Tradeweb

2Q23 EARNINGS
CONFERENCE CALL
JULY 27, 2023

## Disclaimers

The information in this presentation is current only as of its date and may have changed. We undertake no obligation to update this information in light of new information, future events or otherwise

## Basis of Presentation


 consolidates the financial results of TWM LLC and its subsidiaries.








 Please refer to the Company's previously filed Quarterly Reports on Form 10-Q and Annual Report on Form 10-K for capitalized terms not otherwise defined herein

## Unaudited Interim Results

The interim financial results presented herein for the three and six months ended June 30,2023 and 2022 are unaudited. Operating results for interim periods are not necessarily indicative of the results that may be expected for the full year.

## Forward-Looking Statements

 plans, strategies, objectives, prospects and assumptions and future events are forward-looking statements.



 results or developments in future periods.
 whether as a result of new information, future events or otherwise, after the date of this presentation.

## Non-GAAP Financial Measures


 measures 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.

 to evaluate our underlying performance between periods by removing the impact of foreign currency fluctuations. We pr
This information should be considered in addition to, not as a substitute for, results reported in accordance with GAAP.


 you should be aware that in the future, we may incur expenses similar to the adjustments in the presentations of these non-GAAP financial measures
 measures used by other companies in our industry or across different industries.

## Market and Industry Data





## Tradeweb Social Media





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## 2Q23 Earnings Call Participants

Tradeweb


STRATEGIC REVIEW Billy Hult
CHIEF EXECUTIVE OFFICER


GROWTH INITIATIVES Thomas Pluta PRESIDENT


FINANCIAL REVIEW
Sara Furber
CHIEF FINANCIAL OFFICER


WELCOME/ INTRODUCTION
Ashley Serrao
HEAD OF TREASURY, FP\&A \& IR

## OPERATING PERFORMANCE HIGHLIGHTS

REVENUE

## \$310.6M

$+4.5 \% \mathrm{y} / \mathrm{y}^{*}$
$+4.4 \% \mathrm{yly}\left(\text { CC }^{* *}\right)^{1}$
ADJUSTED
EBITDA MARGIN²
52.5\%
+12 bps y/y
+27 bps yly (CC) ${ }^{1}$

INTERNATIONAL
REVENUES
\$109.7M
$+2.5 \% \mathrm{y} / \mathrm{y}$
$+2.1 \% \mathrm{y} / \mathrm{y}(\mathrm{CC})^{1}$

ADJUSTED
EBIT MARGIN ${ }^{2}$

$$
47.9 \%
$$

-9 bps y/y
$+5 \mathrm{bps} \mathrm{y} / \mathrm{y}(\mathrm{CC})^{1}$

ADJUSTED NET INCOME ${ }^{2}$ \$123.7M
+10.8\% y/y
$+11.1 \% \mathrm{yly}(\mathrm{CC})^{1}$

ADJUSTED DILUTED EPS²

## $\$ 0.52$

+10.6\% y/y
$+10.6 \% \mathrm{yly}(\mathrm{CC})^{1}$

[^0]1. Changes presented on a "constant currency" basis reflect changes for the period excluding the impact of foreign currency fluctuations. See "Disclaimers - Non-GAAP Financial Measures" for more information.
2. Adjusted Net Income, Adjusted EBITDA margin, Adjusted EBIT margin and Adjusted Diluted EPS are non-GAAP financial measures. See "Appendix" for reconciliations to their most comparable GAAP financial measures.

## 2Q23 REVENUE GROWTH OF 4.5\% (CC 4.4\% Y/Y)¹

|  | \$8.8 | $\$ 0.1$ | $\$(0.5)$ | $\$ 3.7$ | $\$ 1.7$ | \$(0.3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$297.1 |  |  |  |  |  | $\Rightarrow$ | \$310.6 |
| 2Q22 | Rates | Credit | Equities | Money Markets | Market Data | Other | 2Q23 |
| 2Q23 y/y growth \% | 5.8\% | 0.1\% | (2.3)\% | 30.1\% | 8.3\% | (4.4)\% | 4.5\% |
| $2 Q 23$ y/y constant currency growth $\%^{1}$ | 5.6\% | 0.1\% | (2.9)\% | 30.0\% | 8.2\% | (4.4)\% | 4.4\% |
| YTD y/y growth \% | 6.1\% | 1.6\% | (1.7)\% | 29.3\% | 6.6\% | 5.7\% | 5.1\% |
| YTD y/y constant currency growth $\%^{1}$ | 6.9\% | 2.4\% | (0.7)\% | 30.2\% | 7.3\% | 5.6\% | 6.0\% |

1. Changes presented on a "constant currency" basis reflect changes for the period excluding the impact of foreign currency fluctuations. See "Disclaimers - Non-GAAP Financial Measures" for more information.

