revolving Credit Facility.

Other Income (Loss), Net

Other income (loss), net consists of any income or loss earned from investments, any mark-to-market adjustments or impairments recorded on investments, unrealized and realized gain/loss on foreign exchange derivative contracts entered into for foreign exchange risk management purposes relating to investing activities and any other non-operating items.

Income Taxes

We are subject to U.S. federal, state and local income taxes with respect to our taxable income, including our allocable share of any taxable income of TWM LLC, and are taxed at prevailing corporate tax rates. TWM LLC is a multiple member limited liability company taxed as a partnership and accordingly any taxable income generated by TWM LLC is passed through to and included in the taxable income of its members, including to us. Income taxes also include unincorporated business taxes on income earned or losses incurred for conducting business in certain state and local jurisdictions, income taxes on income earned or losses incurred in foreign jurisdictions on certain operations and federal and state income taxes on income earned or losses incurred, both current and deferred, on subsidiaries that are taxed as corporations for U.S. tax purposes.

Net Income Attributable to Non-Controlling Interests

We are the sole manager of TWM LLC. As a result of this control, and because we have a substantial financial interest in TWM LLC, we consolidate the financial results of TWM LLC and report a non-controlling interest in our condensed consolidated financial statements, representing the economic interests of TWM LLC held by Continuing LLC Owners. Income or loss is attributed to the non-controlling interests based on the relative ownership percentages of LLC Interests held during the period by us and any Continuing LLC Owners.

In connection with the Reorganization Transactions, the TWM LLC Agreement was amended and restated to, among other things, (i) provide for LLC Interests and (ii) exchange all of the then existing membership interests in TWM LLC for LLC Interests. LLC Interests held by Continuing LLC Owners are redeemable in accordance with the TWM LLC Agreement, at the election of such holders, for newly issued shares of Class A common stock or Class B common stock, as the case may be, on a one-for-one basis. In the event of such election by a Continuing LLC Owner, we may, at our option, effect a direct exchange of Class A common stock or Class B common stock for such LLC Interests of such Continuing LLC Owner in lieu of such redemption. In connection with any redemption or exchange, we will receive a corresponding number of LLC Interests, increasing our total ownership interest in TWM LLC. Following the completion of the Reorganization Transactions and the IPO, we owned 64.3% of TWM LLC and Continuing LLC Owners owned the remaining 35.7% of TWM LLC. As of September 30, 2023, we owned 90.2% of TWM LLC and Continuing LLC Owners owned the remaining 9.8% of TWM LLC.

Results of Operations

For the Three Months Ended September 30, 2023 and Three Months Ended September 30, 2022

The following table sets forth a summary of our statements of income for the three months ended September 30, 2023 and 2022:

	Three Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Total revenue	\$ 328,357	\$ 287,115	\$ 41,242	14.4 %
Total expenses	203,619	184,305	19,314	10.5 %
Operating income	124,738	102,810	21,928	21.3 %
Net interest income (expense)	17,465	3,413	14,052	411.7 %
Other income (loss), net	(1,907)	—	(1,907)	N/M
Income before taxes	140,296	106,223	34,073	32.1 %
Provision for income taxes	(28,666)	(24,657)	(4,009)	16.3 %
Net income	111,630	81,566	30,064	36.9 %
Less: Net income attributable to non-controlling interests	13,016	12,483	533	4.3 %
Net income attributable to Tradeweb Markets Inc.	<u>\$ 98,614</u>	<u>\$ 69,083</u>	<u>\$ 29,531</u>	42.7 %

N/M = not meaningful

Revenues

Our revenues for the three months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended September 30,				\$ Change	% Change
	2023		2022			
	\$	% of Total Revenue	\$	% of Total Revenue		
	(dollars in thousands)					
Revenues						
Transaction fees and commissions	\$ 263,485	80.2 %	\$ 228,015	79.4 %	\$ 35,470	15.6 %
Subscription fees ⁽¹⁾	61,821	18.8	56,712	19.8	5,109	9.0 %
Other	3,051	0.9	2,388	0.8	663	27.8 %
Total revenue	<u>\$ 328,357</u>	<u>100.0 %</u>	<u>\$ 287,115</u>	<u>100.0 %</u>	<u>\$ 41,242</u>	14.4 %

Components of total revenue growth:

Constant currency growth ⁽²⁾	12.5 %
Foreign currency impact	1.9 %
Total revenue growth	<u>14.4 %</u>

(1) Subscription fees for the three months ended September 30, 2023 and 2022 include \$15.5 million and \$15.4 million respectively, of Refinitiv market data fees.

(2) Constant currency revenue change, which is a non-GAAP financial measure, is defined as total revenue change excluding the effects of foreign currency fluctuations. Total revenue excluding the effects of foreign currency fluctuations is calculated by translating the current period and prior period's total revenue using the annual average exchange rates for the prior period. We use constant currency change as a supplemental metric to evaluate our underlying total revenue performance between periods by removing the impact of foreign currency fluctuations. We believe that providing constant currency change provides a useful comparison of our total revenue performance and trends between periods.

In general, revenues for the three months ended September 30, 2023 continued to be impacted by a challenging macroeconomic backdrop, including rising interest rates, sustained broader market rate volatility and an inverted yield curve that impacted duration traded and overall fees per million. The primary driver of the \$41.2 million increase in revenue was related to an \$35.5 million increase in transaction fees and commissions to \$263.5 million for the three months ended September 30, 2023 from \$228.0 million for the three months ended September 30, 2022, primarily due to higher revenues for rate derivatives products, U.S. and European corporate bonds and U.S. and European government bonds.

Our total revenue by asset class for the three months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended September 30,		\$ Change	% Change
	2023	2022		
(dollars in thousands)				
Revenues				
Rates	\$ 172,832	\$ 148,167	\$ 24,665	16.6 %
Credit	90,062	78,101	11,961	15.3 %
Equities	20,890	21,277	(387)	(1.8) %
Money Markets	15,763	12,969	2,794	21.5 %
Market Data	22,956	21,222	1,734	8.2 %
Other	5,854	5,379	475	8.8 %
Total revenue	<u>\$ 328,357</u>	<u>\$ 287,115</u>	<u>\$ 41,242</u>	14.4 %

Our variable and fixed revenues by asset class for the three months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended September 30,				\$ Change		% Change	
	2023		2022		Variable	Fixed	Variable	Fixed
	Variable	Fixed	Variable	Fixed				
(dollars in thousands)								
Revenues								
Rates	\$ 114,128	\$ 58,704	\$ 93,673	\$ 54,494	\$ 20,455	\$ 4,210	21.8 %	7.7 %
Credit	82,484	7,578	71,724	6,377	10,760	1,201	15.0 %	18.8 %
Equities	18,567	2,323	18,969	2,308	(402)	15	(2.1) %	0.6 %
Money Markets	11,433	4,330	8,507	4,462	2,926	(132)	34.4 %	(3.0) %
Market Data	115	22,841	—	21,222	115	1,619	N/M	7.6 %
Other	—	5,854	—	5,379	—	475	—	8.8 %
Total revenue	<u>\$ 226,727</u>	<u>\$ 101,630</u>	<u>\$ 192,873</u>	<u>\$ 94,242</u>	<u>\$ 33,854</u>	<u>\$ 7,388</u>	17.6 %	7.8 %

N/M = not meaningful

A significant percentage of our transaction fees and commissions are tied directly to overall trading volumes in the rates, credit, equities and money markets asset classes. The average daily volumes and total volumes on our trading platforms by asset class for the three months ended September 30, 2023 and 2022, and the resulting percentage changes, are summarized as follows:

	Three Months Ended				ADV % Change
	September 30,				
	2023		2022		
ADV	Volume	ADV	Volume		
	(dollars in millions)				
Rates	\$ 853,316	\$ 54,264,525	\$ 652,804	\$ 41,932,450	30.7 %
Rates Cash	361,432	22,842,103	324,168	20,774,062	11.5 %
Rates Derivatives	491,883	31,422,422	328,636	21,158,388	49.7 %
Swaps / Swaptions Tenor (greater than 1 year)	326,175	20,799,345	203,038	13,066,309	60.7 %
Other Rates Derivatives ⁽¹⁾	165,709	10,623,077	125,597	8,092,079	31.9 %
Credit	29,936	1,906,796	29,320	1,887,479	2.1 %
Cash Credit ⁽²⁾	7,194	457,163	5,611	360,559	28.2 %
Credit Derivatives, China Bonds and U.S. Cash "EP"	22,742	1,449,634	23,709	1,526,920	(4.1) %
Equities	18,930	1,197,947	15,813	1,015,143	19.7 %
Equities Cash	9,479	601,332	8,804	565,934	7.7 %
Equities Derivatives	9,451	596,615	7,009	449,209	34.8 %
Money Markets	522,075	33,065,896	400,726	25,721,492	30.3 %
Total ⁽⁴⁾	\$ 1,424,256	\$ 90,435,165	\$ 1,098,663	\$ 70,556,565	29.6 %
Total excluding Other Rates Derivatives ⁽³⁾	\$ 1,258,547	\$ 79,812,088	\$ 973,066	\$ 62,464,486	29.3 %

(1) Includes Swaps/Swaptions of tenor less than 1 year and Rates Futures.

(2) The "Cash Credit" category represents the "Credit" asset class excluding (1) Credit Derivatives (2) China Bonds and (3) U.S. High Grade and High Yield electronically processed ("EP") activity.

(3) Included to contextualize the impact of short-tenored Swaps/Swaptions and Rates Futures on totals for all periods presented.

(4) Total volume across Rates (Cash and Derivatives), Credit and Money Markets include Australia and New Zealand estimated volumes from the Yieldbroker business that Tradeweb acquired on August 31, 2023.

The average variable fees per million dollars of volume traded on our trading platforms by asset class for the three months ended September 30, 2023 and 2022 are summarized below. There are four potential drivers of quarterly fluctuations in our average variable fees per million: (1) the mix and duration of cash and derivatives products traded, (2) the mix of protocols underpinning cash and derivatives products, (3) volume discounts and (4) clients moving between fixed and variable pricing structures. Average variable fees per million should be reviewed in conjunction with our trading volumes and total revenue by asset class. Since variable fees are sometimes subject to fee plans with tiered pricing based on product mix and volume, average variable fees per million for a specific asset class may not correlate with volumes or revenue growth.

	Three Months Ended		\$ Change	% Change
	September 30,			
	2023	2022		
Rates	\$ 2.10	\$ 2.23	\$ (0.13)	(5.7) %
Rates Cash	\$ 2.42	\$ 2.23	\$ 0.19	8.5 %
Rates Derivatives	\$ 1.87	\$ 2.24	\$ (0.37)	(16.4) %
Rates Derivatives (greater than 1 year)	\$ 2.72	\$ 3.46	\$ (0.74)	(21.4) %
Other Rates Derivatives ⁽¹⁾	\$ 0.22	\$ 0.27	\$ (0.05)	(19.1) %
Credit	\$ 43.26	\$ 38.03	\$ 5.23	13.7 %
Cash Credit ⁽²⁾	\$ 162.20	\$ 168.74	\$ (6.54)	(3.9) %
Credit Derivatives, China Bonds and U.S. Cash “EP”	\$ 5.75	\$ 7.12	\$ (1.37)	(19.3) %
Equities	\$ 15.50	\$ 18.69	\$ (3.19)	(17.1) %
Equities Cash	\$ 25.42	\$ 29.33	\$ (3.91)	(13.3) %
Equities Derivatives	\$ 5.50	\$ 5.28	\$ 0.22	4.1 %
Money Markets	\$ 0.35	\$ 0.33	\$ 0.02	4.8 %
Total	\$ 2.51	\$ 2.73	\$ (0.22)	(8.2) %
Total excluding Other Rates Derivatives ⁽³⁾	\$ 2.81	\$ 3.05	\$ (0.24)	(7.9) %

(1) Includes Swaps/Swaptions of tenor less than 1 year and Rates Futures.

(2) The “Cash Credit” category represents the “Credit” asset class excluding (1) Credit Derivatives (2) China Bonds and (3) U.S. High Grade and High Yield electronically processed (“EP”) activity.

(3) Included to contextualize the impact of short-tenored Swaps/Swaptions and Rates Futures on blended fees per million across all periods presented.

The key drivers of the change in total revenue, volumes and variable fees per million by asset class are summarized as follows:

Rates. Revenues from our rates asset class increased by \$24.7 million or 16.6% to \$172.8 million for the three months ended September 30, 2023 compared to \$148.2 million for the three months ended September 30, 2022 primarily due to higher variable transaction fees and commissions on higher trading volumes for rates derivatives products, U.S. and European government bonds, mortgages and an increase in fixed subscription fees. The fixed subscription fee increase was primarily driven by the addition of new dealers and customers to the rates platform, as well as pricing increases on some of the rates subscription services.

