



# TRADEWEB MARKETS HISTORICAL TRADE VOLUMES

AS OF JULY 2021

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# TRADEWEB MARKETS – QUARTERLY ADV (USD mm)

| Asset Class          | Product                        | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 | Q4 2018 | Q1 2019 | Q2 2019 | Q3 2019 | Q4 2019 | Q1 2020 | Q2 2020 | Q3 2020 | Q4 2020 | Q1 2021   | Q2 2021 |
|----------------------|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
| <b>Total</b>         |                                | 381,497 | 377,717 | 393,721 | 437,804 | 533,446 | 539,259 | 532,214 | 589,796 | 645,647 | 752,297 | 816,774 | 685,830 | 897,295 | 778,380 | 780,286 | 897,913 | 1,058,577 | 976,876 |
| <b>Rates</b>         | <b>Total</b>                   | 246,178 | 236,391 | 251,631 | 279,189 | 343,796 | 351,033 | 342,550 | 378,803 | 429,226 | 509,914 | 563,416 | 451,276 | 590,767 | 506,759 | 490,087 | 537,308 | 665,801   | 575,671 |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |         |
|                      | <b>Total</b>                   | 188,634 | 180,682 | 187,125 | 206,164 | 232,055 | 222,191 | 208,879 | 239,972 | 274,976 | 278,341 | 284,622 | 267,714 | 341,557 | 297,599 | 311,033 | 327,865 | 378,323   | 319,023 |
|                      | U.S. Government Bonds          | 50,316  | 51,290  | 50,126  | 56,518  | 71,779  | 64,516  | 65,558  | 78,983  | 82,128  | 80,654  | 82,124  | 77,007  | 93,518  | 92,260  | 86,956  | 91,733  | 114,948   | 106,803 |
|                      | European Government Bonds      | 14,065  | 14,239  | 13,823  | 15,117  | 19,848  | 21,047  | 17,745  | 20,134  | 23,033  | 22,871  | 23,372  | 19,644  | 28,119  | 27,105  | 24,317  | 24,942  | 31,613    | 30,515  |
|                      | Mortgages                      | 122,790 | 113,749 | 121,663 | 133,031 | 138,382 | 134,623 | 123,600 | 138,930 | 166,277 | 171,100 | 175,476 | 167,950 | 214,947 | 173,551 | 195,986 | 207,291 | 226,368   | 177,570 |
|                      | Other Government Bonds         | 1,463   | 1,404   | 1,513   | 1,498   | 2,045   | 2,005   | 1,976   | 1,925   | 3,537   | 3,715   | 3,651   | 3,113   | 4,973   | 4,682   | 3,774   | 3,899   | 5,393     | 4,135   |
|                      | <b>Derivatives</b>             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |         |
|                      | <b>Total</b>                   | 57,544  | 55,709  | 64,506  | 73,024  | 111,741 | 128,843 | 133,670 | 138,831 | 154,251 | 231,574 | 278,794 | 183,562 | 249,209 | 209,160 | 179,054 | 209,442 | 287,477   | 256,648 |
|                      | Swaps/Swaptions ≥ 1Y           | 51,275  | 51,058  | 53,274  | 61,585  | 101,499 | 109,876 | 104,080 | 125,138 | 142,263 | 133,895 | 148,230 | 138,757 | 159,508 | 140,999 | 122,341 | 142,921 | 182,088   | 165,825 |
|                      | Swaps/Swaptions < 1Y           | 5,977   | 4,383   | 11,010  | 11,047  | 9,618   | 18,375  | 29,103  | 13,101  | 11,486  | 96,993  | 129,982 | 44,165  | 89,091  | 67,767  | 56,317  | 65,988  | 104,542   | 89,975  |
|                      | Futures                        | 292     | 267     | 222     | 393     | 624     | 591     | 488     | 592     | 502     | 686     | 582     | 639     | 611     | 395     | 396     | 534     | 847       | 848     |
| <b>Credit</b>        | <b>Total</b>                   | 7,614   | 5,908   | 9,028   | 6,996   | 15,003  | 11,800  | 11,893  | 12,036  | 16,386  | 12,253  | 17,218  | 13,233  | 32,996  | 17,944  | 19,543  | 17,915  | 27,072    | 18,085  |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |         |
|                      | <b>Total</b>                   | 2,314   | 2,411   | 2,774   | 3,213   | 4,329   | 4,314   | 3,958   | 4,325   | 5,631   | 5,583   | 5,455   | 6,015   | 7,255   | 7,812   | 7,036   | 8,328   | 10,382    | 9,519   |
|                      | U.S. High Grade                | 792     | 906     | 1,103   | 1,288   | 1,675   | 1,706   | 1,711   | 2,063   | 2,812   | 2,789   | 2,483   | 3,223   | 3,906   | 4,653   | 3,821   | 4,393   | 5,575     | 5,083   |
|                      | U.S. High Yield                | 195     | 149     | 144     | 199     | 255     | 233     | 232     | 271     | 329     | 283     | 329     | 357     | 486     | 486     | 406     | 604     | 821       | 836     |
|                      | European Credit                | 956     | 1,010   | 916     | 1,017   | 1,601   | 1,364   | 1,098   | 1,171   | 1,321   | 1,287   | 1,203   | 1,299   | 1,658   | 1,364   | 1,270   | 1,541   | 2,066     | 1,911   |
|                      | Municipal Bonds                | 299     | 286     | 264     | 286     | 278     | 266     | 256     | 292     | 279     | 249     | 226     | 217     | 289     | 247     | 201     | 199     | 204       | 193     |
|                      | Chinese Bonds                  |         |         | 285     | 353     | 432     | 676     | 603     | 484     | 833     | 915     | 1,157   | 864     | 857     | 1,010   | 1,277   | 1,501   | 1,594     | 1,373   |
|                      | Other Credit Bonds             | 72      | 60      | 62      | 70      | 88      | 70      | 58      | 45      | 57      | 60      | 57      | 56      | 60      | 50      | 61      | 91      | 122       | 122     |