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U.S. TREASURIES (ADV AND SHARE²) (\$ in billions)

2 Q23 Y/Y Growth
Total: +2\%


GLOBAL ETFs (INSTITUTIONAL ADV)
2Q23 Y/Y Growth
(\$ in billions)


Note: Totals may not foot due to rounding.
2. Share and volumes reflect TW U.S. Treasuries volume across institutional, wholesale and retail client sectors, divided by SIFMA volume.
3. Share reflects TW high grade and high yield volume across institutional, wholesale and retail client sectors, divided by TRACE volume, adjusted by Tradeweb management to exclude emerging market and sectors, divided by TRACE
convertible bond volumes.

Credit Growth Initiatives
Tradeweb

## EXPANDING SHARE ${ }^{1,2}$

| Inst. <br> Client <br> Count | 618 | 705 | 740 | 806 | 896 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. Investment Grade |  |  | 24\% CAGR | $\begin{gathered} \text { 22.7\% } \\ \$ 6.1 \end{gathered}$ | $\begin{gathered} 24.6 \% \\ \$ 6.8 \end{gathered}$ |
| $\begin{gathered} 12.5 \% \\ \$ 2.9 \end{gathered}$ |  | $\begin{gathered} 15.3 \% \\ \$ 4.8 \end{gathered}$ | $\begin{gathered} 21.3 \% \\ \$ 5.2 \end{gathered}$ |  |  |
|  |  | 9.5\% | 9.2\% | 9.9\% | 9.7\% |
|  | 7.5\% 5.0\% | $5.8 \%$ | 12.1\% | 12.9\% | 14.9\% |
| 2Q19 |  | 2Q20 |  | 2 Q 22 | 2Q23 |
| U.S. High Yield |  |  | $32 \% \text { CAGR }$ |  | $\begin{aligned} & 9.6 \% \\ & \$ 0.9 \end{aligned}$ |
|  |  | $\begin{aligned} & 4.0 \% \\ & \$ 0.5 \end{aligned}$ | $\begin{aligned} & 8.4 \% \\ & \$ 0.9 \end{aligned}$ | $\begin{aligned} & 9.5 \% \\ & \$ 1.0 \end{aligned}$ |  |
|  | $\begin{aligned} & 3.2 \% \\ & \$ 0.3 \end{aligned}$ |  | $3.5 \%$ | 3.3\% | 3.4\% |
|  | 1.4\% 1.8\% | $2.5 \% \quad 1.5 \%$ |  | 6.2\% | 6.2\% |
|  | 2Q19 | 2Q20 | 2Q21- Electroni | 2Q22 | 2Q23 |
|  |  |  |  |  |  |

GLOBAL PORTFOLIO TRADING ADV ${ }^{1}$
(\$ in millions, ADV)


GROWING FOUNDATIONAL U.S. RFQ PROTOCOL
(\$ in millions, ADV)

(\$ in millions, ADV)


IRS Growth Initiatives

RECOVERING GLOBAL INTEREST RATE SWAPS ADV ${ }^{1}$
(\$ in trillions)


GROWING TW EM SWAPS ADV²
(\$ in millions)


1. Share and volumes reflect TW IRS volumes across institutional and wholesale client sectors divided by Clarus cleared market volumes. Global IRS market refers to volumes traded by U.S. and non-U.S. entities.

TRADEWEB MARKET SHARE BY CURRENCY²


GROWING TW SWAPS RFM ADV
(\$ in millions)

2. EM is defined as Emerging Markets.


## 2Q23 Financial Performance ${ }^{1}$

(\$ in thousands, except share and per share amounts)

REVENUE GROWTH OF 4.5\% (4.4\% CC) ${ }^{2}$ WITH 2Q23 EBITDA MARGIN OF 52.5\%
6M23 EBITDA MARGIN EXPANSION OF +46 bps to 52.4\% vs. FY 2022 OF 51.9\%