Average variable fees per million for rates decreased primarily due to a decrease in average variable fees per million for rates derivatives driven primarily by shifts in the mix and duration of derivative products traded. This decrease was partially offset by an increase in average variable fees per million for rates cash products primarily due to shifts in the mix of trading towards U.S. government bonds, which have a higher variable fee capture compared to overall rates.

Credit. Revenues from our credit asset class increased by \$12.0 million or 15.3% to \$90.1 million for the three months ended September 30, 2023 compared to \$78.1 million for the three months ended September 30, 2022 primarily due to higher variable transaction fees and commissions on higher trading volumes for U.S. and European corporate bonds, partially offset by lower variable transaction fees and commissions on lower trading volumes for credit derivatives products.

Average variable fees per million for credit increased primarily due to a shift in the mix of products traded from derivative and electronically processed U.S. corporate bonds to cash credit products, which have a higher variable fee capture compared to overall credit.

Equities. Revenues from our equities asset class decreased by \$0.4 million or 1.8% to \$20.9 million for the three months ended September 30, 2023 compared to \$21.3 million for the three months ended September 30, 2022 as the higher variable transaction fees and commissions on higher trading volumes for equity derivatives products was more than offset by a decline in revenue for U.S. and European ETFs.

Average variable fees per million for equities decreased primarily due to a shift in the mix of products and size of units traded, including higher volume per unit traded in ETFs and higher volumes in equity derivatives.

Money Markets. Revenues from our money markets asset class increased by \$2.8 million or 21.5% to \$15.8 million for the three months ended September 30, 2023 compared to \$13.0 million for the three months ended September 30, 2022 primarily due to higher variable transaction fees and commissions for certificates of deposit and repurchase agreements.

Average variable fees per million for money markets increased primarily due to higher growth of U.S. certificates of deposit which have a higher variable fee capture compared to overall money markets.

Market Data. Revenues from our market data asset class increased by \$1.7 million or 8.2% to \$23.0 million for the three months ended September 30, 2023 compared to \$21.2 million for the three months ended September 30, 2022. The increase was derived primarily from increased proprietary third party market data and trade reporting services (APA) revenue.

Other. Revenues from our other asset class increased of \$0.5 million or 8.8% to \$5.9 million for the three months ended September 30, 2023 compared to \$5.4 million for the three months ended September 30, 2022. The increase was derived primarily from increased software development and implementation revenue on behalf of certain clients.

We generate revenue from a diverse portfolio of client sectors. Our total revenue by client sector for the three months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Revenues				
Institutional	\$ 195,094	\$ 172,814	\$ 22,280	12.9 %
Wholesale	77,975	64,584	13,391	20.7 %
Retail	32,332	28,495	3,837	13.5 %
Market Data	22,956	21,222	1,734	8.2 %
Total revenue	<u>\$ 328,357</u>	<u>\$ 287,115</u>	<u>\$ 41,242</u>	14.4 %

Institutional. Revenues from our institutional client sector increased by \$22.3 million or 12.9% to \$195.1 million for the three months ended September 30, 2023 from \$172.8 million for the three months ended September 30, 2022. The increase was derived primarily from higher revenues for rates derivatives products, U.S. corporate bonds and U.S. and European government bonds, partially offset by lower revenues for credit derivatives products.

Wholesale. Revenues from our wholesale client sector increased by \$13.4 million or 20.7% to \$78.0 million for the three months ended September 30, 2023 from \$64.6 million for the three months ended September 30, 2022. The increase was derived primarily from higher revenues for European and U.S. corporate bonds and U.S. government bonds.

Retail. Revenues from our retail client sector increased by \$3.8 million or 13.5% to \$32.3 million for the three months ended September 30, 2023 from \$28.5 million for the three months ended September 30, 2022. The increase was derived primarily from higher revenues for certificates of deposits and U.S. government bonds.

Market Data. Revenues from our market data client sector increased by \$1.7 million or 8.2% to \$23.0 million for the three months ended September 30, 2023 from \$21.2 million for the three months ended September 30, 2022. The increase was derived primarily from increased proprietary third party market data and trade reporting services (APA) revenue.

Our revenues and client base are also diversified by geography. Our total revenue by geography (based on client location) for the three months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Three Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Revenues				
U.S.	\$ 207,842	\$ 185,097	\$ 22,745	12.3 %
International	120,515	102,018	18,497	18.1 %
Total revenue	<u>\$ 328,357</u>	<u>\$ 287,115</u>	<u>\$ 41,242</u>	14.4 %

U.S. Revenues from U.S. clients increased by \$22.7 million or 12.3% to \$207.8 million for the three months ended September 30, 2023 from \$185.1 million for the three months ended September 30, 2022 primarily due to higher revenues for U.S. corporate bonds, U.S. government bonds, rates derivatives products and certificates of deposit.

International. Revenues from International clients increased by \$18.5 million or 18.1% to \$120.5 million for the three months ended September 30, 2023 from \$102.0 million for the three months ended September 30, 2022 primarily due to higher revenues for rates derivatives products, European corporate bonds, European government bonds and market data.

Operating Expenses

Our expenses for the three months ended September 30, 2023 and 2022 were as follows:

	Three Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Employee compensation and benefits	\$ 116,016	\$ 102,720	\$ 13,296	12.9 %
Depreciation and amortization	46,559	44,778	1,781	4.0 %
Technology and communications	19,733	16,816	2,917	17.3 %
General and administrative	6,700	6,892	(192)	(2.8)%
Professional fees	10,479	9,400	1,079	11.5 %
Occupancy	4,132	3,699	433	11.7 %
Total expenses	<u>\$ 203,619</u>	<u>\$ 184,305</u>	<u>\$ 19,314</u>	10.5 %

Employee Compensation and Benefits. Expenses related to employee compensation and benefits increased by \$13.3 million or 12.9% to \$116.0 million for the three months ended September 30, 2023 from \$102.7 million for the three months ended September 30, 2022. The increase was primarily due to an increase in headcount and related salaries and benefits as well as increases in incentive compensation expense and commissions tied to our operating performance, partially offset by a \$2.0 million decrease in non-cash accelerated stock-based compensation expense and related payroll taxes relating to the CEO Retirement Accelerated Stock-Based Compensation Expense. See “— Trends and Other Factors Impacting Our Performance — CEO and Chairperson Transition” for further details.

Depreciation and Amortization. Expenses related to depreciation and amortization increased by \$1.8 million or 4.0% to \$46.6 million for the three months ended September 30, 2023 from \$44.8 million for the three months ended September 30, 2022. The increase was primarily due to increases in amortization of software development costs driven by increases in investment in our infrastructure and expense relating to the assets acquired in connection with the August 31, 2023 Yieldbroker Acquisition.

Technology and Communications. Expenses related to technology and communications increased by \$2.9 million or 17.3% to \$19.7 million for the three months ended September 30, 2023 from \$16.8 million for the three months ended September 30, 2022. The increase was primarily due to increased investment in our data strategy and infrastructure and increased data and clearance fees driven primarily by higher period-over-period trading volumes.

General and Administrative. Expenses related to general and administrative costs remained relatively flat with a decrease of \$0.2 million or 2.8% to \$6.7 million for the three months ended September 30, 2023 from \$6.9 million for the three months ended September 30, 2022. The decrease was primarily the result of decreases in recruiting and travel and entertainment expenses and various sales and use tax refunds and rebates received during the three months ended September 30, 2023. These decreases were partially offset by \$1.2 million in acquisition costs and a \$1.5 million decrease in foreign exchange gains during the three months ended September 30, 2023. Realized and unrealized foreign currency gains totaled \$4.6 million during the three months ended September 30, 2023 as compared to \$6.2 million in gains during three months ended September 30, 2022. The change was primarily driven by changes in fair value of our foreign currency forward contracts used in connection with our foreign currency risk management program.

Professional Fees. Expenses related to professional fees increased by \$1.1 million or 11.5% to \$10.5 million for the three months ended September 30, 2023 from \$9.4 million for the three months ended September 30, 2022. The increase was primarily due to increased legal and other costs related to acquisitions.

Occupancy. Expenses related to occupancy costs increased by \$0.4 million or 11.7% to \$4.1 million for the three months ended September 30, 2023 from \$3.7 million for the three months ended September 30, 2022. The increase was primarily due to higher data center rent expense primarily driven by the completion of the NFI Acquisition technology integration during the three months ended March 31, 2023 and the relocation of data centers to locations providing enhanced infrastructure and improved performance.

Net Interest Income (Expense)

Net interest income increased by \$14.1 million to net interest income of \$17.5 million for the three months ended September 30, 2023 from net interest income of \$3.4 million for the three months ended September 30, 2022 primarily due to an increase in interest income earned as a result of an increase in our average invested cash balance and an increase in interest rates period over period.

Other Income (Loss), Net

During the three months ended September 30, 2023, we recognized a net other loss of \$1.9 million as we unwound the out-of-the-money foreign currency call option entered into in order to partially mitigate the foreign currency exposure relating to the payment of the purchase price for the Yieldbroker Acquisition. See Note 4 – Acquisitions to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

Income Taxes

Income tax expense increased by \$4.0 million to \$28.7 million for the three months ended September 30, 2023 from \$24.7 million for the three months ended September 30, 2022. The provision for income taxes includes U.S. federal, state, local and foreign taxes. The effective tax rate for the three months ended September 30, 2023 was approximately 20.4%, compared with 23.2% for the three months ended September 30, 2022. The effective tax rate for the three months ended September 30, 2023 differed from the U.S. federal statutory rate of 21.0% primarily due to the return-to-provision adjustment and the effect of non-controlling interests, partially offset by the effect of state, local and foreign taxes. The effective tax rate for the three months ended September 30, 2022 differed from the U.S. federal statutory rate of 21.0% primarily due to the effect of state, local and foreign taxes and the return-to-provision adjustments, partially offset by the effect of non-controlling interests and the tax impact of the issuance of common stock from equity incentive plans.

For the Nine Months Ended September 30, 2023 and Nine Months Ended September 30, 2022

The following table sets forth a summary of our statements of income for the nine months ended September 30, 2023 and 2022:

	Nine Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Total revenue	\$ 968,219	\$ 895,739	\$ 72,480	8.1 %
Total expenses	604,580	574,720	29,860	5.2 %
Operating income	363,639	321,019	42,620	13.3 %
Net interest income (expense)	45,065	3,507	41,558	N/M
Other income (loss), net	(2,022)	—	(2,022)	N/M
Income before taxes	406,682	324,526	82,156	25.3 %
Provision for income taxes	(90,920)	(63,915)	(27,005)	42.3 %
Net income	315,762	260,611	55,151	21.2 %
Less: Net income attributable to non-controlling interests	40,210	40,219	(9)	— %
Net income attributable to Tradeweb Markets Inc.	\$ 275,552	\$ 220,392	\$ 55,160	25.0 %

N/M = not meaningful

Revenues

Our revenues for the nine months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Nine Months Ended September 30,				\$ Change	% Change
	2023		2022			
	\$	% of Total Revenue	\$	% of Total Revenue		
(dollars in thousands)						
Revenues						
Transaction fees and commissions	\$ 776,544	80.2 %	\$ 717,489	80.1 %	\$ 59,055	8.2 %
Subscription fees ⁽¹⁾	182,998	18.9	170,691	19.1	12,307	7.2 %
Other	8,677	0.9	7,559	0.8	1,118	14.8 %
Total revenue	\$ 968,219	100.0 %	\$ 895,739	100.0 %	\$ 72,480	8.1 %

Components of total revenue growth:

Constant currency growth ⁽²⁾	8.1 %
Foreign currency impact	— %
Total revenue growth	8.1 %

(1) Subscription fees for the nine months ended September 30, 2023 and 2022 include \$46.5 million and \$46.4 million respectively, of Refinitiv market data fees.

(2) Constant currency revenue change, which is a non-GAAP financial measure, is defined as total revenue change excluding the effects of foreign currency fluctuations. Total revenue excluding the effects of foreign currency fluctuations is calculated by translating the current period and prior period's total revenue using the annual average exchange rates for the prior period. We use constant currency change as a supplemental metric to evaluate our underlying total revenue performance between periods by removing the impact of foreign currency fluctuations. We believe that providing constant currency change provides a useful comparison of our total revenue performance and trends between periods.

The primary driver of the \$72.5 million increase in revenue related to a \$59.1 million increase in transaction fees and commissions to \$776.5 million for the nine months ended September 30, 2023 from \$717.5 million for the nine months ended September 30, 2022, primarily due to higher revenues for U.S. corporate bonds, U.S. government bonds, rates derivative products, certificates of deposit, European corporate bonds and European government bonds, partially offset by lower revenues for credit derivatives products and European ETFs.