|                      | <b>Derivatives</b>             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |         |
|                      | <b>Total</b>                   | 5,300   | 3,497   | 6,254   | 3,783   | 10,674  | 7,486   | 7,935   | 7,711   | 10,755  | 6,670   | 11,763  | 7,218   | 25,741  | 10,132  | 12,507  | 9,587   | 16,690    | 8,566   |
|                      | Swaps                          | 5,300   | 3,497   | 6,254   | 3,783   | 10,674  | 7,486   | 7,935   | 7,711   | 10,755  | 6,670   | 11,763  | 7,218   | 25,741  | 10,132  | 12,507  | 9,587   | 16,690    | 8,566   |
| <b>Equities</b>      | <b>Total</b>                   | 4,483   | 4,522   | 4,015   | 6,239   | 9,967   | 6,976   | 5,796   | 8,533   | 7,771   | 7,119   | 7,345   | 8,988   | 17,800  | 9,996   | 9,066   | 12,394  | 16,177    | 16,056  |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |         |
|                      | <b>Total</b>                   | 2,650   | 2,585   | 2,448   | 3,462   | 5,656   | 4,006   | 3,162   | 5,202   | 4,479   | 4,116   | 4,499   | 4,547   | 9,225   | 6,329   | 5,442   | 6,826   | 9,021     | 8,240   |
|                      | U.S. ETFs                      | 1,902   | 1,828   | 1,770   | 2,746   | 4,458   | 2,806   | 2,182   | 3,918   | 2,979   | 2,587   | 2,755   | 2,974   | 6,527   | 4,480   | 3,849   | 4,656   | 6,046     | 5,885   |
|                      | European ETFs                  | 748     | 758     | 678     | 716     | 1,199   | 1,200   | 979     | 1,283   | 1,499   | 1,529   | 1,744   | 1,573   | 2,698   | 1,849   | 1,592   | 2,170   | 2,975     | 2,355   |
|                      | <b>Derivatives</b>             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |         |
|                      | <b>Total</b>                   | 1,833   | 1,937   | 1,567   | 2,777   | 4,310   | 2,970   | 2,634   | 3,331   | 3,292   | 3,002   | 2,846   | 4,440   | 8,576   | 3,667   | 3,624   | 5,568   | 7,155     | 7,817   |
|                      | Options / Convertibles / Swaps | 406     | 611     | 413     | 700     | 755     | 925     | 1,253   | 961     | 1,438   | 1,404   | 1,275   | 2,628   | 3,973   | 849     | 1,188   | 2,639   | 3,054     | 3,850   |
|                      | Equity Futures                 | 1,427   | 1,325   | 1,155   | 2,078   | 3,555   | 2,045   | 1,381   | 2,371   | 1,854   | 1,599   | 1,571   | 1,812   | 4,602   | 2,819   | 2,436   | 2,929   | 4,102     | 3,967   |
| <b>Money Markets</b> | <b>Total</b>                   | 123,222 | 130,896 | 129,047 | 145,379 | 164,680 | 169,449 | 171,975 | 190,423 | 192,264 | 223,011 | 228,795 | 212,333 | 255,732 | 243,681 | 261,590 | 330,296 | 349,528   | 367,063 |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |         |
|                      | <b>Total</b>                   | 123,222 | 130,896 | 129,047 | 145,379 | 164,680 | 169,449 | 171,975 | 190,423 | 192,264 | 223,011 | 228,795 | 212,333 | 255,732 | 243,681 | 261,590 | 330,296 | 349,528   | 367,063 |
|                      | Repurchase Agreements (Repo)   | 102,312 | 110,194 | 109,189 | 125,139 | 141,009 | 147,475 | 152,140 | 170,176 | 173,522 | 204,217 | 210,969 | 194,193 | 236,750 | 230,978 | 250,039 | 319,216 | 335,531   | 353,446 |
|                      | Other Money Markets            | 20,910  | 20,702  | 19,858  | 20,240  | 23,671  | 21,974  | 19,836  | 20,247  | 18,742  | 18,794  | 17,827  | 18,140  | 18,982  | 12,703  | 11,551  | 11,080  | 13,996    | 13,617  |



# TRADEWEB MARKETS – QUARTERLY BLENDED TRADE DAYS

| Asset Class          | Product                        | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 | Q4 2018 | Q1 2019 | Q2 2019 | Q3 2019 | Q4 2019 | Q1 2020 | Q2 2020 | Q3 2020 | Q4 2020 | Q1 2021 | Q2 2021 |
|----------------------|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Total</b>         |                                | 62.17   | 62.90   | 63.24   | 62.22   | 61.29   | 63.81   | 63.35   | 61.74   | 61.36   | 62.82   | 64.40   | 62.41   | 62.38   | 62.76   | 64.42   | 62.51   | 61.45   | 63.51   |
| <b>Rates</b>         | <b>Total</b>                   | 62.20   | 62.87   | 63.28   | 62.24   | 61.33   | 63.78   | 63.38   | 61.86   | 61.41   | 62.79   | 64.44   | 62.47   | 62.41   | 62.74   | 64.40   | 62.54   | 61.45   | 63.50   |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                      | <b>Total</b>                   | 62.15   | 62.91   | 63.15   | 62.15   | 61.17   | 63.89   | 63.18   | 61.35   | 61.17   | 62.90   | 64.16   | 62.15   | 62.16   | 62.90   | 64.15   | 62.17   | 61.17   | 63.78   |
|                      | U.S. Government Bonds          | 62.00   | 63.00   | 63.00   | 62.00   | 61.00   | 64.00   | 63.00   | 61.00   | 61.00   | 63.00   | 64.00   | 62.00   | 62.00   | 63.00   | 64.00   | 62.00   | 61.00   | 64.00   |
|                      | European Government Bonds      | 64.00   | 62.00   | 65.00   | 64.00   | 63.00   | 63.00   | 65.00   | 65.00   | 63.00   | 62.00   | 66.00   | 64.00   | 64.00   | 62.00   | 66.00   | 64.00   | 63.00   | 62.00   |
|                      | Mortgages                      | 62.00   | 63.00   | 63.00   | 62.00   | 61.00   | 64.00   | 63.00   | 61.00   | 61.00   | 63.00   | 64.00   | 62.00   | 62.00   | 63.00   | 64.00   | 62.00   | 61.00   | 64.00   |