|  | 2Q23 |  | 1Q23 |  | 2Q22 |  |  | $\begin{array}{r} \% \Delta \\ \text { 2Q23 vs 2Q22 } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{r} \% \Delta \\ 2 Q 23 \text { vs 1Q23 } \\ \hline \end{array}$ |  |  |  |
| Rates | \$ | 2.10 |  |  | \$ | 2.09 | \$ | 2.20 | 0.6 \% | (4.4)\% |
| Rates Cash | \$ | 2.44 | \$ | 2.54 | \$ | 2.27 | (3.9) \% | 7.7 \% |
| Rates Derivatives | \$ | 1.83 | \$ | 1.78 | \$ | 2.14 | 3.1 \% | (14.5) \% |
| Rates Derivatives >= 1 Yr | \$ | 2.75 | \$ | 3.03 | \$ | 3.42 | (9.4) \% | (19.6) \% |
| Other Rates Derivatives ${ }^{2}$ | \$ | 0.23 | \$ | 0.17 | \$ | 0.22 | 35.2 \% | 4.3 \% |
| Credit | \$ | 65.37 | \$ | 40.75 | \$ | 47.31 | 60.4 \% | 38.2 \% |
| Cash Credit ${ }^{3}$ | \$ | 151.91 | \$ | 146.32 | \$ | 155.56 | 3.8 \% | (2.4) \% |
| Credit Derivatives + U.S. Cash 'EP' | \$ | 7.75 | \$ | 6.32 | \$ | 7.73 | 22.5 \% | 0.3 \% |
| Equities | \$ | 16.60 | \$ | 19.64 | \$ | 19.77 | (15.5)\% | (16.0)\% |
| Equities Cash | \$ | 26.59 | \$ | 30.33 | \$ | 29.20 | (12.3)\% | (8.9) \% |
| Equities Derivatives | \$ | 6.14 | \$ | 7.21 | \$ | 5.93 | (14.9)\% | 3.4 \% |
| Money Markets | \$ | 0.38 | \$ | 0.38 | \$ | 0.29 | 0.5 \% | 30.1 \% |
| Total | \$ | 2.60 | \$ | 2.71 | \$ | 2.78 | (4.0)\% | (6.6)\% |
| Total w/o Other Rates Derivatives ${ }^{4}$ | \$ | 2.92 | \$ | 3.20 | \$ | 3.14 | (8.9)\% | (7.1)\% |

 See "Appendix" for additional commentary regarding fees per million.
2. Includes Swaps/Swaptions of tenor less than 1 year and Rates Futures.
3. The "Cash Credit" category represents the "Credit" asset class excluding (1) Credit Derivatives and (2) U.S. High Grade and High Yield electronically processed ("EP") activity,
4. Included to contextualize the impact of short-tenored Swaps/Swaptions and Rates Futures on totals for all periods presented.

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## 2Q23 ADJUSTED EXPENSES INCREASED 4.7\% (4.3\% CC y/y) ${ }^{2}$

|  |  | 2Q23 |  | 2Q22 | $\begin{array}{r} \% \Delta \\ 2 \mathrm{Q} 23 \text { vs 2Q22 } \end{array}$ | \% $\Delta$ Constant Currency 2Q23 vs 2Q22 ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adjusted Expenses |  |  |  |  |  |  |
| Employee compensation and benefits ${ }^{\text {a }}$ | \$ | 103,339 | \$ | 102,595 | 0.7 \% | 0.9 \% |
| Depreciation and amortization ${ }^{\text {b }}$ |  | 14,258 |  | 13,009 | 9.6 \% | 9.7 \% |
| Technology and communications |  | 18,701 |  | 16,034 | 16.6 \% | 16.6 \% |
| General and administrative ${ }^{\mathrm{c}, \mathrm{d}}$ |  | 11,966 |  | 10,667 | 12.2 \% | 4.4 \% |
| Professional fees ${ }^{\text {d }}$ |  | 9,524 |  | 8,560 | 11.3 \% | 11.0 \% |
| Occupancy |  | 4,028 |  | 3,661 | 10.0 \% | 10.4 \% |
| Total adjusted non-compensation expenses | \$ | 58,477 | \$ | 51,931 | 12.6 \% | 11.0 \% |
| Total Adjusted Expenses | \$ | 161,816 | \$ | 154,526 | 4.7 \% | - - - - 4.3 \% |

 period; Non-cash accelerated stock-based compensation expense associated with our former CFO and former CEO and related payroll taxes. See "Appendix" for additional information.
b. Adjusted to exclude acquisition and Refinitiv Transaction related depreciation and amortization. See "Appendix" for additional information.
b. Adjusted to exclude acquisition and Refinitiv Transaction related depreciation and amortization. See "Appendix for additional information to exclude unrealized gains/losses from outstanding foreign exchange forward contracts and gains and losses from the revaluation of foreign denominated cash. See "Appendix" for additional information.
c. Adjusted to exclude incremental direct costs associated with the acquisition and integration of completed and potential mergers and acquisitions. See "Appendix" for additional information.
2. Changes presented on a "constant currency" basis reflect changes for the period excluding the impact of foreign currency fluctuations. See "Disclaimers - Non-GAAP Financial Measures" for more information.