Our total revenue by asset class for the nine months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Nine Months Ended September 30,				\$ Change	% Change
	2023		2022			
	\$	% of Total Revenue	\$	% of Total Revenue		
(dollars in thousands)						
Revenues						
Rates	\$ 503,691		\$ 460,092		\$ 43,599	9.5 %
Credit	263,127		248,410		14,717	5.9 %
Equities	69,239		70,471		(1,232)	(1.7)%
Money Markets	46,404		36,659		9,745	26.6 %
Market Data	68,166		63,618		4,548	7.1 %
Other	17,592		16,489		1,103	6.7 %
Total revenue	\$ 968,219		\$ 895,739		\$ 72,480	8.1 %

Our variable and fixed revenues by asset class for the nine months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Nine Months Ended September 30,				\$ Change		% Change	
	2023		2022		Variable	Fixed	Variable	Fixed
	Variable	Fixed	Variable	Fixed				
	(dollars in thousands)							
Revenues								
Rates	\$ 329,884	\$ 173,807	\$ 293,396	\$ 166,696	\$ 36,488	\$ 7,111	12.4 %	4.3 %
Credit	242,182	20,945	228,869	19,541	13,313	1,404	5.8 %	7.2 %
Equities	62,330	6,909	63,529	6,942	(1,199)	(33)	(1.9)%	(0.5)%
Money Markets	33,382	13,022	23,439	13,220	9,943	(198)	42.4 %	(1.5)%
Market Data	160	68,006	—	63,618	160	4,388	N/M	6.9 %
Other	—	17,592	—	16,489	—	1,103	—	6.7 %
Total revenue	<u>\$ 667,938</u>	<u>\$ 300,281</u>	<u>\$ 609,233</u>	<u>\$ 286,506</u>	<u>\$ 58,705</u>	<u>\$ 13,775</u>	9.6 %	4.8 %

N/M = not meaningful

The key drivers of the change in total revenue by asset class are summarized as follows:

Rates. Revenues from our rates asset class increased by \$43.6 million or 9.5% to \$503.7 million for the nine months ended September 30, 2023 compared to \$460.1 million for the nine months ended September 30, 2022 primarily due to variable transaction fees and commissions on higher trading volumes for U.S. government bonds, rates derivatives products and European government bonds and an increase in fixed subscription fees.

Credit. Revenues from our credit asset class increased by \$14.7 million or 5.9% to \$263.1 million for the nine months ended September 30, 2023 compared to \$248.4 million for the nine months ended September 30, 2022 primarily due to higher variable transaction fees and commissions on higher trading volumes for U.S. and European corporate bonds, partially offset by lower variable transaction fees and commissions on lower trading volumes for credit derivatives products.

Equities. Revenues from our equities asset class decreased by \$1.2 million or 1.7% to \$69.2 million for the nine months ended September 30, 2023 compared to \$70.5 million for the nine months ended September 30, 2022 primarily due to lower variable transaction fees and commissions on lower trading volumes for European ETFs, partially offset by higher variable transaction fees and commissions on higher trading volumes for equity derivatives products.

Money Markets. Revenues from our money markets asset class increased by \$9.7 million or 26.6% to \$46.4 million for the nine months ended September 30, 2023 compared to \$36.7 million for the nine months ended September 30, 2022 primarily due to higher variable transaction fees and commissions for certificates of deposit and repurchase agreements.

Market Data. Revenues from our market data asset class increased by \$4.5 million or 7.1% to \$68.2 million for the nine months ended September 30, 2023 compared to \$63.6 million for the nine months ended September 30, 2022. The increase was derived primarily from increased proprietary third party market data and trade reporting services (APA) revenue.

Other. Revenues from our other asset class increased by \$1.1 million or 6.7%, to \$17.6 million for the nine months ended September 30, 2023 compared to \$16.5 million for the nine months ended September 30, 2022. The increase was driven primarily by an increase in revenue from software development and implementation projects performed on behalf of certain clients.

We generate revenue from a diverse portfolio of client sectors. Our total revenue by client sector for the nine months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Nine Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Revenues				
Institutional	\$ 577,774	\$ 551,322	\$ 26,452	4.8 %
Wholesale	227,404	205,532	21,872	10.6 %
Retail	94,875	75,267	19,608	26.1 %
Market Data	68,166	63,618	4,548	7.1 %
Total revenue	<u>\$ 968,219</u>	<u>\$ 895,739</u>	<u>\$ 72,480</u>	8.1 %

Institutional. Revenues from our institutional client sector increased by \$26.5 million or 4.8% to \$577.8 million for the nine months ended September 30, 2023 from \$551.3 million for the nine months ended September 30, 2022. The increase was derived primarily from higher revenues for rates derivatives products, U.S. corporate bonds and U.S. and European government bonds, partially offset by lower revenues for credit derivatives products and European ETFs.

Wholesale. Revenues from our wholesale client sector increased by \$21.9 million or 10.6% to \$227.4 million for the nine months ended September 30, 2023 from \$205.5 million for the nine months ended September 30, 2022. The increase was derived primarily from higher revenues for European and U.S. corporate bonds and U.S. government bonds.

Retail. Revenues from our retail client sector increased by \$19.6 million or 26.1% to \$94.9 million for the nine months ended September 30, 2023 from \$75.3 million for the nine months ended September 30, 2022. The increase was derived primarily from higher revenues for certificates of deposit, U.S. government bonds and U.S. corporate bonds.

Market Data. Revenues from our market data client sector increased by \$4.5 million or 7.1% to \$68.2 million for the nine months ended September 30, 2023 from \$63.6 million for the nine months ended September 30, 2022. The increase was derived primarily from increased proprietary third party market data and trade reporting services (APA) revenue.

Our revenues and client base are also diversified by geography. Our total revenue by geography (based on client location) for the nine months ended September 30, 2023 and 2022, and the resulting dollar and percentage changes, were as follows:

	Nine Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Revenues				
U.S.	\$ 617,463	\$ 565,540	\$ 51,923	9.2 %
International	350,756	330,199	20,557	6.2 %
Total revenue	<u>\$ 968,219</u>	<u>\$ 895,739</u>	<u>\$ 72,480</u>	8.1 %

U.S. Revenues from U.S. clients increased by \$51.9 million or 9.2% to \$617.5 million for the nine months ended September 30, 2023 from \$565.5 million for the nine months ended September 30, 2022 primarily due to higher revenues for U.S. corporate bonds, U.S. government bonds and certificates of deposit.

International. Revenues from International clients increased by \$20.6 million or 6.2% to \$350.8 million for the nine months ended September 30, 2023 from \$330.2 million for the nine months ended September 30, 2022 primarily due to higher revenues for rates derivatives products, European government bonds, European corporate bonds and market data, partially offset by lower revenues for credit derivatives products and European ETFs.

Operating Expenses

Our expenses for the nine months ended September 30, 2023 and 2022 were as follows:

	Nine Months Ended September 30,		\$ Change	% Change
	2023	2022		
	(dollars in thousands)			
Employee compensation and benefits	\$ 334,433	\$ 330,601	\$ 3,832	1.2 %
Depreciation and amortization	137,850	133,998	3,852	2.9 %
Technology and communications	56,001	48,626	7,375	15.2 %
General and administrative	31,692	24,806	6,886	27.8 %
Professional fees	32,321	25,832	6,489	25.1 %
Occupancy	12,283	10,857	1,426	13.1 %
Total expenses	<u>\$ 604,580</u>	<u>\$ 574,720</u>	<u>\$ 29,860</u>	<u>5.2 %</u>

Employee Compensation and Benefits. Expenses related to employee compensation and benefits increased by \$3.8 million or 1.2% to \$334.4 million for the nine months ended September 30, 2023 from \$330.6 million for the nine months ended September 30, 2022. The increase was primarily due to the increase in headcount and related salaries and benefits as well as increases in commissions tied to our operating performance, partially offset by a \$9.4 million decrease in non-cash accelerated stock-based compensation expense and related payroll taxes relating to the CEO Retirement Accelerated Stock-Based Compensation Expense. See “— Trends and Other Factors Impacting Our Performance — CEO and Chairperson Transition” for further details.

Depreciation and Amortization. Expenses related to depreciation and amortization increased \$3.9 million or 2.9% to \$137.9 million for the nine months ended September 30, 2023 from \$134.0 million for the nine months ended September 30, 2022. The increase was primarily due to increases in amortization of software development costs driven by increases in investment in our infrastructure and expense relating to the assets acquired in connection with the August 31, 2023 Yieldbroker Acquisition.

Technology and Communications. Expenses related to technology and communications increased by \$7.4 million or 15.2% to \$56.0 million for the nine months ended September 30, 2023 from \$48.6 million for the nine months ended September 30, 2022. The increase was primarily due to investment in our data strategy and infrastructure and increased data and clearance fees driven primarily by higher period-over-period trading volumes.

General and Administrative. Expenses related to general and administrative costs increased by \$6.9 million or 27.8% to \$31.7 million for the nine months ended September 30, 2023 from \$24.8 million for the nine months ended September 30, 2022. The increase was primarily due to a \$6.8 million decrease in foreign exchange gains during the nine months ended September 30, 2023. Realized and unrealized foreign currency gains totaled \$3.9 million during the nine months ended September 30, 2023 as compared to \$10.7 million in gains during the nine months ended September 30, 2022. The change was primarily driven by changes in fair value of our foreign currency forward contracts used in connection with our foreign currency risk management program.

Professional Fees. Expenses related to professional fees increased by \$6.5 million or 25.1% to \$32.3 million for the nine months ended September 30, 2023 from \$25.8 million for the nine months ended September 30, 2022. The increase was primarily due to increased legal and other costs related acquisitions.

Occupancy. Expenses related to occupancy costs increased by \$1.4 million or 13.1% to \$12.3 million for the nine months ended September 30, 2023 as compared to \$10.9 million for the nine months ended September 30, 2022. The increase was primarily due to higher data center rent expense primarily driven by the completion of the NFI Acquisition technology integration during the three months ended March 31, 2023 and the relocation of data centers to locations providing enhanced infrastructure and improved performance.

Net Interest Income (Expense)

Net interest income increased by \$41.6 million to net interest income of \$45.1 million for the nine months ended September 30, 2023 from net interest income of \$3.5 million for the nine months ended September 30, 2022 primarily due to an increase in interest income earned relating to an increase in our average invested cash balance and an increase in interest rates period over period.

Other Income (Loss), Net

During the nine months ended September 30, 2023, we recognized a net other loss of \$2.0 million, including a \$1.3 million loss in connection with unwinding the out-of-the-money foreign currency call option entered into in order to partially mitigate the foreign currency exposure on the payment of the purchase price for the Yieldbroker Acquisition. See Note 4 – Acquisitions to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details. In addition, we also recognized a \$0.7 million loss due to a net reduction in the tax indemnification receivables from Refinitiv relating to the settlement of the tax matter for less than the previously estimated amount. See Note 6 – Income Taxes to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for further details.

Income Taxes

Income tax expense increased by \$27.0 million to \$90.9 million for the nine months ended September 30, 2023 from \$63.9 million for the nine months ended September 30, 2022. The provision for income taxes includes U.S. federal, state, local, and foreign taxes. The effective tax rate for the nine months ended September 30, 2023 was approximately 22.4%, compared with 19.7% for the nine months ended September 30, 2022. The effective tax rate for the nine months ended September 30, 2023 differed from the U.S. federal statutory rate of 21.0% primarily due to state, local and foreign taxes, partially offset by the effect of non-controlling interests, the exercise of equity compensation and the return-to-provision adjustment. The effective tax rate for the nine months ended September 30, 2022 differed from the U.S. federal statutory rate of 21.0% primarily due to the tax impact of the issuance of common stock from equity incentive plans, return-to-provision adjustments and the effect of non-controlling interests, partially offset by state, local and foreign taxes.

Effects of Inflation

While inflation may impact our revenues and operating expenses, we believe the effects of inflation, if any, on our results of operations and financial condition have not been significant during the three and nine months ended September 30, 2023 and 2022. However, there can be no assurance that our results of operations and financial condition will not be materially impacted by inflation in the future. See “— Trends and Other Factors Impacting Our Performance — Economic Environment” above.

Liquidity and Capital Resources

Overview

Liquidity describes the ability of a company to generate sufficient cash flows to meet the cash requirements of its business operations, including working capital needs to meet operating expenses, debt service, acquisitions, other commitments and contractual obligations. We consider liquidity in terms of cash on hand, cash flows from operations and availability under the Revolving Credit Facility and their sufficiency to fund our operating and investing activities.

Historically, we have generated significant cash flows from operations and have funded our business operations through cash on hand and cash flows from operations.

Our primary cash needs are for day to day operations, working capital requirements, clearing margin requirements, capital expenditures primarily for software and equipment, our expected dividend payments and our share repurchase program. In addition, we are obligated to make payments under the Tax Receivable Agreement.

We expect to fund our short and long-term liquidity requirements through cash and cash equivalents and cash flows from operations. While historically we have generated significant and adequate cash flows from operations, in the case of an unexpected event in the future or otherwise, we may fund our liquidity requirements through borrowings under the Revolving Credit Facility.