|                      | Other Government Bonds         | 62.67   | 62.12   | 63.81   | 63.09   | 61.43   | 62.70   | 63.58   | 63.32   | 60.91   | 61.37   | 63.45   | 62.56   | 61.37   | 62.19   | 63.09   | 63.15   | 61.47   | 61.98   |
|                      | <b>Derivatives</b>             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                      | <b>Total</b>                   | 62.36   | 62.74   | 63.66   | 62.47   | 61.66   | 63.60   | 63.70   | 62.73   | 61.83   | 62.67   | 64.73   | 62.93   | 62.75   | 62.53   | 64.85   | 63.12   | 61.82   | 63.16   |
|                      | Swaps/Swaptions ≥ 1Y           | 62.37   | 62.74   | 63.46   | 62.50   | 61.69   | 63.58   | 63.76   | 62.72   | 61.82   | 62.52   | 64.85   | 62.98   | 62.78   | 62.50   | 64.73   | 62.98   | 61.85   | 62.97   |
|                      | Swaps/Swaptions < 1Y           | 62.30   | 62.79   | 64.62   | 62.37   | 61.35   | 63.66   | 63.51   | 62.88   | 62.03   | 62.87   | 64.60   | 62.78   | 62.71   | 62.59   | 65.13   | 63.43   | 61.77   | 63.50   |
|                      | Futures                        | 62.00   | 63.00   | 63.01   | 62.00   | 61.01   | 63.99   | 63.02   | 61.02   | 61.01   | 63.00   | 64.00   | 62.01   | 62.00   | 63.00   | 64.00   | 62.00   | 61.01   | 64.00   |
| <b>Credit</b>        | <b>Total</b>                   | 62.82   | 62.58   | 63.81   | 62.90   | 61.79   | 63.34   | 63.96   | 62.52   | 61.64   | 62.58   | 64.88   | 62.57   | 62.76   | 62.44   | 64.94   | 62.49   | 61.54   | 63.05   |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                      | <b>Total</b>                   | 62.86   | 62.57   | 63.88   | 62.98   | 61.56   | 63.05   | 63.72   | 61.99   | 61.04   | 62.60   | 64.66   | 62.16   | 62.00   | 62.30   | 64.73   | 62.02   | 60.95   | 63.01   |
|                      | U.S. High Grade                | 62.00   | 63.00   | 63.00   | 62.00   | 61.00   | 64.00   | 63.00   | 61.00   | 61.00   | 63.00   | 64.00   | 62.00   | 62.00   | 63.00   | 64.00   | 62.00   | 61.00   | 64.00   |
|                      | U.S. High Yield                | 62.00   | 63.00   | 63.00   | 62.00   | 61.00   | 64.00   | 63.00   | 61.00   | 61.00   | 63.00   | 64.00   | 62.00   | 62.00   | 63.00   | 64.00   | 62.00   | 61.00   | 64.00   |
|                      | European Credit                | 64.00   | 62.00   | 65.00   | 64.00   | 63.00   | 63.00   | 65.00   | 65.00   | 63.00   | 62.00   | 66.00   | 64.00   | 64.00   | 62.00   | 66.00   | 64.00   | 63.00   | 62.00   |
|                      | Municipal Bonds                | 62.00   | 63.00   | 63.00   | 62.00   | 61.00   | 64.00   | 63.00   | 61.00   | 61.00   | 63.00   | 64.00   | 62.00   | 62.00   | 63.00   | 64.00   | 62.00   | 61.00   | 64.00   |
|                      | Chinese Bonds                  |         |         | 65.00   | 65.00   | 59.00   | 60.00   | 64.00   | 60.00   | 58.00   | 62.00   | 65.00   | 60.00   | 58.00   | 59.00   | 66.00   | 60.00   | 58.00   | 60.00   |
|                      | Other Credit Bonds             | 62.94   | 62.50   | 63.83   | 62.75   | 62.00   | 63.55   | 63.96   | 63.12   | 62.18   | 62.39   | 65.11   | 63.24   | 63.29   | 62.32   | 65.20   | 62.87   | 62.00   | 63.00   |
|                      | <b>Derivatives</b>             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                      | <b>Total</b>                   | 62.80   | 62.59   | 63.77   | 62.82   | 61.88   | 63.51   | 64.08   | 62.82   | 61.95   | 62.57   | 64.98   | 62.91   | 62.97   | 62.54   | 65.05   | 62.90   | 61.91   | 63.11   |
|                      | Swaps                          | 62.80   | 62.59   | 63.77   | 62.82   | 61.88   | 63.51   | 64.08   | 62.82   | 61.95   | 62.57   | 64.98   | 62.91   | 62.97   | 62.54   | 65.05   | 62.90   | 61.91   | 63.11   |
| <b>Equities</b>      | <b>Total</b>                   | 62.53   | 62.69   | 63.55   | 63.23   | 61.40   | 63.67   | 63.79   | 63.54   | 61.76   | 62.58   | 64.82   | 64.00   | 62.46   | 62.74   | 64.52   | 64.00   | 61.55   | 62.76   |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                      | <b>Total</b>                   | 62.56   | 62.71   | 63.55   | 63.21   | 61.42   | 63.70   | 63.62   | 63.49   | 61.67   | 62.63   | 64.78   | 64.00   | 62.58   | 62.71   | 64.59   | 64.00   | 61.66   | 62.71   |
|                      | U.S. ETFs                      | 62.00   | 63.00   | 63.00   | 63.00   | 61.00   | 64.00   | 63.00   | 63.00   | 61.00   | 63.00   | 64.00   | 64.00   | 62.00   | 63.00   | 64.00   | 64.00   | 61.00   | 63.00   |
|                      | European ETFs                  | 64.00   | 62.00   | 65.00   | 64.00   | 63.00   | 63.00   | 65.00   | 65.00   | 63.00   | 62.00   | 66.00   | 64.00   | 64.00   | 62.00   | 66.00   | 64.00   | 63.00   | 62.00   |
|                      | <b>Derivatives</b>             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                      | <b>Total</b>                   | 62.48   | 62.66   | 63.55   | 63.26   | 61.36   | 63.62   | 64.00   | 63.62   | 61.89   | 62.51   | 64.90   | 64.00   | 62.32   | 62.81   | 64.43   | 64.00   | 61.42   | 62.80   |