## Capital Management Key Highlights

- $\$ 1.4$ billion in cash and cash equivalents (June 30th, 2023). We expect to use our cash balances to fund the pending AUD125 million acquisition of Yieldbroker ${ }^{5}$
- Undrawn $\$ 500$ million credit facility
- TTM FCF: $\$ 634.8$ million ${ }^{1}$ (+17.9\% yr/yr)
- 2Q23 cash paid for capex \& cap software development: \$15.0 million (-0.6\% yr/yr)
- \$7.6 million in share buybacks in Q2 (107k shares); \$244.7 million of share repurchase authorization remains as of June 30th, 2023
- $\$ 1.9$ million in shares withheld in Q2 to satisfy tax obligations related to exercise of stock options and vesting of restricted stock units and performance-based restricted stock units held by employees
- Board of Directors declared a quarterly dividend of $\$ 0.09$ per Class A and Class B share payable in September 2023 (+12.5\% per share $\mathrm{yr} / \mathrm{yr}$ )


## 2023 FY Guidance (UNCHANGED) ${ }^{2,3}$

(\$ in millions)

Strong Free Cash Flow Growth and Conversion ${ }^{1}$ (\$ in millions)


| Adjusted Expenses | $\$ 669-714 M$ |
| :--- | :---: |
| Acquisition \& Refinitiv related D\&A | $\$ 127 \mathrm{M}$ |
| Assumed non-GAAP tax rate | $\sim 24 \%-25 \%$ |
| Capex \& Cap software development (Cash) | $\$ 56-62 \mathrm{M}$ |

## Share Count Sensitivity



Assumed Average Share

| Price | Q3 2023 |
| :---: | :---: |
| $\$ 60.00$ | $236,390,782$ |
| $\$ 70.00$ | $236,603,241$ |
| $\$ 80.00$ | $236,803,753$ |
| $\$ 90.00$ | $236,967,625$ |

[^1]


 calculating pro forma adjusted fully diluted weighted average shares outstanding only and does not necessarily reflect the amount of exchanges that may occur in the future.

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## APPENDIX

## RATES

## Cash Rates: +8\%

- Higher FPM due to a positive mix shift towards higher fee per million U.S. Treasuries. U.S. Treasuries fee per million was also aided by the continued pickup in our retail channel.


## Swaps/Swaptions $\geq 1 \mathrm{Yr}$ : -20\%

- Lower FPM due to $18 \% \mathrm{yr} / \mathrm{yr}$ reduction in duration (swaps FPM is based on duration traded) and an increase in compression trades which carries a lower FPM. This was partially offset by the continued growth in EM swaps and our RFM protocol.


## Other Rates Derivatives: +4\%

- Higher FPM due to a pick-up in risk-trading across short tenor swaps.


## EQUITIES

Avg FPM: -16\%

Cash Equities: -9\%

- Lower FPM due to a mix shift away from higher fee per million European ETFs.

Equity Derivatives: -3\%

- Lower FPM due to a mix shift towards equity derivatives and convertibles.


## CREDIT

Avg FPM: +38\%

## Cash Credit: -2\%

- Lower FPM due to a mix shift away from munis partially offset by strong growth in our fully electronic U.S. high grade volumes.


## Credit Derivatives/ U.S. Cash Credit Electronically Processed: 0\%

- Relatively stable FPM was driven by a mix shift towards electronically processed IG credit that was offset by a shift away from credit derivatives.


## MONEY MARKETS

- Higher FPM was driven by a mix shift towards U.S. CDs, which carry a higher fee per million than overall Money Markets. The higher fee per million retail money markets business continues to improve given the higher interest rate environment.

Reconciliation of Non-GAAP Financial Measures (\$ in thousands)

 party costs incurred that directly relate to the acquisition transaction or its integration.

 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.
 5. Represents intangible asset and acquired software our tax savings.
 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).
 2Q23 and 2Q22 revenue. Revenues for the six months ended June 30, 2023 totaled $\$ 640$ million. FY 2022 revenues totaled $\$ 1,189$ million.

| Reconciliation of Cash Flow from Operating Activities to Free Cash Flow | Successor2Q23 TTM |  | Successor 2Q22 TTM |  | Successor FY22 |  | Successor FY21 |  | Successor FY20 |  | Successor FY19 |  | Successor4Q18 |  | Predecessor 9M18 |  | Predecessor FY17 |  | Predecessor FY16 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash flow from operating activities | \$ | 693,446 | \$ | 597,330 | \$ | 632,822 | \$ | 578,021 | \$ | 443,234 | \$ | 311,003 | \$ | 112,556 | \$ | 164,828 | \$ | 224,580 | \$ | 171,845 |
| Less: Capitalization of software development costs |  | $(39,123)$ |  | $(35,767)$ |  | $(36,882)$ |  | $(34,470)$ |  | $(31,046)$ |  | $(28,681)$ |  | $(7,156)$ |  | $(19,523)$ |  | $(27,157)$ |  | $(25,351)$ |
| Less: Purchases of furniture, equipment and leasehold improvements |  | $(19,557)$ |  | $(23,158)$ |  | $(23,214)$ |  | $(16,878)$ |  | $(11,490)$ |  | $(15,781)$ |  | $(9,090)$ |  | $(6,327)$ |  | $(13,461)$ |  | $(9,998)$ |
| Free Cash Flow | \$ | 634,766 | \$ | 538,405 | \$ | 572,726 | \$ | 526,673 | \$ | 400,698 | \$ | 266,541 | \$ | 96,310 | \$ | 138,978 | \$ | 183,962 | \$ | 136,496 |