We believe that our projected cash position, cash flows from operations and, if necessary, borrowings under the Revolving Credit Facility, will be sufficient to fund our liquidity requirements for at least the next 12 months. The Revolving Credit Facility matures in April 2024. We are currently in discussions to renew the Revolving Credit Facility. If we are not able to renew the Revolving Credit Facility, we believe we have sufficient cash to fund our liquidity requirements for at least the next 12 months without reliance on a credit facility, however, our future liquidity requirements could be higher than we currently expect as a result of various factors. For example, any future investments, acquisitions, joint ventures or other similar transactions, which we consider from time to time, may reduce our cash balance or require additional capital. In addition, our ability to continue to meet our future liquidity requirements will depend on, among other things, our ability to achieve anticipated levels of revenues and cash flows from operations and our ability to manage costs and working capital successfully, all of which are subject to general economic, financial, competitive and other factors beyond our control. In the event we require any additional capital, it will take the form of equity or debt financing, or both, and there can be no assurance that we will be able to raise any such financing on terms acceptable to us or at all.

As of September 30, 2023 and December 31, 2022, we had cash and cash equivalents of approximately \$1.5 billion and \$1.3 billion, respectively. All cash and cash equivalents were held in accounts with financial institutions or money market funds such that the funds are immediately available or in fixed term deposits with a maximum maturity of three months. See Item 3. “Quantitative And Qualitative Disclosures About Market Risks — Credit Risk.”

Factors Influencing Our Liquidity and Capital Resources

Dividend Policy

Subject to legally available funds, we intend to pay quarterly cash dividends on our Class A common stock and Class B common stock equal to \$0.09 per share. As discussed below, our ability to pay these quarterly cash dividends on our Class A common stock and Class B common stock will depend on distributions to us from TWM LLC.

The declaration, amount and payment of any dividends will be at the sole discretion of our board of directors and will depend on our and our subsidiaries’ results of operations, capital requirements, financial condition, business prospects, contractual restrictions, restrictions imposed by applicable laws and other factors that our board of directors deem relevant. Because we are a holding company and all of our business is conducted through our subsidiaries, we expect to pay dividends, if any, only from funds we receive from our subsidiaries. Accordingly, our ability to pay dividends to our stockholders is dependent on the earnings and distributions of funds from our subsidiaries. As the sole manager of TWM LLC, we intend to cause, and will rely on, TWM LLC to make distributions in respect of LLC Interests to fund our dividends. If TWM LLC is unable to cause these subsidiaries to make distributions, it may have inadequate funds to distribute to us and we may be unable to fund our dividends. In addition, when TWM LLC makes distributions to us, the other holders of LLC Interests will be entitled to receive proportionate distributions based on their economic interests in TWM LLC at the time of such distributions.

Our board of directors will periodically review the cash generated from our business and the capital expenditures required to finance our growth plans and determine whether to modify the amount of regular dividends and/or declare any periodic special dividends. Any future determination to change the amount of dividends and/or declare special dividends will be at the discretion of our board of directors and will be dependent upon then-existing conditions and other factors that our board of directors considers relevant.

Cash Dividends

On October 26, 2023, the board of directors of Tradeweb Markets Inc. declared a cash dividend of \$0.09 per share of Class A common stock and Class B common stock for the third quarter of 2023. This dividend will be payable on December 15, 2023 to stockholders of record as of December 1, 2023.

In March, June and September 2023, Tradeweb Markets Inc. paid quarterly cash dividends to holders of Class A common stock and Class B common stock in an aggregate amount totaling \$56.8 million during the nine months ended September 30, 2023.

Cash Distributions

On October 26, 2023, Tradeweb Markets Inc., as the sole manager, approved a distribution by TWM LLC to its equityholders, including Tradeweb Markets Inc., in an aggregate amount of \$49.9 million, as adjusted by required state and local tax withholdings that will be determined prior to the record date of December 1, 2023, payable on December 13, 2023.

In March, June and September 2023, TWM LLC made quarterly cash distributions to its equityholders in an aggregate amount of \$69.5 million during the nine months ended September 30, 2023, including distributions to Tradeweb Markets Inc. of \$62.0 million and distributions to non-controlling interests of \$7.5 million. The proceeds of the cash distributions were used by Tradeweb Markets Inc. to fund dividend payments, taxes and expenses.

Share Repurchase Program

On December 5, 2022, we announced that our board of directors authorized a new share repurchase program (the “2022 Share Repurchase Program”), after completing in October 2022, the \$150.0 million of total repurchases of the Company’s Class A common stock previously authorized in February 2021 (the “2021 Share Repurchase Program”). The 2022 Share Repurchase Program was authorized to continue to offset annual dilution from stock-based compensation plans, as well as to opportunistically repurchase our Class A common stock. The 2022 Share Repurchase Program authorizes the purchase of up to \$300.0 million of our Class A common stock at the Company’s discretion and has no termination date. The 2022 Share Repurchase Program can be effected through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), through privately negotiated transactions or through accelerated share repurchases, each in accordance with applicable securities laws and other restrictions. The amounts, timing and manner of the repurchases will be subject to general market conditions, the prevailing price and trading volumes of our Class A common stock and other factors. The 2022 Share Repurchase Program does not require the Company to acquire a specific number of shares and may be suspended, amended or discontinued at any time. During the nine months ended September 30, 2023, the Company acquired a total of 485,730 shares of Class A common stock, at an average price of \$72.48, for purchases totaling \$35.2 million pursuant to the 2022 Share Repurchase Program. As of September 30, 2023, a total of \$239.8 million remained available for repurchase pursuant to the 2022 Share Repurchase Program.

Other Share Repurchases

In addition to the share repurchase programs discussed above, we may also withhold shares to cover the payroll tax withholding obligations upon the exercise of stock options and vesting of performance-based restricted stock units that vest based on the Company’s financial performance (“PRSUs”), restricted stock units (“RSUs”) and performance-based restricted stock units that vest based on market conditions (“PSUs”).

During the nine months ended September 30, 2023, the Company withheld 693,456 shares of common stock from employee stock option, PRSU and RSU awards, at an average price per share of \$71.38 and an aggregate value of \$49.5 million, based on the price of the Class A common stock on the date the relevant withholding occurred.

Tax Receivable Agreement

We are obligated to make payments under the Tax Receivable Agreement. See Note 7 – Tax Receivable Agreement to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for additional details regarding the requirements for these payments. Although the actual timing and amount of any payments that may be made under the Tax Receivable Agreement will vary, we expect the payments required will be significant. Any payments made by us under the Tax Receivable Agreement will generally reduce the amount of overall cash flows that might have otherwise been available to us or to TWM LLC. These payments will offset some of the tax benefits that we expect to realize as a result of the ownership structure of TWM LLC. To the extent that we are unable to make payments under the Tax Receivable Agreement for any reason, the unpaid amounts generally will be deferred and will accrue interest until paid by us. The first payment of the Tax Receivable Agreement was made in January 2021. As of September 30, 2023, total amounts due to the Continuing LLC Owners under the Tax Receivable Agreement were \$448.0 million, substantially all due to be paid over 15 years following the purchase of LLC Interests from Continuing LLC Owners or redemption or exchanges by Continuing LLC Owners of LLC Interests. As of September 30, 2023, we expect to make tax receivable agreement liability payments of approximately \$25.7 million within the next 12 months and approximately \$422.3 million thereafter. In addition to these amounts above, our tax receivable agreement liability and future payments thereunder are expected to increase as we realize (or are deemed to realize) an increase in tax basis of TWM LLC’s assets resulting from any future purchases, redemptions or exchanges of LLC Interests from Continuing LLC Owners. We currently expect to fund these future tax receivable agreement liability payments from some of the realized cash tax savings as a result of this increase in tax basis.

Indebtedness

As of September 30, 2023 and December 31, 2022, we had no outstanding indebtedness.

On April 8, 2019, TWM LLC entered into the Revolving Credit Facility with a syndicate of banks. The Revolving Credit Facility was subsequently amended on November 7, 2019 and March 31, 2023. The Revolving Credit Facility provides borrowing capacity to be used to fund our ongoing working capital needs, letters of credit and for general corporate purposes, including potential future acquisitions and expansions.

The Revolving Credit Facility permits borrowings of up to \$500.0 million by TWM LLC. Subject to the satisfaction of certain conditions, we will be able to increase the Revolving Credit Facility by \$250.0 million with the consent of lenders participating in the increase. The Revolving Credit Facility provides for the issuance of up to \$5.0 million of letters of credit as well as borrowings on same-day notice, referred to as swingline loans, in an amount of up to \$30.0 million. The Revolving Credit Facility will mature on April 8, 2024.

As of September 30, 2023, there were \$0.5 million in letters of credit issued under the Revolving Credit Facility and no borrowings outstanding. As of September 30, 2023, we had availability of \$499.5 million.

Under the terms of the credit agreement that governs the Revolving Credit Facility, borrowings under the Revolving Credit Facility bear interest at a rate equal to, at our option, either (a) a base rate equal to the greatest of (i) the administrative agent's prime rate, (ii) the federal funds effective rate plus ½ of 1.00% and (iii) one month Term SOFR plus 1.00% plus a credit adjustment spread of 0.10%, in each case plus 0.75%, (b) Term SOFR plus 1.75% plus a credit adjustment spread of 0.10%, subject to a 0.00% floor, (c) SONIA plus 1.75%, subject to a 0.00% floor or (d) EURIBOR plus 1.75%, subject to a 0.00% floor. The credit agreement also requires that we pay a commitment fee of 0.25% for available but unborrowed amounts. We are also required to pay customary letter of credit fees and agency fees.

We have the option to voluntarily repay outstanding loans at any time without premium or penalty other than customary "breakage" costs with respect to Term SOFR, SONIA and EURIBOR loans.

There will be no scheduled amortization under the Revolving Credit Facility. The principal amount outstanding will be due and payable in full at maturity.

Obligations under the Revolving Credit Facility are guaranteed by our existing and future direct and indirect material wholly-owned domestic subsidiaries, subject to certain exceptions. The Revolving Credit Facility is secured by a first-priority security interest in substantially all of the assets of TWM LLC and the guarantors under the facility, subject to certain exceptions.

The credit agreement that governs the Revolving Credit Facility contains a number of covenants that, among other things and subject to certain exceptions, restrict the ability of TWM LLC and the ability of its restricted subsidiaries to:

- incur additional indebtedness and guarantee indebtedness;
- create or incur liens;
- pay dividends and distributions or repurchase capital stock;
- make investments, loans and advances; and
- enter into certain transactions with affiliates.

The Revolving Credit Facility contains a financial covenant requiring compliance with a (i) maximum total net leverage ratio tested on the last day of each fiscal quarter not to exceed 3.5 to 1.0 (increasing to 4.0 to 1.0 for the four-quarter period following a material acquisition and the fiscal quarter in which such material acquisition is consummated) and (ii) minimum cash interest coverage ratio tested on the last day of each fiscal quarter not less than 3.0 to 1.0.

The credit agreement that governs the Revolving Credit Facility also contains certain affirmative covenants and events of default customary for facilities of this type, including relating to a change of control. If an event of default occurs, the lenders under the Revolving Credit Facility will be entitled to take various actions, including the acceleration of amounts due under the Revolving Credit Facility and all actions permitted to be taken by secured creditors under applicable law.

As of September 30, 2023, we were in compliance with all the covenants set forth in the Revolving Credit Facility.

Operating Lease Obligations

We have operating leases for corporate offices and data centers with initial lease terms ranging from one to 10 years. Our operating lease obligations are primarily related to rental payments under lease agreements for office space in the United States and the United Kingdom through June 2028. As of September 30, 2023, our operating lease liabilities totaled \$22.0 million, with payments pursuant to these obligations due within the next 12 months and thereafter totaling \$10.6 million and \$12.6 million, respectively.

Capital Expenditures

Our business also requires continued investment in our technology for product innovation, proprietary technology architecture, operational reliability and cybersecurity. We expect total cash paid for non-acquisition related capital expenditures and software development costs for fiscal 2023 to be between \$56 million and \$63 million, compared to expenditures of \$60.1 million in fiscal 2022, with the midpoint of our 2023 capital expenditure guidance at slightly lower than fiscal year 2022 due to the acceleration of certain infrastructure enhancements during 2022. Cash paid for capital expenditures and software development costs during the nine months ended September 30, 2023 totaled \$49.6 million.

Other Cash and Liquidity Requirements

Certain of our U.S. subsidiaries are registered as broker-dealers, SEFs or introducing brokers and are subject to the applicable rules and regulations of the SEC and CFTC. These rules contain minimum net capital or other financial resource requirements, as defined in the applicable regulations. These rules may also require a significant part of the registrants' assets be kept in relatively liquid form. Certain of our foreign subsidiaries are regulated by the Financial Conduct Authority in the UK, the Nederlandsche Bank in the Netherlands, the Japanese Financial Services Agency, the Japanese Securities Dealers Association and other foreign regulators, and must maintain financial resources, as defined in the applicable regulations, in excess of the applicable financial resources requirement. As of September 30, 2023 and December 31, 2022, each of our regulated subsidiaries had maintained sufficient net capital or financial resources to at least satisfy their minimum requirements, which in aggregate were \$70.6 million and \$69.1 million, respectively. We maintain capital balances in these subsidiaries in excess of our minimum requirements in order to satisfy working capital needs and to ensure that we have enough cash on hand to satisfy margin requirements and credit risk, including the excess capital expectations of our clients. The Fixed Income Clearing Corporation ("FICC") and some of our clearing brokers require us to post collateral on unsettled positions, included within deposits with clearing organizations in our condensed consolidated statements of financial condition. Collateral amounts are marked to market on a daily basis, requiring us to pay or receive margin amounts as part of the daily funds settlement. Margin call requirements can vary significantly across periods based on daily market changes and may represent a significant and unpredictable use of our liquidity.