|                      | Options / Convertibles / Swaps | 63.86   | 62.03   | 64.89   | 63.91   | 62.79   | 63.08   | 64.78   | 64.72   | 62.72   | 62.14   | 65.66   | 64.00   | 62.58   | 62.37   | 65.19   | 64.00   | 61.90   | 62.62   |
|                      | Equity Futures                 | 62.08   | 62.95   | 63.07   | 63.04   | 61.06   | 63.86   | 63.29   | 63.18   | 61.25   | 62.83   | 64.27   | 64.00   | 62.09   | 62.94   | 64.05   | 64.00   | 61.05   | 62.98   |
| <b>Money Markets</b> | <b>Total</b>                   | 62.06   | 62.97   | 63.10   | 62.11   | 61.15   | 63.91   | 63.22   | 61.39   | 61.23   | 62.89   | 64.26   | 62.22   | 62.25   | 62.83   | 64.40   | 62.41   | 61.44   | 63.56   |
|                      | <b>Cash</b>                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|                      | <b>Total</b>                   | 62.06   | 62.97   | 63.10   | 62.11   | 61.15   | 63.91   | 63.22   | 61.39   | 61.23   | 62.89   | 64.26   | 62.22   | 62.25   | 62.83   | 64.40   | 62.41   | 61.44   | 63.56   |
|                      | Repurchase Agreements (Repo)   | 62.03   | 62.98   | 63.08   | 62.11   | 61.16   | 63.91   | 63.23   | 61.41   | 61.24   | 62.89   | 64.27   | 62.23   | 62.26   | 62.82   | 64.42   | 62.43   | 61.45   | 63.55   |
|                      | Other Money Markets            | 62.20   | 62.89   | 63.19   | 62.13   | 61.14   | 63.92   | 63.13   | 61.20   | 61.12   | 62.95   | 64.13   | 62.13   | 62.13   | 62.95   | 64.12   | 62.10   | 61.12   | 63.92   |

# TRADEWEB MARKETS – 2017 MONTHLY ADV (USD mm)

| Asset Class          | Product                        | 2017    |          |         |         |         |         |         |         |           |         |          |          |
|----------------------|--------------------------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|                      |                                | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December |
| <b>Total</b>         |                                | 378,455 | 365,746  | 397,460 | 359,628 | 365,378 | 405,543 | 365,373 | 357,371 | 462,918   | 419,208 | 454,349  | 440,083  |
| <b>Rates</b>         | <b>Total</b>                   | 245,832 | 232,503  | 257,975 | 222,683 | 224,444 | 260,036 | 230,594 | 222,372 | 305,486   | 261,759 | 293,275  | 282,916  |
|                      | <b>Cash</b>                    | 199,206 | 183,698  | 183,503 | 180,404 | 173,762 | 187,841 | 179,638 | 179,890 | 202,768   | 212,330 | 210,639  | 194,843  |
|                      | <b>Total</b>                   | 199,206 | 183,698  | 183,503 | 180,404 | 173,762 | 187,841 | 179,638 | 179,890 | 202,768   | 212,330 | 210,639  | 194,843  |
|                      | U.S. Government Bonds          | 51,562  | 50,860   | 48,784  | 52,684  | 52,085  | 49,290  | 47,388  | 47,803  | 55,536    | 54,325  | 58,086   | 57,174   |
|                      | European Government Bonds      | 13,607  | 15,064   | 13,612  | 14,267  | 12,751  | 15,705  | 13,820  | 11,069  | 16,841    | 16,135  | 16,943   | 11,988   |
|                      | Mortgages                      | 132,411 | 116,407  | 119,697 | 111,905 | 107,685 | 121,404 | 116,905 | 119,731 | 128,641   | 140,427 | 133,888  | 124,366  |
|                      | Other Government Bonds         | 1,625   | 1,367    | 1,409   | 1,547   | 1,241   | 1,442   | 1,525   | 1,287   | 1,749     | 1,443   | 1,722    | 1,315    |
|                      | <b>Derivatives</b>             | 46,626  | 48,805   | 74,473  | 42,279  | 50,682  | 72,195  | 50,956  | 42,482  | 102,718   | 49,429  | 82,636   | 88,072   |
|                      | <b>Total</b>                   | 46,626  | 48,805   | 74,473  | 42,279  | 50,682  | 72,195  | 50,956  | 42,482  | 102,718   | 49,429  | 82,636   | 88,072   |
|                      | Swaps/Swaptions ≥ 1Y           | 40,513  | 46,741   | 64,573  | 40,166  | 47,679  | 63,719  | 47,752  | 41,594  | 72,028    | 46,157  | 55,209   | 84,846   |
|                      | Swaps/Swaptions < 1Y           | 5,915   | 1,745    | 9,548   | 1,795   | 2,746   | 8,242   | 3,070   | 627     | 30,425    | 2,813   | 26,921   | 3,021    |
|                      | Futures                        | 198     | 319      | 352     | 318     | 257     | 234     | 134     | 261     | 265       | 459     | 505      | 205      |
| <b>Credit</b>        | <b>Total</b>                   | 4,944   | 5,431    | 11,823  | 6,479   | 5,196   | 6,139   | 5,420   | 5,885   | 16,171    | 8,687   | 7,685    | 4,456    |
|                      | <b>Cash</b>                    | 2,120   | 2,427    | 2,390   | 2,268   | 2,425   | 2,520   | 2,696   | 2,611   | 3,028     | 3,464   | 3,526    | 2,611    |
|                      | <b>Total</b>                   | 2,120   | 2,427    | 2,390   | 2,268   | 2,425   | 2,520   | 2,696   | 2,611   | 3,028     | 3,464   | 3,526    | 2,611    |
|                      | U.S. High Grade                | 697     | 812      | 860     | 744     | 942     | 1,010   | 1,115   | 1,137   | 1,052     | 1,502   | 1,378    | 969      |
|                      | U.S. High Yield                | 196     | 217      | 176     | 140     | 152     | 153     | 139     | 136     | 158       | 183     | 281      | 131      |