## Reconciliation of Non-GAAP Financial Measures cont.

## (\$ in thousands, except share and per share amounts)

| Operating Expenses to Adjusted Expenses | 2Q23 |  | 2Q22 |  |
| :---: | :---: | :---: | :---: | :---: |
| Operating Expenses | \$ | 194,278 | \$ | 190,531 |
| Merger and acquisition transaction and integration costs ${ }^{1}$ |  | $(1,212)$ |  | (15) |
| D\&A related to acquisitions and the Refinitiv Transaction ${ }^{2}$ |  | $(31,629)$ |  | $(31,761)$ |
| Stock-based compensation expense ${ }^{3}$ |  | (585) |  | $(7,295)$ |
| Foreign exchange gains / (losses) ${ }^{4}$ |  | 964 |  | 3,066 |
| Adjusted Expenses | \$ | 161,816 | \$ | 154,526 |

 party costs incurred that directly relate to the acquisition transaction or its integration
 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).

June 30, 2022, this adjustment also includes $\$ 5.7$ million of non-cash accelerated stock-based compensation expense and related payroll taxes associated with our former CFO and former CEO.
4. 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.

| EPS: Net income attributable to Tradeweb Markets Inc. | 2Q23 |  | 2Q22 |  |
| :---: | :---: | :---: | :---: | :---: |
| Numerator: |  |  |  |  |
| Net income attributable to Tradeweb Markets Inc. | \$ | 89,082 | \$ | 68,344 |
| Less: Distributed and undistributed earnings allocated to unvested RSUs and unsettled vested PRSUs ${ }^{1}$ |  | (102) |  | (26) |
| Net income attributable to outstanding shares of Class A and Class B common stock - Basic and Diluted | \$ | 88,980 | \$ | 68,318 |
|  |  |  |  |  |
| Denominator: |  |  |  |  |
| Weighted average shares of Class A and Class B common stock outstanding - Basic |  | 211,569,728 |  | 204,501,035 |
| Dilutive effect of PRSUs |  | 350,713 |  | 782,955 |
| Dilutive effect of options |  | 1,143,376 |  | 1,839,177 |
| Dilutive effect of RSUs |  | 92,936 |  | 149,508 |
| Dilutive effect of PSUs |  | - |  | - |
| Weighted average shares of Class A and Class B common stock outstanding - Diluted |  | 213,156,753 |  | 207,272,675 |
| Earnings per share - Basic | \$ | 0.42 | \$ | 0.33 |
| Earnings per share - Diluted | \$ | 0.42 | \$ | 0.33 |

 of calculating earnings per share in accordance with the two-class method

## Reconciliation of Non-GAAP Financial Measures cont.



1. As a result of the Reorganization Transactions and the IPO completed in April 2019, certain earnings information is being presented separately for Tradeweb Markets LLC and Tradeweb Markets Inc.
a. $\quad$ Presents information for Tradeweb Markets Inc. (post-IPO period)
2. For post-IPO periods, 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.
 relate to the acquisition transaction or its integration.

to the Refinitiv Transaction (where all assets were marked to fair value as of the closing date of the Refinitiv Transaction).


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,
 jurisdictions which impacted our tax savings.
 2022 and the years ended December 31, 202
corporate tax rate for the periods presented.
4. 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

Reconciliation of Diluted Weighted Average Shares Outstanding to Adjusted Diluted Weighted Average Shares Outstanding and Adjusted Diluted EPS
2Q23

| Diluted weighted average shares of Class A and Class B common stock outstanding | 213,156,753 | 207,272,675 |
| :---: | :---: | :---: |
| Weighted average of other participating securities ${ }^{1}$ | 241,963 | 76,426 |
| Assumed exchange of LLC Interests for shares of Class A or Class B common stock ${ }^{2}$ | 23,153,250 | 29,971,658 |
| Adjusted diluted weighted average shares outstanding | 236,551,966 | 237,320,759 |
| Adjusted Net Income (in thousands) | \$ 123,749 | \$ 111,659 |
| Adjusted Diluted EPS | \$ 0.52 | \$ 0.47 |