At times, transactions executed on our wholesale platform fail to settle due to the inability of a transaction party to deliver or receive the transacted security. Until the failed transaction settles, we will recognize a receivable from (and a matching payable to) brokers and dealers and clearing organizations for the proceeds from the unsettled transaction. The impact on our liquidity and capital resources is minimal as receivables and payables for failed transactions are usually recognized simultaneously and predominantly offset. However, from time to time, we enter into repurchase and/or reverse repurchase agreements to facilitate the clearance of securities relating to fails to deliver or receive. We seek to manage credit exposure related to these agreements to repurchase (or reverse repurchase), including the risk related to a decline in market value of collateral (pledged or received), by entering into agreements to repurchase with overnight or short-term maturity dates and only entering into repurchase transactions with netting members of the FICC. The FICC operates a continuous net settlement system, whereby as trades are submitted and compared, the FICC becomes the counterparty.

Working Capital

Working capital is defined as current assets minus current liabilities. Current assets consist of cash and cash equivalents, restricted cash, receivable from brokers and dealers and clearing organizations, deposits with clearing organizations, accounts receivable and receivable and due from affiliates. Current liabilities consist of payable to brokers and dealers and clearing organizations, accrued compensation, deferred revenue, payable and due to affiliates, accounts payable, accrued expenses and other liabilities, lease liabilities and tax receivable agreement liability. Changes in working capital, which impact our cash flows provided by operating activities, can vary depending on factors such as delays in the collection of receivables, changes in our operating performance, changes in trading patterns, changes in client billing terms and other changes in the demand for our platforms and solutions.

Our working capital as of September 30, 2023 and December 31, 2022 was as follows:

	September 30, 2023	December 31, 2022
	(in thousands)	
Cash and cash equivalents	\$ 1,493,410	\$ 1,257,229
Restricted cash	1,000	1,000
Receivable from brokers and dealers and clearing organizations	4,966	11,632
Deposits with clearing organizations	26,433	23,906
Accounts receivable	167,039	142,676
Receivable and due from affiliates	3,165	2,728
Total current assets	1,696,013	1,439,171
Payable to brokers and dealers and clearing organizations	4,966	11,264
Accrued compensation	121,227	150,884
Deferred revenue	31,404	22,827
Payable and due to affiliates	527	7,232
Current portion of:		
Accounts payable, accrued expenses and other liabilities	46,059	46,099
Lease liabilities	10,004	11,265
Tax receivable agreement liability	25,717	5,791
Total current liabilities	239,904	255,362
Total working capital	\$ 1,456,109	\$ 1,183,809

Current Assets

Current assets increased to \$1.7 billion as of September 30, 2023 from \$1.4 billion as of December 31, 2022 primarily due to an increase in cash and cash equivalents (see “—Cash Flows” below).

Current Liabilities

Current liabilities decreased to \$239.9 million as of September 30, 2023 from \$255.4 million as of December 31, 2022 primarily due to a decrease in accrued compensation as a result of annual bonus payments which occurred during the nine months ended September 30, 2023.

See “—Other Cash and Liquidity Requirements” above for a discussion on how capital requirements can impact our working capital.

Cash Flows

Our cash flows for the nine months ended September 30, 2023 and 2022 were as follows:

	Nine Months Ended September 30,	
	2023	2022
	(in thousands)	
Net cash provided by operating activities	\$ 501,328	\$ 424,822
Net cash used in investing activities	(120,509)	(45,429)
Net cash used in financing activities	(144,150)	(221,857)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(488)	(19,357)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 236,181	\$ 138,179

Operating Activities

Operating activities consist primarily of net income adjusted for noncash items that primarily include depreciation and amortization, stock-based compensation expense and deferred tax expense. Cash flows from operating activities can fluctuate significantly from period-to-period as working capital needs and the timing of payments for accrued compensation (primarily in the first quarter) and other items impact reported cash flows.

Net cash provided by operating activities for the nine months ended September 30, 2023 was \$501.3 million, an increase of \$76.5 million over the nine months ended September 30, 2022, primarily driven by an increase in net income and changes in working capital.

Investing Activities

Investing activities consist primarily of software development costs, investments in technology hardware, purchases of equipment and other tangible assets, business acquisitions and investments.

Net cash used in investing activities was \$120.5 million for the nine months ended September 30, 2023, which consisted of \$69.6 million of total net cash paid for the Yieldbroker Acquisition (net of cash acquired), \$32.1 million of capitalized software development costs, \$17.5 million of purchases of furniture, equipment, purchased software and leasehold improvements and \$1.3 million of cash paid for a foreign currency call option, net of sales proceeds. Net cash used in investing activities was \$45.4 million for the nine months ended September 30, 2022, which consisted of \$27.5 million of capitalized software development costs and \$18.0 million of purchases of furniture, equipment, purchased software and leasehold improvements.

Financing Activities

Net cash used in financing activities for the nine months ended September 30, 2023 was \$144.2 million, and was primarily driven by \$41.2 million in payroll tax payments for options, PRSUs and RSUs, net of proceeds from the related stock-based compensation option exercises, \$32.9 million in share repurchases pursuant to the 2022 Share Repurchase Program and \$56.8 million in cash dividends to our Class A and Class B common stockholders. Net cash used in financing activities for the nine months ended September 30, 2022 was \$221.9 million, and was primarily driven by \$90.6 million in payroll tax payments for options, PRSUs and RSUs, net of proceeds from the related stock-based compensation option exercises, \$65.3 million in share repurchases pursuant to the 2021 Share Repurchase Program and \$49.4 million in cash dividends to our Class A and Class B common stockholders.

Non-GAAP Financial Measures

Free Cash Flow

In addition to cash flow from operating activities presented in accordance with GAAP, we use Free Cash Flow, a non-GAAP measure, to measure liquidity. Free Cash Flow is defined as cash flow from operating activities less non-acquisition related expenditures for capitalized software development costs and furniture, equipment and leasehold improvements.

We present Free Cash Flow because we believe it is a useful indicator of liquidity that provides information to management and investors about the amount of cash generated from our core operations after non-acquisition related expenditures for capitalized software development costs and furniture, equipment and leasehold improvements.

Free Cash Flow has limitations as an analytical tool, and you should not consider Free Cash Flow in isolation or as an alternative to cash flow from operating activities or any other liquidity measure determined in accordance with GAAP. You are encouraged to evaluate each adjustment. In addition, in evaluating Free Cash Flow, you should be aware that in the future, we may incur expenditures similar to the adjustments in the presentation of Free Cash Flow. In addition, Free Cash Flow may not be comparable to similarly titled measures used by other companies in our industry or across different industries.

The table set forth below presents a reconciliation of our cash flow from operating activities to Free Cash Flow for the nine months ended September 30, 2023 and 2022:

	Nine Months Ended	
	September 30,	
	2023	2022
	(in thousands)	
Cash flow from operating activities	\$ 501,328	\$ 424,822
Less: Capitalization of software development costs	(32,105)	(27,470)
Less: Purchases of furniture, equipment and leasehold improvements	(17,467)	(17,959)
Free Cash Flow	<u>\$ 451,756</u>	<u>\$ 379,393</u>

Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT, Adjusted EBIT margin, Adjusted Net Income and Adjusted Diluted EPS

In addition to net income, net income margin and net income attributable to Tradeweb Markets Inc., each presented in accordance with GAAP, we present Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT and Adjusted EBIT margin as non-GAAP measures of our operating performance and Adjusted Net Income and Adjusted Net Income per diluted share (“Adjusted Diluted EPS”) as non-GAAP measures of our profitability.

Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT and Adjusted EBIT margin

Adjusted EBITDA is defined as net income before net interest income/expense, provision for income taxes and depreciation and amortization, adjusted for the impact of certain other items, including merger and acquisition transaction and integration costs, certain stock-based compensation expense and related payroll taxes, tax receivable agreement liability adjustments, unrealized gains and losses from outstanding foreign currency forward contracts, gains and losses from the revaluation of foreign denominated cash and other income and loss.

Adjusted EBIT is defined as net income before net interest income/expense and provision for income taxes, adjusted for the impact of certain other items, including merger and acquisition transaction and integration costs, certain stock-based compensation expense and related payroll taxes, tax receivable agreement liability adjustments, depreciation and amortization related to acquisitions and the Refinitiv Transaction, unrealized gains and losses from outstanding foreign currency forward contracts, gains and losses from the revaluation of foreign denominated cash and other income and loss.

Net income margin is defined as net income, divided by revenue for the applicable period. Adjusted EBITDA margin and Adjusted EBIT margin are defined as Adjusted EBITDA and Adjusted EBIT, respectively, divided by revenue for the applicable period.

We present Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT and Adjusted EBIT margin because we believe they assist investors and analysts in comparing our operating performance across reporting periods on a consistent basis by excluding items that we do not believe are indicative of our core operating performance. For example, we exclude non-cash stock-based compensation expense associated with the Special Option Award as defined in Note 2 – Significant Accounting Policies to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q and post-IPO options awarded in 2019 to management and other employees as well as payroll taxes associated with exercises of such options during the applicable period. We believe it is useful to exclude this stock-based compensation expense and associated payroll taxes because the amount of expense associated with the Special Option Award and the post-IPO option awards in 2019 may not directly correlate to the underlying performance of our business and will vary across periods. Beginning on August 30, 2021, we also exclude the non-cash accelerated stock-based compensation expense associated with our former CFO and beginning on February 11, 2022 the incremental non-cash accelerated stock-based compensation expense associated with our retired CEO, the CEO Retirement Accelerated Stock-Based Compensation Expense discussed above under “— Trends and Other Factors Impacting Our Performance — CEO and Chairperson Transition,” and related payroll taxes are also excluded, as we do not consider these expenses indicative of our core ongoing operating performance. The accelerated stock-based compensation expense associated with our former CFO and retired CEO was fully amortized on January 4, 2022 and December 31, 2022, respectively. In addition, we exclude the tax receivable agreement liability adjustments discussed below under “— Critical Accounting Policies and Estimates — Tax Receivable Agreement.” We believe it is useful to exclude the tax receivable agreement liability adjustment because the recognition of income during a period due to changes in the tax receivable agreement liability recorded in our condensed consolidated statement of financial condition as a result of changes in the mix of earnings, tax legislation and tax rates in various jurisdictions, or other factors that may impact our tax savings, may not directly correlate to the underlying performance of our business and will vary across periods. We also believe it is useful to exclude merger and acquisition transaction and integration costs as the incremental direct costs related to completed and potential acquisitions and related integrations are not indicative of our core ongoing operating performance. With respect to Adjusted EBIT and Adjusted EBIT margin, we believe it is useful to exclude the depreciation and amortization of tangible and intangible assets resulting from acquisitions and the application of pushdown accounting to the Refinitiv Transaction in order to facilitate a period-over-period comparison of our financial performance.

Management and our board of directors use Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT and Adjusted EBIT margin to assess our financial performance and believe they are helpful in highlighting trends in our core operating performance, while other measures can differ significantly depending on long-term strategic decisions regarding capital structure, the tax jurisdictions in which we operate and capital investments. Further, our executive incentive compensation is based in part on components of Adjusted EBITDA and Adjusted EBITDA margin.

Adjusted Net Income and Adjusted Diluted EPS

Adjusted Net Income is defined as net income attributable to Tradeweb Markets Inc. assuming the full exchange of all outstanding LLC Interests held by non-controlling interests for shares of Class A common stock or Class B common stock of Tradeweb Markets Inc., adjusted for certain stock-based compensation expense and related payroll taxes, tax receivable agreement liability adjustments, merger and acquisition transaction and integration costs, depreciation and amortization related to acquisitions and the Refinitiv Transaction, unrealized gains and losses from outstanding foreign currency forward contracts, gains and losses from the revaluation of foreign denominated cash and other income and loss. Adjusted Net Income also gives effect to certain tax related adjustments to reflect an assumed effective tax rate. Adjusted Diluted EPS is defined as Adjusted Net Income divided by the diluted weighted average number of shares of Class A common stock and Class B common stock outstanding for the applicable period (including the effect of potentially dilutive securities determined using the treasury stock method), plus the weighted average number of other participating securities reflected in earnings per share using the two-class method, plus the assumed full exchange of all outstanding LLC Interests held by non-controlling interests for shares of Class A common stock or Class B common stock.