|                      | European Credit                | 867     | 1,020    | 982     | 1,034   | 980     | 1,021   | 909     | 761     | 1,092     | 1,109   | 1,160    | 758      |
|                      | Municipal Bonds                | 300     | 307      | 290     | 288     | 292     | 278     | 277     | 269     | 246       | 265     | 276      | 319      |
|                      | Chinese Bonds                  |         |          |         |         |         |         | 209     | 239     | 411       | 331     | 360      | 368      |
|                      | Other Credit Bonds             | 61      | 71       | 83      | 62      | 60      | 58      | 48      | 68      | 69        | 74      | 71       | 65       |
|                      | <b>Derivatives</b>             | 2,824   | 3,005    | 9,434   | 4,211   | 2,771   | 3,619   | 2,723   | 3,274   | 13,143    | 5,223   | 4,160    | 1,845    |
|                      | <b>Total</b>                   | 2,824   | 3,005    | 9,434   | 4,211   | 2,771   | 3,619   | 2,723   | 3,274   | 13,143    | 5,223   | 4,160    | 1,845    |
|                      | Swaps                          | 2,824   | 3,005    | 9,434   | 4,211   | 2,771   | 3,619   | 2,723   | 3,274   | 13,143    | 5,223   | 4,160    | 1,845    |
| <b>Equities</b>      | <b>Total</b>                   | 4,743   | 3,663    | 4,947   | 4,702   | 4,446   | 4,444   | 3,282   | 3,760   | 5,039     | 4,700   | 6,136    | 8,033    |
|                      | <b>Cash</b>                    | 2,771   | 2,250    | 2,879   | 2,728   | 2,491   | 2,560   | 2,187   | 2,186   | 3,004     | 2,808   | 3,303    | 4,347    |
|                      | <b>Total</b>                   | 2,771   | 2,250    | 2,879   | 2,728   | 2,491   | 2,560   | 2,187   | 2,186   | 3,004     | 2,808   | 3,303    | 4,347    |
|                      | U.S. ETFs                      | 2,002   | 1,609    | 2,057   | 1,910   | 1,629   | 1,955   | 1,476   | 1,596   | 2,262     | 2,064   | 2,545    | 3,708    |
|                      | European ETFs                  | 769     | 640      | 821     | 817     | 862     | 605     | 711     | 590     | 742       | 744     | 758      | 639      |
|                      | <b>Derivatives</b>             | 1,972   | 1,413    | 2,068   | 1,974   | 1,955   | 1,884   | 1,095   | 1,574   | 2,035     | 1,892   | 2,834    | 3,687    |
|                      | <b>Total</b>                   | 1,972   | 1,413    | 2,068   | 1,974   | 1,955   | 1,884   | 1,095   | 1,574   | 2,035     | 1,892   | 2,834    | 3,687    |
|                      | Options / Convertibles / Swaps | 446     | 258      | 501     | 616     | 810     | 409     | 271     | 492     | 467       | 521     | 886      | 692      |
|                      | Equity Futures                 | 1,526   | 1,156    | 1,567   | 1,358   | 1,146   | 1,476   | 824     | 1,082   | 1,568     | 1,371   | 1,948    | 2,995    |
| <b>Money Markets</b> | <b>Total</b>                   | 122,936 | 124,149  | 122,714 | 125,763 | 131,292 | 134,924 | 126,078 | 125,354 | 136,221   | 144,062 | 147,252  | 144,679  |
|                      | <b>Cash</b>                    | 122,936 | 124,149  | 122,714 | 125,763 | 131,292 | 134,924 | 126,078 | 125,354 | 136,221   | 144,062 | 147,252  | 144,679  |
|                      | <b>Total</b>                   | 122,936 | 124,149  | 122,714 | 125,763 | 131,292 | 134,924 | 126,078 | 125,354 | 136,221   | 144,062 | 147,252  | 144,679  |
|                      | Repurchase Agreements (Repo)   | 102,556 | 103,260  | 101,323 | 104,849 | 110,404 | 114,584 | 106,572 | 106,416 | 114,954   | 123,095 | 128,011  | 124,151  |
|                      | Other Money Markets            | 20,381  | 20,889   | 21,391  | 20,915  | 20,888  | 20,340  | 19,506  | 18,938  | 21,267    | 20,966  | 19,241   | 20,527   |

# TRADEWEB MARKETS – 2018 MONTHLY ADV (USD mm)

| Asset Class   | Product                        | 2018    |          |         |         |         |         |         |         |           |         |          |          |
|---------------|--------------------------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|               |                                | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December |
| Total         |                                | 516,618 | 563,823  | 523,188 | 495,130 | 533,949 | 588,240 | 518,270 | 494,384 | 592,697   | 584,001 | 570,492  | 616,860  |
| Rates         | Total                          | 337,510 | 368,756  | 327,750 | 308,994 | 346,634 | 397,060 | 340,056 | 313,841 | 379,527   | 369,809 | 359,982  | 409,245  |
|               | Cash                           | 233,112 | 247,262  | 217,274 | 216,591 | 229,028 | 220,569 | 208,236 | 187,142 | 235,759   | 256,448 | 230,662  | 230,693  |
|               | U.S. Government Bonds          | 70,561  | 79,835   | 65,708  | 64,142  | 66,843  | 62,451  | 64,839  | 61,652  | 71,082    | 78,042  | 78,225   | 80,870   |
|               | European Government Bonds      | 19,221  | 19,705   | 20,643  | 19,723  | 22,637  | 20,643  | 17,847  | 15,455  | 20,266    | 22,650  | 20,609   | 16,719   |
|               | Mortgages                      | 141,344 | 145,699  | 128,801 | 130,575 | 137,622 | 135,528 | 123,468 | 108,350 | 142,206   | 153,631 | 129,883  | 131,431  |