 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.
 non-controlling interests.
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## Quarterly Volumes

|  | Product | Q2 2023 |  | Q1 2023 |  | Q2 2022 |  | QOQ | YoY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class |  | ADV (USD mm) | Volume (USD mm) | ADV (USD mm) | Volume (USD mm) | ADV (USD mm) | Volume (USD mm) | ADV | ADV |
| Rates | Cash | 344,674 | 21,627,622 | 362,602 | 22,567,692 | 341,367 | 21,126,389 | -4.94\% | 0.97\% |
|  | U.S. Govermment Bonds | 135,128 | 8,513,069 | 144,083 | 8,933,137 | 131,935 | 8,179,969 | -6.22\% | 2.42\% |
|  | European Goverment Bonds | 40,694 | 2,482,305 | 42,636 | 2,728,696 | 35,439 | 2,161,809 | -4.56\% | 14.83\% |
|  | Mortages | 163,359 | 10,291,617 | 170,185 | 10,551,479 | 168,603 | 10,453,370 | -4.01\% | -3.11\% |
|  | Oher Goverment Bonds | 5,493 | 340,631 | 5,698 | 354,380 | 5,389 | 331,240 | -3.61\% | 1.92\% |
|  | Derivatives | 429,285 | 26,633,837 | 508,675 | 31,989,758 | 367,604 | 22,616,932 | -15.61\% | 16.78\% |
|  | Swaps/Swaptions $\geq 1$ Y | 273,533 | 16,961,570 | 285,896 | 17,965,246 | 221,191 | 13,602,492 | -4.32\% | 23.66\% |
|  | SwapsSwaptions < 1 Y | 154,332 | 9,582,824 | 221,202 | 13,926,695 | 145,004 | 8,927,045 | -30.23\% | 6.43\% |
|  | Futures | 1,420 | 89,443 | 1,577 | 97,816 | 1,410 | 87,395 | -9.95\% | 0.76\% |
| Total |  | 773,959 | 48,261,458 | 871,277 | 54,557,449 | 708,971 | 43,743,321 | -11.17\% | 9.17\% |
| Credit | Cash | 10,627 | 662,558 | 11,497 | 714,885 | 10,196 | 626,277 | -7.57\% | 4.23\% |
|  | U.S. High Grade - Fully Electronic | 3,960 | 249,509 | 4,134 | 256,281 | 3,260 | 202,106 | -4.19\% | 21.49\% |
|  | U.S. High Grade - Electronically Processed | 2,694 | 169,695 | 3,137 | 194,472 | 2,652 | 164,397 | -14.13\% | 1.58\% |
|  | U.S. High Yield - Fully Electronic | 567 | 35,718 | 674 | 41,777 | 652 | 40,432 | -15.86\% | -13.06\% |
|  | U.S. High Yield - Electronically Processed | 317 | 19,997 | 372 | 23,093 | 353 | 21,910 | -14.78\% | -10.18\% |
|  | European Creait | 1,958 | 119,461 | 2,046 | 130,939 | 1,762 | 107,496 | -4.28\% | 11.13\% |
|  | Municipal Bonds | 308 | 19,414 | 312 | 19,316 | 394 | 24,444 | -1.09\% | -21.84\% |
|  | Chinese Bonds | 720 | 42,505 | 714 | 42,133 | 1,001 | 58,041 | 0.88\% | -28.01\% |
|  | Other Credit Bonds | 101 | 6,259 | 109 | 6,874 | 122 | 7,449 | -6.78\% | -16.57\% |
|  | Derivatives | 8,362 | 520,513 | 20,806 | 1,306,491 | 16,477 | 1,013,032 | -59.81\% | -49.25\% |
|  | Swaps | 8,362 | 520,513 | 20,806 | 1,306,491 | 16,477 | 1,013,032 | -59.81\% | -49.25\% |
| Total |  | 18,989 | 1,183,072 | 32,303 | 2,021,376 | 26,673 | 1,639,309 | -41.22\% | -28.81\% |
| Equities | Cash | 9,913 | 612,223 | 10,491 | 656,077 | 9,945 | 613,843 | -5.51\% | -0.32\% |
|  | U.S. ETFs | 7,547 | 467,926 | 7,663 | 475,083 | 7,202 | 446,499 | -1.51\% | 4.80\% |
|  | European ETFs | 2,366 | 144,297 | 2,828 | 180,994 | 2,743 | 167,344 | -16.35\% | -13.77\% |
|  | Derivatives | 9,444 | 584,528 | 9,043 | 562,478 | 6,761 | 418,547 | 4.43\% | 39.67\% |
|  | Convertibles/Swaps/Options | 6,340 | 392,306 | 6,056 | 376,950 | 3,273 | 202,579 | 4.70\% | 93.69\% |
|  | Futures | 3,103 | 192,221 | 2,987 | 185,528 | 3,488 | 215,968 | 3.89\% | -11.02\% |
| Total |  | 19,356 | 1,196,751 | 19,534 | 1,218,555 | 16,706 | 1,032,390 | -0.91\% | 15.86\% |
| Money Markets | Cash | 484,307 | 30,339,463 | 441,597 | 27,533,940 | 423,984 | 26,205,599 | 9.67\% | 14.23\% |
|  | Repurchase Agreements (Repo) | 465,958 | 29,184,597 | 425,340 | 26,525,083 | 405,652 | 25,069,414 | 9.55\% | 14.87\% |
|  | Other Money Makets | 18,349 | 1,154,866 | 16,257 | 1,008,856 | 18,332 | 1,136,185 | 12.87\% | 0.09\% |
| Total |  | 484,307 | 30,339,463 | 441,597 | 27,533,940 | 423,984 | 26,205,599 | 9.67\% | 14.23\% |
|  |  | ADV (USD mm) | Volume (USD mm) | ADV (USD mm) | Volume (USD mm) | ADV (USD mm) | Volume (USD mm) | QoQ | Yoy |
|  | Total | 1,296,611 | 80,980,743 | 1,364,711 | 85,331,320 | 1,176,333 | 72,620,618 | -4.99\% | 10.20\% |