We use Adjusted Net Income and Adjusted Diluted EPS as supplemental metrics to evaluate our business performance in a way that also considers our ability to generate profit without the impact of certain items. We exclude stock-based compensation expense associated with the Special Option Award and the post-IPO option awards in 2019 and payroll taxes associated with exercises of such options, non-cash accelerated stock-based compensation expense associated with our former CFO and related payroll taxes, CEO Retirement Accelerated Stock-Based Compensation Expense and related payroll taxes, tax receivable agreement liability adjustments, merger and acquisition transaction and integration costs and acquisition and Refinitiv Transaction-related depreciation and amortization for the reasons described above. Each of the normal recurring adjustments and other adjustments described in the definition of Adjusted Net Income helps to provide management with a measure of our operating performance over time by removing items that are not related to day-to-day operations or are non-cash expenses. In addition to excluding items that are non-recurring or may not be indicative of our ongoing operating performance, by assuming the full exchange of all outstanding LLC Interests held by non-controlling interests, we believe that Adjusted Net Income and Adjusted Diluted EPS for Tradeweb Markets Inc. facilitate comparisons with other companies that have different organizational and tax structures, as well as comparisons period over period, because it eliminates the effect of any changes in net income attributable to Tradeweb Markets Inc. driven by increases in our ownership of TWM LLC, which are unrelated to our operating performance.

Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT, Adjusted EBIT margin, Adjusted Net Income and Adjusted Diluted EPS have limitations as analytical tools, and you should not consider these non-GAAP financial measures in isolation or as alternatives to net income attributable to Tradeweb Markets Inc., net income, net income margin, operating income, gross margin, earnings per share or any other financial measure derived in accordance with GAAP. You are encouraged to evaluate each adjustment and, as applicable, the reasons we consider it appropriate for supplemental analysis. In addition, in evaluating Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT, Adjusted EBIT margin, Adjusted Net Income and Adjusted Diluted EPS you should be aware that in the future, we may incur expenses similar to the adjustments in the presentation of these non-GAAP financial measures. Our presentation of Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT, Adjusted EBIT margin, Adjusted Net Income and Adjusted Diluted EPS should not be construed as an inference that our future results will be unaffected by unusual or non-recurring items. In addition, Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT, Adjusted EBIT margin, Adjusted Net Income and Adjusted Diluted EPS may not be comparable to similarly titled measures used by other companies in our industry or across different industries.

The table set forth below presents a reconciliation of net income and net income margin to Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBIT and Adjusted EBIT margin for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(dollars in thousands)			
Net income	\$ 111,630	\$ 81,566	\$ 315,762	\$ 260,611
Merger and acquisition transaction and integration costs ⁽¹⁾	4,614	43	6,411	40
Net interest (income) expense	(17,465)	(3,413)	(45,065)	(3,507)
Depreciation and amortization	46,559	44,778	137,850	133,998
Stock-based compensation expense ⁽²⁾	525	2,675	1,960	13,839
Provision for income taxes	28,666	24,657	90,920	63,915
Foreign exchange (gains) / losses ⁽³⁾	(6,076)	(3,972)	(4,242)	(6,306)
Tax receivable agreement liability adjustment ⁽⁴⁾	—	—	—	—
Other (income) loss, net	1,907	—	2,022	—
Adjusted EBITDA	\$ 170,360	\$ 146,334	\$ 505,618	\$ 462,590
Less: Depreciation and amortization	(46,559)	(44,778)	(137,850)	(133,998)
Add: D&A related to acquisitions and the Refinitiv Transaction ⁽⁵⁾	31,971	31,558	95,217	95,088
Adjusted EBIT	\$ 155,772	\$ 133,114	\$ 462,985	\$ 423,680
Net income margin	34.0 %	28.4 %	32.6 %	29.1 %
Adjusted EBITDA margin	51.9 %	51.0 %	52.2 %	51.6 %
Adjusted EBIT margin	47.4 %	46.4 %	47.8 %	47.3 %

- (1) Represents incremental direct costs associated with the acquisition and integration of completed and potential mergers and acquisitions. These costs generally include legal, consulting, advisory, due diligence, severance and other third party costs incurred that directly relate to the acquisition transaction or its integration.
- (2) Represents non-cash stock-based compensation expense associated with the Special Option Award and post-IPO options awarded in 2019 and payroll taxes associated with the exercise of such options. During the three and nine months ended September 30, 2022, this adjustment also includes \$2.0 million and \$9.4 million, respectively, of non-cash accelerated stock-based compensation expense and related payroll taxes associated with our former CFO and former CEO.
- (3) Represents unrealized gain or loss recognized on foreign currency forward contracts and foreign exchange gain or loss from the revaluation of cash denominated in a different currency than the entity's functional currency.
- (4) Represents income recognized during the applicable period due to changes in the tax receivable agreement liability recorded in the consolidated statement of financial condition as a result of changes in the mix of earnings, tax legislation and tax rates in various jurisdictions which impacted our tax savings.
- (5) Represents intangible asset and acquired software amortization resulting from acquisitions and intangible asset amortization and increased tangible asset and capitalized software depreciation and amortization resulting from the application of pushdown accounting to the Refinitiv Transaction (where all assets were marked to fair value as of the closing date of the Refinitiv Transaction).

	Three Months Ended September 30,			Nine Months Ended September 30,				
	2023	2022	Basis Point Change	Constant Currency Basis Point Change	2023	2022	Basis Point Change	Constant Currency Basis Point Change
Adjusted EBITDA margin	51.9 %	51.0 %	+92 bps	+181 bps	52.2 %	51.6 %	+58 bps	+90 bps
Adjusted EBIT margin	47.4 %	46.4 %	+108 bps	+192 bps	47.8 %	47.3 %	+52 bps	+83 bps

- (1) The changes in Adjusted EBITDA margin and Adjusted EBIT margin, both on a constant currency basis, are non-GAAP financial measures, and are defined as the changes in Adjusted EBITDA margin and Adjusted EBIT margin excluding the effects of foreign currency fluctuations. Adjusted EBITDA margin and Adjusted EBIT margin excluding the effects of foreign currency fluctuations are calculated by translating the current period and prior period's results using the annual average exchange rates for the prior period. We use the changes in Adjusted EBITDA margin and Adjusted EBIT margin on a constant currency basis as supplemental metrics to evaluate our underlying margin performance between periods by removing the impact of foreign currency fluctuations. We believe that providing changes in Adjusted EBITDA margin and Adjusted EBIT margin on a constant currency basis provide useful comparisons of our Adjusted EBITDA margin and Adjusted EBIT margin and trends between periods.

The table set forth below presents a reconciliation of net income attributable to Tradeweb Markets Inc. and net income, as applicable, to Adjusted Net Income and Adjusted Diluted EPS for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(in thousands except per share amounts)			
Earnings per diluted share	\$ 0.46	\$ 0.33	\$ 1.30	\$ 1.06
Net income attributable to Tradeweb Markets Inc.	\$ 98,614	\$ 69,083	\$ 275,552	\$ 220,392
Net income attributable to non-controlling interests ⁽¹⁾	13,016	12,483	40,210	40,219
Net income	111,630	81,566	315,762	260,611
Provision for income taxes	28,666	24,657	90,920	63,915
Merger and acquisition transaction and integration costs ⁽²⁾	4,614	43	6,411	40
D&A related to acquisitions and the Refinitiv Transaction ⁽³⁾	31,971	31,558	95,217	95,088
Stock-based compensation expense ⁽⁴⁾	525	2,675	1,960	13,839
Foreign exchange (gains) / losses ⁽⁵⁾	(6,076)	(3,972)	(4,242)	(6,306)
Tax receivable agreement liability adjustment ⁽⁶⁾	—	—	—	—
Other (income) loss, net	1,907	—	2,022	—
Adjusted Net Income before income taxes	173,237	136,527	508,050	427,187
Adjusted income taxes ⁽⁷⁾	(42,443)	(30,036)	(124,472)	(93,982)
Adjusted Net Income	\$ 130,794	\$ 106,491	\$ 383,578	\$ 333,205
Adjusted Diluted EPS ⁽⁸⁾	\$ 0.55	\$ 0.45	\$ 1.62	\$ 1.40

- (1) Represents the reallocation of net income attributable to non-controlling interests from the assumed exchange of all outstanding LLC Interests held by non-controlling interests for shares of Class A or Class B common stock.
- (2) Represents incremental direct costs associated with the acquisition and integration of completed and potential mergers and acquisitions. These costs generally include legal, consulting, advisory, due diligence, severance and other third party costs incurred that directly relate to the acquisition transaction or its integration.
- (3) Represents intangible asset and acquired software amortization resulting from acquisitions and intangible asset amortization and increased tangible asset and capitalized software depreciation and amortization resulting from the application of pushdown accounting to the Refinitiv Transaction (where all assets were marked to fair value as of the closing date of the Refinitiv Transaction).
- (4) Represents non-cash stock-based compensation expense associated with the Special Option Award and post-IPO options awarded in 2019 and payroll taxes associated with the exercise of such options. During the three and nine months ended September 30, 2022, this adjustment also includes \$2.0 million and \$9.4 million, respectively, of non-cash accelerated stock-based compensation expense and related payroll taxes associated with our former CFO and former CEO.
- (5) Represents unrealized gain or loss recognized on foreign currency forward contracts and foreign exchange gain or loss from the revaluation of cash denominated in a different currency than the entity's functional currency.
- (6) Represents income recognized during the applicable period due to changes in the tax receivable agreement liability recorded in the consolidated statement of financial condition as a result of changes in the mix of earnings, tax legislation and tax rates in various jurisdictions which impacted our tax savings.
- (7) Represents corporate income taxes at an assumed effective tax rate of 24.5% applied to Adjusted Net Income before income taxes for the three and nine months ended September 30, 2023 and 22.0% for the three and nine months ended September 30, 2022.
- (8) For a summary of the calculation of Adjusted Diluted EPS, see "Reconciliation of Diluted Weighted Average Shares Outstanding to Adjusted Diluted Weighted Average Shares Outstanding and Adjusted Diluted EPS" below.

The following table summarizes the calculation of Adjusted Diluted EPS for the three and nine months ended September 30, 2023 and 2022:

Reconciliation of Diluted Weighted Average Shares Outstanding to Adjusted Diluted Weighted Average Shares Outstanding and Adjusted Diluted EPS	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Diluted weighted average shares of Class A and Class B common stock outstanding	213,491,634	208,329,469	212,276,908	207,748,037
Weighted average of other participating securities ⁽¹⁾	265,681	246,238	266,453	121,115
Assumed exchange of LLC Interests for shares of Class A or Class B common stock ⁽²⁾	23,080,571	28,750,603	24,179,583	29,667,383
Adjusted diluted weighted average shares outstanding	236,837,886	237,326,310	236,722,944	237,536,535
Adjusted Net Income (in thousands)	\$ 130,794	\$ 106,491	\$ 383,578	\$ 333,205
Adjusted Diluted EPS	\$ 0.55	\$ 0.45	\$ 1.62	\$ 1.40

- (1) Represents weighted average unvested restricted stock units and unsettled vested performance-based restricted stock units issued to certain retired or terminated employees that are entitled to non-forfeitable dividend equivalent rights and are considered participating securities prior to being issued and outstanding shares of common stock in accordance with the two-class method used for purposes of calculating earnings per share. See Note 2 – Significant Accounting Policies to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for a discussion of the two-class method.
- (2) Assumes the full exchange of the weighted average of all outstanding LLC Interests held by non-controlling interests for shares of Class A or Class B common stock, resulting in the elimination of the non-controlling interests and recognition of the net income attributable to non-controlling interests.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements are prepared in accordance with U.S. GAAP which requires us to make estimates and assumptions about future events that affect the reported amounts of assets, liabilities, revenues and expenses, and disclosure of contingent assets and liabilities. These estimates and assumptions are based on judgment and the best available information at the time. Management bases its estimates on historical experience, observance of trends in particular areas, information available from outside sources and various other assumptions that are believed to be reasonable under the circumstances. Information from these sources form the basis for making judgments about the carrying values of assets and liabilities that may not be readily apparent from other sources. Therefore, actual results could differ materially from those estimates. Management evaluates its accounting policies, estimates and judgments on an on-going basis.

Management evaluated the development and selection of its critical accounting policies and estimates and believes that the following policies are most critical to the portrayal of our financial condition and results of operations, and that require our most difficult, subjective or complex judgments in estimating the effect of inherent uncertainties. Our most critical policies and estimates include business combinations, revenue recognition, stock-based compensation, current and deferred income taxes and the tax receivable agreement liability. With respect to critical accounting policies and estimates, even a relatively minor variance between actual and expected experience can potentially have a materially favorable or unfavorable impact on subsequent results of operations. More information on all of our significant accounting policies can be found in Note 2 – Significant Accounting Policies to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Business Combinations

Business combinations are accounted for under the purchase method of accounting pursuant to Accounting Standards Codification (“ASC”) 805, *Business Combinations* (“ASC 805”). 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. The fair value of assets acquired and liabilities assumed is determined based on assumptions that reasonable market participants would use in the principal (or most advantageous) market for the asset or liability. Determining the fair value of certain assets acquired and liabilities assumed is judgmental in nature and often involves the use of significant estimates and assumptions, including assumptions with respect to future cash flows, discount rates, growth rates, customer attrition rates and asset lives.