|               | Other Government Bonds         | 1,987   | 2,023    | 2,122   | 2,151   | 1,926   | 1,946   | 2,083   | 1,685   | 2,205     | 2,125   | 1,946    | 1,672    |
|               | Derivatives                    | 104,398 | 121,495  | 110,475 | 92,403  | 117,606 | 176,491 | 131,820 | 126,699 | 143,768   | 113,361 | 129,320  | 178,553  |
|               | Swaps/Swaptions ≥ 1Y           | 95,656  | 104,760  | 104,579 | 86,144  | 107,912 | 135,169 | 95,672  | 95,437  | 123,470   | 105,312 | 106,276  | 168,203  |
|               | Swaps/Swaptions < 1Y           | 8,115   | 16,082   | 5,300   | 5,723   | 9,159   | 40,618  | 35,652  | 30,808  | 19,780    | 7,485   | 22,272   | 9,913    |
|               | Futures                        | 627     | 653      | 596     | 537     | 535     | 705     | 496     | 455     | 518       | 563     | 772      | 436      |
| Credit        | Total                          | 9,886   | 14,985   | 20,276  | 11,938  | 12,543  | 10,871  | 8,809   | 8,004   | 19,865    | 14,537  | 11,669   | 9,529    |
|               | Cash                           | 4,562   | 4,386    | 4,016   | 4,294   | 4,153   | 4,509   | 3,903   | 3,599   | 4,434     | 4,713   | 4,550    | 3,622    |
|               | U.S. High Grade                | 1,703   | 1,656    | 1,666   | 1,636   | 1,822   | 1,653   | 1,488   | 1,624   | 2,063     | 2,321   | 2,112    | 1,713    |
|               | U.S. High Yield                | 276     | 284      | 207     | 245     | 229     | 227     | 207     | 229     | 264       | 305     | 290      | 210      |
|               | European Credit                | 1,627   | 1,742    | 1,440   | 1,503   | 1,306   | 1,291   | 1,122   | 926     | 1,269     | 1,302   | 1,322    | 853      |
|               | Municipal Bonds                | 290     | 281      | 264     | 284     | 254     | 260     | 239     | 256     | 275       | 285     | 301      | 292      |
|               | Chinese Bonds                  | 567     | 337      | 361     | 548     | 473     | 1,015   | 783     | 516     | 499       | 441     | 487      | 518      |
|               | Other Credit Bonds             | 99      | 86       | 78      | 77      | 69      | 64      | 65      | 47      | 64        | 59      | 38       | 36       |
|               | Derivatives                    | 5,324   | 10,599   | 16,260  | 7,644   | 8,391   | 6,362   | 4,907   | 4,406   | 15,431    | 9,824   | 7,119    | 5,907    |
|               | Swaps                          | 5,324   | 10,599   | 16,260  | 7,644   | 8,391   | 6,362   | 4,907   | 4,406   | 15,431    | 9,824   | 7,119    | 5,907    |
| Equities      | Total                          | 8,096   | 12,877   | 9,193   | 7,098   | 6,306   | 7,532   | 5,110   | 5,212   | 7,251     | 9,283   | 6,799    | 9,524    |
|               | Cash                           | 4,648   | 7,285    | 5,185   | 4,193   | 3,776   | 4,052   | 2,767   | 2,814   | 4,013     | 5,833   | 4,012    | 5,755    |
|               | U.S. ETFs                      | 3,579   | 5,825    | 4,100   | 3,156   | 2,525   | 2,751   | 1,798   | 1,916   | 2,929     | 4,523   | 2,830    | 4,390    |
|               | European ETFs                  | 1,070   | 1,460    | 1,085   | 1,037   | 1,251   | 1,301   | 970     | 898     | 1,083     | 1,310   | 1,182    | 1,365    |
|               | Derivatives                    | 3,448   | 5,592    | 4,008   | 2,905   | 2,530   | 3,479   | 2,342   | 2,398   | 3,238     | 3,451   | 2,788    | 3,770    |
|               | Options / Convertibles / Swaps | 948     | 841      | 473     | 672     | 904     | 1,190   | 1,285   | 1,343   | 1,117     | 837     | 1,150    | 894      |
|               | Equity Futures                 | 2,500   | 4,751    | 3,535   | 2,233   | 1,626   | 2,289   | 1,057   | 1,055   | 2,121     | 2,614   | 1,638    | 2,876    |
| Money Markets | Total                          | 161,126 | 167,206  | 165,969 | 167,100 | 168,465 | 172,778 | 164,295 | 167,326 | 186,054   | 190,372 | 192,041  | 188,561  |
|               | Cash                           | 161,126 | 167,206  | 165,969 | 167,100 | 168,465 | 172,778 | 164,295 | 167,326 | 186,054   | 190,372 | 192,041  | 188,561  |
|               | Repurchase Agreements (Repo)   | 138,855 | 142,285  | 142,027 | 146,622 | 147,153 | 148,621 | 144,277 | 148,365 | 165,366   | 168,780 | 173,075  | 168,517  |
|               | Other Money Markets            | 22,271  | 24,921   | 23,942  | 20,477  | 21,312  | 24,157  | 20,019  | 18,961  | 20,688    | 21,592  | 18,966   | 20,045   |

# TRADEWEB MARKETS – 2019 MONTHLY ADV (USD mm)

| Asset Class          | Product                        | 2019    |          |         |         |         |         |         |         |           |         |          |          |
|----------------------|--------------------------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|                      |                                | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December |
| <b>Total</b>         |                                | 623,373 | 602,595  | 708,063 | 666,051 | 738,212 | 857,592 | 751,296 | 829,376 | 874,898   | 706,987 | 698,716  | 652,024  |