PRODUCT CATEGORIES INCLUDE
U.S. Govermment Bonds: U.S. Treasury bills, notes and bonds, and Treasury Inflation-protected Securities including when-issued securities.

## en-ssued securties. <br> Corgmeges.:To-be-announced mortgage-backed securities, specified pools, collateralized mortgage obligations,

 Other Govermment Bonds: Japanesese, Canadian, Austrailenivat . ncluding Pfandobriefe), other : Japanese, Canadian, Australian and New Zealand govermment bonds, covered bonds bonds/debentures.Rates Futures: Government bond futures leg of exchange for physicals (EFPs)
U.S. High Grade and High Yield: All TRACE-reported corporates, excluding convertibles
U.S. High Grade and High Yield: All TRACE-
(see page 23 for segmentation methodology).

Chinese Bonds: Chinese Interbank Bond Market (CIBM) instruments - government and corporate - transacted via Bond Connect Company Limited (BCCL) and CIBM Direct.
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VOLUMES

Other Credit Bonds: Other developed market (including non-TRACE-reported bonds, preferreds and structured notes), developing and emerging market corporate and government bonds. Credit Swaps: Index and single name credit default swaps.
ETF: Exchange traded funds (ETFs), ETF leg of EFPs, and net asset value trades.
Convertibles/Swaps/Options: Convertible bonds, equity swaps, call and put strategies, and other equity derivatives excluding futures.
Equities Futures: Equity futures including the futures leg of EFPs.
Other Money Markets: Agency discount notes, commercial paper, certificates of deposits (including structured CDs), and deposits. Starting in February 2019, Canadian Commercial Paper effected on Tradeweb by non-Canadian clients

Volumes include Tradeweb, Dealerweb and Tradeweb Direct. Except with respect to U.S. Treasuries, both sides of a
tade are included in volume totals where the trade is fully-anonymous and a Tradeweb broker-dealer is the matched principal counterparty. Riskless principal trades on Tradeweb Direct are single-count.
Il volumes converted to U.S. Dollars.
Jumes for Mortgages represent current face value at time of trade.
.S. government bond volumes have been updated as a result of a reclassification of certain U.S. Treasury transactions.