The most significant accounting estimate associated with the Yieldbroker Acquisition that closed in August 2023 was the valuation of the acquired definite-lived intangible customer relationship asset (the “Customer Relationships”), which was valued at approximately \$39.7 million as of the date of the closing of the acquisition. The majority of the residual total purchase price of \$40.3 million, net of cash acquired and prior to working capital and other closing adjustments, was primarily allocated to goodwill, which was measured at approximately \$35.1 million as of the date of the closing of the acquisition. We utilized the assistance of a third-party valuation specialist to determine the fair value of the assets acquired and liabilities assumed at the date of the closing of the acquisition. Management is responsible for these valuations and appraisals.

The valuation of the Customer Relationships primarily included significant unobservable inputs (Level 3), creating a significant level of estimation uncertainty. Customer Relationships were valued using the income approach, specifically a multi-period excess earnings method. The excess earnings method examines the economic returns contributed by the identified tangible and intangible assets of a company, and then examines the excess return that is attributable to the intangible asset being valued. The discount rate used reflects the amount of risk associated with the hypothetical cash flows for the Customer Relationships relative to the overall business. In developing a discount rate for the Customer Relationships, the Company estimated a weighted-average cost of capital for the overall business and employed an intangible asset risk premium to this rate when discounting the excess earnings related to Customer Relationships. The resulting discounted cash flows were then tax-affected at the applicable statutory rate. For GAAP purposes, the Customer Relationships will be amortized over a useful life of 13 years. Any changes in the discount rate used for valuing the Customer Relationships or the estimated useful life used for amortization purposes could have a material impact on our condensed consolidated statements of financial condition and condensed consolidated statement of income. Any increases or decreases in the allocation of purchase price to Customer Relationships, which is an amortizable asset, would be offset by a corresponding decrease or increase in goodwill, which is an indefinite-lived asset, not subject to amortization and as a result would impact the asset balances recorded on our condensed consolidated statements of financial condition as well as the amortization expense recorded on our condensed consolidated statement of income over the life of the asset. Any changes in the estimated useful life of the Customer Relationships would also impact timing of the reduction of the net balance of intangible assets, net of accumulated amortization on our consolidated statements of financial condition and the timing of the recognition of amortization expense on our condensed consolidated statement of income. The primary areas of the preliminary purchase price allocation that are not yet finalized as of September 30, 2023 relate primarily to the valuation of the identifiable intangible assets and software and final working capital adjustments. The allocation of the purchase price will be finalized upon completion of the analysis of the acquired assets within one year of the date of the closing of the acquisition.

Revenue Recognition

We enter into contracts with our clients to provide a stand-ready connection to our electronic marketplaces, which facilitates the execution of trades by our clients. The access to our electronic marketplaces, including market data and continuous pricing data refreshes and the processing of trades thereon are highly interrelated and are considered a single performance obligation satisfied over time as the client simultaneously receives and consumes the benefit from our performance. This performance obligation constitutes a series of services that are substantially the same in nature and are provided over time using the same measure of progress. For our services, we earn subscription fees for granting access to our electronic marketplaces.

We earn transaction fees and/or commissions from transactions executed on our trading platforms, including commission revenue from electronic and voice brokerage transacted on a riskless principal basis. Riskless principal revenues are derived on matched principal transactions where revenues are earned on the spread between the buy and sell price of the transacted product. Fixed monthly transaction fees or commissions or monthly transaction fee or commission minimums are generally earned on a monthly basis in the period the stand-ready trading services are provided. Variable transaction fee or commission revenue is recognized and recorded on a trade-date basis when the individual trade occurs. Variable discounts or rebates on transaction fees or commissions are generally earned and applied monthly or quarterly, are resolved within the same reporting period and are recorded as a reduction to revenue in the period the relevant trades occur.

We earn fees from Refinitiv relating to the sale of market data to Refinitiv, which redistributes that data. Included in these fees are real-time market data fees which are recognized monthly on a straight-line basis as Refinitiv receives and consumes the benefit evenly, over the contact period, as the data is provided, and fees for historical data sets which are recognized when the historical data set is provided to Refinitiv.

We are required to make significant judgments for the Refinitiv market data fees. Significant judgments used in accounting for this contract include the following determinations:

- The provision of real-time market data feeds and annual historical data sets are distinct performance obligations.

- The performance obligations under this contract are recognized over time from the initial delivery of the data feeds or each historical data set until the end of the contract term.
- The transaction price for the performance obligations is determined by using a market assessment analysis. Inputs in this analysis include a consultant study which determined the overall value of our market data and pricing information for historical data sets provided by other companies.

During each of the three and nine months ended September 30, 2023 and 2022, there were no material changes in the assumptions used to determine the Refinitiv market data fees.

Stock-Based Compensation

The stock-based payments received by the employees of the Company are accounted for as equity awards. The Company measures and recognizes the cost of employee services received in exchange for awards of equity instruments based on their estimated fair values measured as of the grant date. For performance-based restricted stock units that vest based on market conditions, the Company recognizes stock-based compensation based on the estimated grant date fair value of the awards computed with the assistance of a valuation specialist using a Monte Carlo simulation on a binomial model, which represents a significant accounting estimate given the significant level of estimation uncertainty relating to the selection of valuation assumptions required for the valuation. The significant assumptions used to estimate the fair value of the performance-based restricted stock units that vest based on market conditions are years of maturity, annualized volatility and the risk-free interest rate. The maturity period represents the period of time that the award granted was modeled into the future, the risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of measurement corresponding with the maturity period of the award and the expected volatility is based upon historical volatility of the Company's Class A common stock. On March 15, 2023, we granted 251,113 performance-based restricted stock units that vest based on market conditions with a grant date fair value totaling \$24.7 million, which will be amortized into expense on a straight-line basis through December 31, 2025. The significant assumptions used in determining the grant date fair value of the award were a maturity of 2.8 years, annualized volatility of 28.81% and a risk-free interest rate of 3.77%. A change in any of the assumptions used to value these awards could materially affect stock-based compensation expense recorded in the current and future periods.

Income Taxes

Tradeweb Markets Inc. is subject to U.S. federal, state and local income taxes with respect to its taxable income, including its allocable share of any taxable income of TWM LLC, and is taxed at prevailing corporate tax rates. TWM LLC is a multiple member limited liability company taxed as a partnership and accordingly any taxable income generated by TWM LLC is passed through to and included in the taxable income of its members, including to us. TWM LLC records taxes for conducting business in certain state, local and foreign jurisdictions and records U.S. federal taxes for subsidiaries that are taxed as corporations for U.S. tax purposes. We currently record deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities and measure the deferred taxes using the enacted tax rates and laws that will be in effect when such temporary differences are expected to reverse. The measurement of deferred taxes often involves the exercise of significant judgment related to the realization of tax basis. Our deferred tax assets and liabilities reflect our assessment that tax positions taken in filed tax returns and the resulting tax basis are more likely than not to be sustained if they are audited by taxing authorities. Assessing tax rates that we expect to apply and determining the years when the temporary differences are expected to affect taxable income requires judgment about the future apportionment of our income among the jurisdictions in which we operate. Any changes in our practices or judgments involved in the measurement of deferred tax assets and liabilities could materially impact our financial condition or results of operations.

In connection with recording deferred tax assets and liabilities, we record valuation allowances when we believe that it is more likely than not that the Company will not be able to realize its deferred tax assets in the future. We evaluate our deferred tax assets quarterly to determine whether adjustments to our valuation allowance are appropriate in light of changes in facts or circumstances, such as changes in tax law, interactions with taxing authorities and developments in case law. In making this evaluation, we rely on our recent history of pre-tax earnings, our forecasts of future earnings and the nature and timing of future deductions and benefits represented by the deferred tax assets, all of which involve the exercise of significant judgment. As of September 30, 2023 and December 31, 2022, we have no valuation allowance established on our deferred tax assets. If forecasts of future earnings and the nature and estimated timing of future deductions and benefits change in the future, we may determine that existing valuation allowances must be revised or new valuation allowances created, any of which could materially impact our financial condition or results of operations. See Note 6 – Income Taxes to our unaudited condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

We recognize interest and penalties related to unrecognized tax benefits within the provision for income taxes in our condensed consolidated statements of income. Accrued interest and penalties are included within accounts payable, accrued expenses and other liabilities in our condensed consolidated statements of financial condition. A U.S. shareholder of a controlled foreign corporation (“CFC”) is required to include in income, as a deemed dividend, the global intangible low-taxed income (“GILTI”) of the CFC. We have elected to treat taxes due on future U.S. inclusions in taxable income of GILTI as a current period expense when incurred.

Tax Receivable Agreement

Tradeweb Markets Inc. entered into a Tax Receivable Agreement with TWM LLC and the Continuing LLC Owners which provides for the payment by Tradeweb Markets Inc. to a Continuing LLC Owner of 50% of the amount of U.S. federal, state and local income or franchise tax savings, if any, that Tradeweb Markets Inc. actually realizes (or in some circumstances is deemed to realize) as a result of (i) increases in the tax basis of TWM LLC’s assets resulting from (a) the purchase of LLC Interests from such Continuing LLC Owner, including with the net proceeds from the IPO, the October 2019 and April 2020 follow-on offerings and any future offering or (b) redemptions or exchanges by such Continuing LLC Owner of LLC Interests for shares of Class A common stock or Class B common stock or for cash, as applicable, and (ii) certain other tax benefits related to Tradeweb Markets Inc. making payments under the Tax Receivable Agreement. Substantially all payments due under the Tax Receivable Agreement are payable over the 15 years following the purchase of LLC Interests from Continuing LLC Owners or redemption or exchanges by Continuing LLC Owners of LLC Interests. The timing of the payments over the 15 year period is dependent upon our annual taxable income over the same period. In determining the estimated timing of payments, the current year’s taxable income is used to extrapolate an estimate of future taxable income. This requires significant judgment relating to projecting future earnings, the geographic mix of those earnings and the timing of deferred taxes becoming current.

The impact of any changes in the total projected obligations recorded under the Tax Receivable Agreement as a result of actual changes in the geographic mix of our earnings, changes in tax legislation and tax rates or other factors that may impact our actual tax savings realized will be reflected in income before taxes in the period in which the change occurs.

Recent Accounting Pronouncements

See Note 2 – Significant Accounting Policies to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS

Foreign Currency and Derivative Risk

We have global operations and substantial portions of our revenues, expenses, assets and liabilities are generated and denominated in non-U.S. dollar currencies.

The following table shows the percentage breakdown of our revenue and operating expenses denominated in currencies other than the U.S. dollar for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2023	2022	2023	2022
% of revenue denominated in foreign currencies ⁽¹⁾	28%	27%	28%	29%
% of operating expenses denominated in foreign currencies ⁽²⁾	16%	14%	16%	14%

(1) Revenue in foreign currencies is primarily denominated in euros.

(2) Operating expenses in foreign currencies are primarily denominated in British pounds sterling.

Revenues, expenses, assets and liabilities denominated in non-functional currencies are recorded in the appropriate functional currency for the legal entity at the rate of exchange prevailing at the transaction date. Monetary assets and liabilities that are denominated in non-functional currencies are then remeasured at the end of each reporting period at the exchange rate prevailing at the end of the reporting period. Foreign currency remeasurement gains or losses on monetary assets and liabilities in nonfunctional currencies are recognized in the condensed consolidated statements of income within general and administrative expenses. Realized and unrealized losses from foreign currency re-measurement of transactions in nonfunctional currencies recognized in the condensed consolidated statements of income within general and administrative expense totaled \$0.7 million and \$0.6 million during the three months ended September 30, 2023 and 2022, respectively, and realized and unrealized losses totaled \$1.0 million and \$2.3 million during the nine months ended September 30, 2023 and 2022, respectively.

Since our condensed consolidated financial statements are presented in U.S. dollars, we also translate all non-U.S. dollar functional currency revenues, expenses, assets and liabilities into U.S. dollars. All non-U.S. dollar functional currency revenue and expense amounts are translated into U.S. dollars monthly at the average exchange rate for the month. All non-U.S. dollar functional currency assets and liabilities are translated at the rate prevailing at the end of the reporting period. Gains or losses on translation in the financial statements, when the functional currency is other than the U.S. dollar, are included as a component of other comprehensive income. Accordingly, increases or decreases in the value of the U.S. dollar against the other currencies will affect our operating revenues, operating income and the value of balance sheet items.