| <b>Rates</b>         | <b>Total</b>                   | 410,036 | 395,915  | 479,430 | 441,812 | 490,485 | 602,065 | 507,620 | 580,607 | 606,087   | 480,572 | 462,427  | 410,962  |
|                      | <b>Cash</b>                    | 268,614 | 263,055  | 292,256 | 271,455 | 262,327 | 303,149 | 255,207 | 286,051 | 315,298   | 279,825 | 283,689  | 240,225  |
|                      | U.S. Government Bonds          | 79,656  | 82,807   | 83,986  | 76,248  | 79,991  | 86,010  | 73,129  | 85,478  | 88,328    | 77,945  | 81,310   | 72,133   |
|                      | European Government Bonds      | 21,934  | 22,397   | 24,791  | 22,155  | 21,072  | 25,564  | 23,875  | 20,982  | 25,324    | 20,350  | 21,517   | 16,864   |
|                      | Mortgages                      | 164,445 | 153,885  | 179,321 | 169,041 | 157,660 | 188,047 | 154,881 | 175,882 | 197,684   | 178,055 | 178,001  | 148,270  |
|                      | Other Government Bonds         | 2,578   | 3,966    | 4,158   | 4,010   | 3,604   | 3,528   | 3,323   | 3,709   | 3,962     | 3,475   | 2,861    | 2,958    |
|                      | <b>Derivatives</b>             | 141,422 | 132,859  | 187,174 | 170,357 | 228,158 | 298,916 | 252,413 | 294,556 | 290,789   | 200,747 | 178,738  | 170,737  |
|                      | Swaps/Swaptions ≥ 1Y           | 127,301 | 127,695  | 171,050 | 102,504 | 117,092 | 184,678 | 141,058 | 137,335 | 167,672   | 143,516 | 141,241  | 131,802  |
|                      | Swaps/Swaptions < 1Y           | 13,480  | 4,806    | 15,632  | 67,417  | 110,101 | 113,599 | 110,935 | 156,524 | 122,483   | 56,758  | 36,823   | 38,152   |
|                      | Futures                        | 642     | 358      | 493     | 437     | 965     | 640     | 419     | 698     | 633       | 473     | 674      | 783      |
| <b>Credit</b>        | <b>Total</b>                   | 12,798  | 11,804   | 24,365  | 10,897  | 11,432  | 14,544  | 10,168  | 14,642  | 27,716    | 16,377  | 13,121   | 9,986    |
|                      | <b>Cash</b>                    | 5,612   | 5,926    | 5,407   | 5,597   | 5,140   | 6,064   | 5,332   | 5,033   | 6,050     | 6,443   | 6,728    | 4,942    |
|                      | U.S. High Grade                | 2,736   | 2,922    | 2,789   | 2,949   | 2,489   | 2,952   | 2,400   | 2,139   | 2,952     | 3,173   | 3,518    | 3,009    |
|                      | U.S. High Yield                | 391     | 355      | 244     | 271     | 255     | 327     | 345     | 278     | 367       | 359     | 377      | 339      |
|                      | European Credit                | 1,277   | 1,340    | 1,348   | 1,295   | 1,173   | 1,404   | 1,316   | 949     | 1,346     | 1,366   | 1,517    | 991      |
|                      | Municipal Bonds                | 275     | 291      | 272     | 254     | 244     | 250     | 218     | 231     | 227       | 217     | 223      | 211      |
|                      | Chinese Bonds                  | 885     | 957      | 689     | 766     | 919     | 1,074   | 1,000   | 1,381   | 1,092     | 1,265   | 1,039    | 344      |
|                      | Other Credit Bonds             | 47      | 61       | 64      | 62      | 61      | 56      | 53      | 54      | 66        | 64      | 55       | 48       |
|                      | <b>Derivatives</b>             | 7,186   | 5,877    | 18,958  | 5,300   | 6,292   | 8,480   | 4,835   | 9,609   | 21,667    | 9,935   | 6,392    | 5,044    |
|                      | Swaps                          | 7,186   | 5,877    | 18,958  | 5,300   | 6,292   | 8,480   | 4,835   | 9,609   | 21,667    | 9,935   | 6,392    | 5,044    |
| <b>Equities</b>      | <b>Total</b>                   | 8,041   | 7,071    | 8,145   | 7,166   | 6,313   | 7,958   | 5,305   | 7,691   | 9,190     | 7,343   | 8,843    | 10,967   |
|                      | <b>Cash</b>                    | 4,902   | 4,223    | 4,280   | 3,969   | 3,881   | 4,526   | 3,246   | 5,044   | 5,282     | 3,695   | 4,183    | 5,832    |
|                      | U.S. ETFs                      | 3,442   | 2,538    | 2,916   | 2,497   | 2,355   | 2,938   | 1,740   | 3,183   | 3,398     | 2,288   | 2,544    | 4,136    |
|                      | European ETFs                  | 1,460   | 1,685    | 1,364   | 1,473   | 1,527   | 1,589   | 1,506   | 1,861   | 1,884     | 1,406   | 1,639    | 1,696    |
|                      | <b>Derivatives</b>             | 3,139   | 2,848    | 3,865   | 3,197   | 2,431   | 3,432   | 2,059   | 2,647   | 3,908     | 3,648   | 4,660    | 5,135    |
|                      | Options / Convertibles / Swaps | 1,195   | 1,615    | 1,528   | 1,780   | 1,171   | 1,280   | 1,356   | 1,003   | 1,471     | 2,364   | 3,187    | 2,401    |
|                      | Equity Futures                 | 1,944   | 1,234    | 2,337   | 1,417   | 1,260   | 2,152   | 703     | 1,644   | 2,437     | 1,285   | 1,474    | 2,734    |
| <b>Money Markets</b> | <b>Total</b>                   | 192,499 | 187,806  | 196,123 | 206,176 | 229,982 | 233,025 | 228,203 | 226,436 | 231,904   | 202,694 | 214,325  | 220,108  |
|                      | <b>Cash</b>                    | 192,499 | 187,806  | 196,123 | 206,176 | 229,982 | 233,025 | 228,203 | 226,436 | 231,904   | 202,694 | 214,325  | 220,108  |