## U.S. Corporate Bonds

## Tradeweb

USING MARKET REPORTING STANDARDS

## TRADEWEB MARKETS

| Product | Type | Q2 2023 |  |  |  |  |  | Q1 2023 |  |  |  |  |  | Q2 2022 |  |  |  |  |  | QOQ |  | YoY |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Volume (USD mm) |  |  | Trades |  |  | Volume (USD mm) |  |  | Trades |  |  | Volume (USD mm) |  |  | Trades |  |  | Voume (USD mm) |  | Volume (USD mm) |  |
|  |  | ADV | Total | $\begin{array}{r} \% \text { of } \\ \text { TRACE } \end{array}$ | ADT | Total | $\begin{gathered} \% \text { of } \\ \text { TRACE } \end{gathered}$ | ADV | Total | $\begin{gathered} \% \text { of } \\ \text { TRACE } \end{gathered}$ | ADT | Total | $\begin{gathered} \% \text { of } \\ \text { TRACE } \end{gathered}$ | ADV | Total | $\begin{gathered} \% \text { of } \\ \text { TRACE } \end{gathered}$ | ADT | Total | $\begin{gathered} \% \text { of } \\ \text { TRACE } \end{gathered}$ | ADV | $\begin{gathered} \% \text { of } \\ \text { TRACE } \end{gathered}$ | ADV | $\begin{gathered} \% \text { of } \\ \text { TRACE } \end{gathered}$ |
| U.S. High Grade | Total | 6,817 | 429,461 | 24.6\% | 20,310 | 1,279,535 | 24.9\% | 7,461 | 462,563 | 23.0\% | 21,197 | 1,314,241 | 24.3\% | 6,099 | 378,128 | 22.7\% | 17,740 | 1,099,876 | 24.9\% | -8.63\% | 161bp | 11.77\% | 191bp |
|  | Fully Electronic | 4,123 | 259,767 | 14.9\% | 19,907 | 1,254,130 | 24.4\% | 4,324 | 268,091 | 13.4\% | 20,773 | 1,287,931 | 23.8\% | 3,447 | 213,731 | 12.9\% | 17,353 | 1,075,884 | 24.3\% | -4.64\% | 156bp | 19.61\% | 206bp |
|  | Electronically Processed | 2,694 | 169,695 | 9.7\% | 403 | 25,405 | 0.5\% | 3,137 | 194,472 | 9.7\% | 424 | 26,310 | 0.5\% | 2,652 | 164,397 | 9.9\% | 387 | 23,992 | 0.5\% | -14.13\% | 5bp | 1.58\% | -15bp |
| U.S. High Yield | Total | 899 | 56,667 | 9.6\% | 2,836 | 178,688 | 20.2\% | 1,065 | 66,019 | 9.4\% | 3,535 | 219,160 | 19.4\% | 1,020 | 63,222 | 9.5\% | 2,962 | 183,646 | 16.7\% | -15.53\% | 13bp | -11.79\% | 2 bp |
|  | Fully Electronic | 582 | 36,670 | 6.2\% | 2,714 | 170,995 | 19.3\% | 692 | 42,925 | 6.1\% | 3,402 | 210,926 | 18.7\% | 666 | 41,313 | 6.2\% | 2,837 | 175,872 | 16.0\% | -15.93\% | 6 bp | -12.65\% | -5bp |
|  | Electronically Processed | 317 | 19,997 | 3.4\% | 122 | 7,693 | 0.9\% | 372 | 23,093 | 3.3\% | 133 | 8,234 | 0.7\% | 353 | 21,910 | 3.3\% | 125 | 7,774 | 0.7\% | -14.78\% | 8bp | -10.18\% | 7 bp |

## REPORTED MARKET



## FOOTNOTES

Numbers include all activity on Tradeweb, Dealerweb and Tradeweb Direct.
Corporate bond volume and trade count numbers reflect all trades reported to TRACE, excluding emerging market and convertible bonds.
Monthly average capped volumes for HG and HY applied to capped trades based on TRACE reporting standards
Electronically Processed include voice trades processed electronically on Tradeweb
Day counts for corporate bonds reflect all SIFMA trading days.

Segmentation between HG and HY determined using the following methodology and ratings from Standards \& Poor's (S\&P),
Moody's Investor Services and Fitch Ratings:

- If 2 of 3 of the bond's ratings are equal to or worse than $\mathrm{BB}+/ \mathrm{Ba} 1 / \mathrm{BB}+$ (but not including "other ratings") then the bond is HY
- If 1 of 3 of the bond's ratings is equal to or worse than $\mathrm{BB}+/ \mathrm{Ba} 1 / \mathrm{BB}+$, and none are better, then the bond is HY .
- If the bond is not rated by any agency then the bond is HY
- If 3 of 3 of the bond's ratings are better than $\mathrm{BB}+/ \mathrm{Ba1/BB}+$ (but not including "other ratings") then the bond is HG - If 2 of 3 of the bond's ratings are better than $\mathrm{BB}+/ \mathrm{Ba} 1 / \mathrm{BB}+$ then the bond is HG .

If 1 of 3 of the bond's ratings is better than $\mathrm{BB}+/ \mathrm{Ba} 1 / \mathrm{BB}+$, and none are equal or worse, then the bond is HG .

- If 1 of 3 of the bond's ratings is better than $\mathrm{BB}+/ \mathrm{Ba} 1 / \mathrm{BB}+$, and 1 of 3 is equal or worse, then the bond is HG (i.e. the bond is split rated: $1 \mathrm{HG}, 1 \mathrm{HY}$ )


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[^0]:    *y/y = year over year comparison
    ${ }^{* *} \mathrm{CC}=$ constant currency

[^1]:    