Aside from U.S. dollars, a significant portion of our revenues are denominated in euros and a significant portion of our expenses are denominated in British pound sterling. The following table shows the average foreign currency exchange rates to the U.S. dollar for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended				Nine Months Ended			
	September 30,				September 30,			
	2023		2022		2023		2022	
Euros	\$	1.09	\$	1.01	\$	1.08	\$	1.07
British pound sterling	\$	1.27	\$	1.18	\$	1.24	\$	1.26

The following table shows the change in revenue and operating income caused by fluctuations in foreign currency rates used in translation during the three and nine months ended September 30, 2023 and 2022:

Impact of Foreign Currency Rate Fluctuations (amounts in thousands)	Three Months Ended				Nine Months Ended			
	September 30,				September 30,			
	2023		2022		2023		2022	
Increase (decrease) in revenue	\$	2,100	\$	(12,800)	\$	5,000	\$	(26,000)
Increase (decrease) in operating income	\$	1,600	\$	(8,600)	\$	4,600	\$	(19,100)

The following table shows the impact a hypothetical 10% increase or decrease in the U.S. dollar against all other currencies and a hypothetical 10% increase or decrease in only euro or only British pound sterling exchange rates would have on the translation of actual revenue and operating income for the three and nine months ended September 30, 2023 and 2022:

Hypothetical 10% Change in Value of U.S. Dollar (amounts in thousands)	Three Months Ended				Nine Months Ended							
	September 30,				September 30,							
	2023		2022		2023		2022					
<i>All currencies</i>												
Effect of 10% change on revenue	+/-	\$	10,300	+/-	\$	8,600	+/-	\$	30,000	+/-	\$	28,200
Effect of 10% change on operating income	+/-	\$	6,500	+/-	\$	5,500	+/-	\$	19,400	+/-	\$	19,100
<i>Euros</i>												
Effect of 10% change on revenue	+/-	\$	9,200	+/-	\$	7,800	+/-	\$	27,200	+/-	\$	25,800
Effect of 10% change on operating income	+/-	\$	8,700	+/-	\$	7,600	+/-	\$	25,900	+/-	\$	25,000
<i>British pound sterling</i>												
Effect of 10% change on revenue	+/-	\$	500	+/-	\$	300	+/-	\$	1,300	+/-	\$	1,100
Effect of 10% change on operating income	+/-	\$	2,100	+/-	\$	1,900	+/-	\$	6,400	+/-	\$	6,000

We have derivative risk relating to our foreign exchange derivative contracts. We enter into foreign currency forward contracts to mitigate our U.S. dollar and British pound sterling versus euro exposure, generally with a duration of not more than 12 months. In June 2023, we also entered into a foreign currency call option on Australian dollars, in order to partially mitigate the Company's U.S. dollar versus Australian dollar foreign exchange exposure on the then-anticipated payment of the Australian dollar denominated purchase price for the Yieldbroker Acquisition. The out-of-the-money foreign currency call option was unwound in August 2023 and we recognized losses during three and nine months ended September 30, 2023 totaling \$1.9 million and \$1.3 million, respectively, relating to this option. We do not use derivative instruments for trading or speculative purposes.

As of September 30, 2023 and December 31, 2022, the notional amount of our foreign currency forward contracts was \$178.6 million and \$162.8 million, respectively. Realized and unrealized gains/losses on foreign currency forward contracts totaled a \$3.9 million gain and a \$6.8 million gain during the three months ended September 30, 2023 and 2022, respectively, and realized and unrealized gains on foreign currency forward contracts totaled \$4.9 million and \$12.9 million during the nine months ended September 30, 2023 and 2022, respectively.

By using derivative instruments to hedge exposures to foreign currency fluctuations, we are exposed to credit risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contract. When the fair value of a derivative contract is positive, the counterparty owes us, which creates credit risk for us. When the fair value of a derivative contract is negative, we owe the counterparty and, therefore, we are not exposed to the counterparty's credit risk in those circumstances. We attempt to minimize counterparty credit risk in derivative instruments by entering into transactions with high-quality counterparties whose credit rating is at least upper-medium investment grade. As of September 30, 2023 and December 31, 2022, the counterparty on each of the foreign exchange derivative contracts was an affiliate of LSEG.

Credit Risk

Cash and cash equivalents includes cash and money market instruments held by a limited number of global financial institutions, including cash amounts in excess of federally insured limits. To mitigate this concentration of credit risk, the Company invests through high-credit-quality financial institutions, monitors the concentration of credit exposure of investments with any single obligor and diversifies as determined appropriate.

We have credit risk relating to our receivables, which are primarily receivables from financial institutions, including investment managers and brokers and dealers. As of September 30, 2023 and December 31, 2022, the allowance for credit losses with regard to these receivables totaled \$0.2 million and \$0.1 million, respectively.

In the normal course of our business we, as an agent, execute transactions with, and on behalf of, other brokers and dealers. If these transactions do not settle because of failure to perform by either counterparty, we may be obligated to discharge the obligation of the non-performing party and, as a result, may incur a loss if the market value of the instrument is different than the contractual amount. This credit risk exposure can be directly impacted by volatile trading markets, as our clients may be unable to satisfy their contractual obligations during volatile trading markets.

Our policy is to monitor our market exposure and counterparty risk. Counterparties are evaluated for creditworthiness and risk assessment prior to our initiating contract activities. The counterparties' creditworthiness is then monitored on an ongoing basis, and credit levels are reviewed to ensure that there is not an inappropriate concentration of credit outstanding to any particular counterparty.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management has evaluated, under the supervision of our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), the effectiveness of our disclosure controls and procedures, as defined in Rule 13a-15(e) of the Exchange Act, as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our CEO and CFO have concluded that our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q are effective at a reasonable assurance level in ensuring that information required to be disclosed in our Exchange Act reports is (1) recorded, processed, summarized and reported in a timely manner and (2) accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. Our management, including our CEO and CFO, does not expect that our disclosure controls and procedures will prevent or detect all errors and all fraud. While our disclosure controls and procedures are designed to provide reasonable assurance of their effectiveness, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected.

Changes in Internal Control over Financial Reporting

There were no changes to our internal control over financial reporting during the quarter ended September 30, 2023 that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION**ITEM 1. LEGAL PROCEEDINGS**

Except as set forth in [Note 13](#) to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q, there have been no material changes from the legal proceedings previously disclosed under the heading “Item 3. Legal Proceedings” in Part I of our 2022 Form 10-K.

ITEM 1A. RISK FACTORS

There have been no material changes to our principal risks that we believe are material to our business, results of operations and financial condition, from the risk factors previously disclosed in “Item 1A. Risk Factors” in Part I of our 2022 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 three months ended September 30, 2023, we repurchased the following shares of Class A 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 ⁽¹⁾	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs ⁽¹⁾
				(in thousands)
July 1, 2023 – July 31, 2023	30,205	\$ 69.86	30,205	\$ 242,582
August 1, 2023 – August 30, 2023	—	—	—	\$ 242,582
September 1, 2023 – September 30, 2023	34,849	79.99	34,849	\$ 239,794
Total	65,054	\$ 75.28	65,054	

(1) On December 5, 2022, we announced that our board of directors authorized a new share repurchase program (the “2022 Share Repurchase Program”), after completing in October 2022, the \$150.0 million of total repurchases of the Company’s Class A common stock previously authorized in February 2021 (the “2021 Share Repurchase Program”). The 2022 Share Repurchase Program was authorized to continue to offset annual dilution from stock-based compensation plans, as well as to opportunistically repurchase our Class A common stock. The 2022 Share Repurchase Program authorizes the purchase of up to \$300.0 million of our Class A common stock at the Company’s discretion and has no termination date. The 2022 Share Repurchase Program can be effected through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), through privately negotiated transactions or through accelerated share repurchases, each in accordance with applicable securities laws and other restrictions. The 2022 Share Repurchase Program does not require the Company to acquire a specific number of shares and may be suspended, amended or discontinued at any time.

Each share of Class A common stock repurchased pursuant to the 2022 Share Repurchase Programs was funded with the proceeds, on a dollar-for-dollar basis, from the repurchase by Tradeweb Markets LLC of an LLC Interest from the Corporation in order to maintain the one-to-one ratio between outstanding shares of the Class A common stock and Class B common stock and the LLC Interests owned by the Corporation.

The table above does not reflect shares surrendered to cover the payroll tax withholding obligations upon the exercise of stock options and vesting of PRSUs and RSUs. During the three months ended September 30, 2023, the Company withheld 92,373 shares of Class A common stock in connection with such exercises and vesting of stock awards.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

(a) None.

(b) None.

(c) *Securities Trading Plans of Executive Officers and Directors*

The following table describes trading plans intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act, as defined in Item 408 of Regulation S-K (“Rule 10b5-1 trading arrangements”), adopted, modified or terminated by our executive officers and directors during the three months ended September 30, 2023.

Name and Title	Action	Date	Aggregate Number of Securities to be Purchased or Sold	Scheduled Expiration Date ⁽¹⁾
Steven Berns <i>Director</i>	Adoption	August 4, 2023	Sale of up to 760 shares of Class A common stock to be issued upon the vesting on May 15, 2024 of previously awarded restricted stock units.	May 30, 2024
Scott Zucker <i>Chief Administrative and Risk Officer</i>	Adoption	September 1, 2023	Sale of an amount equal to up to: (A) 3,048 shares of Class A common stock and (B) (i) 10,180 shares of Class A common stock to be issued upon the vesting on January 1, 2024 of previously awarded performance-based restricted stock units, plus (ii) the number of shares issued upon vesting on January 1, 2024 in settlement of dividend equivalent rights in respect of the 10,180 shares subject to the performance-based restricted stock units that accrued during the award’s vesting period of March 15, 2021 - January 1, 2024, pursuant to the terms of the award agreement and determined on the vesting date, less (iii) the number of shares withheld for taxes, to be determined on the vesting date.	June 1, 2024
Billy Hult <i>Chief Executive Officer and Director</i>	Modification ⁽²⁾	September 8, 2023	Sale of an amount equal to up to: (A) 35,000 shares of Class A common stock to be issued upon the exercise of options in accordance with the terms of the Rule 10b5-1 trading arrangement and (B) (i) 49,688 shares of Class A common stock to be issued upon the vesting on January 1, 2024 of previously awarded performance-based restricted stock units, plus (ii) the number of shares issued upon vesting on January 1, 2024 in settlement of dividend equivalent rights in respect of the 49,688 shares subject to the performance-based restricted stock units that accrued during the award’s vesting period of March 15, 2021 - January 1, 2024, pursuant to the terms of the award agreement and determined on the vesting date, less (iii) the number of shares withheld for taxes, to be determined on the vesting date.	May 16, 2024

- (1) In each case, the Rule 10b5-1 trading arrangement may also expire on such earlier date as all such transactions under the trading arrangement are completed or at such time as such trading arrangement is otherwise terminated in accordance with its terms.
- (2) Modified the Rule 10b5-1 trading arrangement originally adopted by Mr. Hult on May 16, 2023 (the “Original Hult Plan”) to increase the number of shares covered by such trading arrangement. The Original Hult Plan provided for the potential sale of an amount of shares of Class A common stock equal to up to: (i) 49,688 shares of Class A common stock to be issued upon the vesting on January 1, 2024 of previously awarded performance-based restricted stock units, plus (ii) the number of shares issued upon vesting on January 1, 2024 in settlement of dividend equivalent rights in respect of the 49,688 shares subject to the performance-based restricted stock units that accrued during the award’s vesting period of March 15, 2021 - January 1, 2024, pursuant to the terms of the award agreement and determined on the vesting date, less (iii) the number of shares withheld for taxes, to be determined on the vesting date. As of the date of modification, no shares of Class A common stock had been sold under the Original Hult Plan.

During the three months ended September 30, 2023, none of our directors or executive officers adopted, modified or terminated a non-Rule 10b5-1 trading arrangement (as defined in Item 408 of Regulation S-K).

ITEM 6. EXHIBITS

Exhibit Number	Description of Exhibit
31.1*	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover page formatted as Inline XBRL and contained in Exhibit 101.

* Filed herewith.

** Furnished herewith.

† Indicates a management contract or compensatory plan or arrangement.

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.

TRADEWEB MARKETS INC.

October 26, 2023

/s/ William Hult

By: William Hult
Chief Executive Officer (Principal Executive Officer)

October 26, 2023

/s/ Sara Furber

By: Sara Furber
Chief Financial Officer (Principal Financial Officer)

**CERTIFICATION OF THE PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, William Hult, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the fiscal quarter ended September 30, 2023 of Tradeweb Markets Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

October 26, 2023

/s/ William Hult

William Hult
Chief Executive Officer

**CERTIFICATION OF THE PRINCIPAL FINANCIAL OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sara Furber, certify that:

1. I have reviewed this quarterly report on Form 10-Q for the fiscal quarter ended September 30, 2023 of Tradeweb Markets Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

October 26, 2023

/s/ Sara Furber
Sara Furber
Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Tradeweb Markets Inc. (the "Company") for the fiscal quarter ended September 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), William Hult, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

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

October 26, 2023

/s/ William Hult

William Hult
Chief Executive Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Tradeweb Markets Inc. (the "Company") for the fiscal quarter ended September 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Sara Furber, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to her knowledge:

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

October 26, 2023

/s/ Sara Furber

Sara Furber

Chief Financial Officer