|                      | Repurchase Agreements (Repo)   | 172,928 | 169,628  | 177,706 | 188,068 | 211,514 | 213,151 | 211,175 | 208,345 | 213,482   | 184,153 | 196,118  | 202,450  |
|                      | Other Money Markets            | 19,571  | 18,178   | 18,417  | 18,108  | 18,468  | 19,873  | 17,028  | 18,091  | 18,423    | 18,541  | 18,207   | 17,659   |



# TRADEWEB MARKETS – 2020 MONTHLY ADV (USD mm)

| Asset Class          | Product                        | 2020    |          |           |         |         |         |         |         |           |         |          |          |
|----------------------|--------------------------------|---------|----------|-----------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|                      |                                | January | February | March     | April   | May     | June    | July    | August  | September | October | November | December |
| <b>Total</b>         |                                | 801,420 | 885,011  | 1,001,529 | 762,963 | 791,493 | 780,924 | 724,614 | 746,829 | 870,446   | 904,525 | 958,689  | 834,473  |
| <b>Rates</b>         | <b>Total</b>                   | 521,837 | 578,563  | 668,515   | 494,657 | 524,683 | 501,700 | 444,827 | 469,838 | 556,548   | 538,807 | 582,163  | 494,929  |
|                      | <b>Cash</b>                    | 325,969 | 349,980  | 349,341   | 294,970 | 301,003 | 297,039 | 301,746 | 314,076 | 317,627   | 330,453 | 357,616  | 299,164  |
|                      | <b>Total</b>                   | 325,969 | 349,980  | 349,341   | 294,970 | 301,003 | 297,039 | 301,746 | 314,076 | 317,627   | 330,453 | 357,616  | 299,164  |
|                      | U.S. Government Bonds          | 87,737  | 96,610   | 96,366    | 88,955  | 91,781  | 95,852  | 83,673  | 87,375  | 89,977    | 83,886  | 100,139  | 91,965   |
|                      | European Government Bonds      | 26,756  | 25,835   | 31,559    | 27,344  | 25,745  | 28,123  | 23,634  | 22,182  | 27,068    | 27,327  | 26,972   | 20,414   |
|                      | Mortgages                      | 207,390 | 223,086  | 215,130   | 173,879 | 178,900 | 168,375 | 190,812 | 200,606 | 196,784   | 214,979 | 226,447  | 183,407  |
|                      | Other Government Bonds         | 4,085   | 4,448    | 6,286     | 4,792   | 4,577   | 4,689   | 3,627   | 3,912   | 3,798     | 4,262   | 4,058    | 3,378    |
|                      | <b>Derivatives</b>             | 195,868 | 228,583  | 319,174   | 199,686 | 223,680 | 204,661 | 143,081 | 155,762 | 238,921   | 208,354 | 224,547  | 195,765  |
|                      | <b>Total</b>                   | 195,868 | 228,583  | 319,174   | 199,686 | 223,680 | 204,661 | 143,081 | 155,762 | 238,921   | 208,354 | 224,547  | 195,765  |
|                      | Swaps/Swaptions ≥ 1Y           | 140,767 | 140,486  | 193,880   | 144,608 | 129,443 | 148,044 | 87,779  | 122,290 | 158,231   | 120,588 | 161,049  | 147,919  |
|                      | Swaps/Swaptions < 1Y           | 54,446  | 87,335   | 124,857   | 54,683  | 93,832  | 56,233  | 55,018  | 33,040  | 80,213    | 87,194  | 62,786   | 47,502   |
|                      | Futures                        | 656     | 762      | 437       | 395     | 405     | 385     | 284     | 431     | 478       | 572     | 712      | 343      |
| <b>Credit</b>        | <b>Total</b>                   | 15,749  | 27,863   | 54,352    | 20,173  | 14,703  | 18,851  | 13,191  | 11,598  | 33,928    | 20,292  | 21,276   | 12,451   |
|                      | <b>Cash</b>                    | 7,166   | 7,329    | 7,255     | 7,504   | 7,887   | 8,071   | 7,090   | 6,519   | 7,484     | 8,471   | 9,281    | 7,281    |
|                      | <b>Total</b>                   | 7,166   | 7,329    | 7,255     | 7,504   | 7,887   | 8,071   | 7,090   | 6,519   | 7,484     | 8,471   | 9,281    | 7,281    |
|                      | U.S. High Grade                | 3,960   | 3,985    | 3,785     | 4,451   | 4,834   | 4,682   | 3,847   | 3,678   | 3,938     | 4,667   | 4,895    | 3,696    |
|                      | U.S. High Yield                | 434     | 543      | 486       | 534     | 481     | 446     | 387     | 342     | 489       | 557     | 672      | 590      |
|                      | European Credit                | 1,706   | 1,763    | 1,515     | 1,463   | 1,186   | 1,437   | 1,188   | 969     | 1,643     | 1,591   | 1,814    | 1,216    |
|                      | Municipal Bonds                | 227     | 236      | 394       | 290     | 239     | 213     | 202     | 192     | 208       | 210     | 187      | 200      |
|                      | Chinese Bonds                  | 770     | 741      | 1,026     | 711     | 1,096   | 1,248   | 1,409   | 1,287   | 1,129     | 1,348   | 1,639    | 1,481    |
|                      | Other Credit Bonds             | 69      | 61       | 49        | 55      | 51      | 46      | 56      | 51      | 76        | 98      | 75       | 97       |
|                      | <b>Derivatives</b>             | 8,583   | 20,533   | 47,096    | 12,669  | 6,816   | 10,780  | 6,100   | 5,079   | 26,444    | 11,821  | 11,995   | 5,170    |
|                      | <b>Total</b>                   | 8,583   | 20,533   | 47,096    | 12,669  | 6,816   | 10,780  | 6,100   | 5,079   | 26,444    | 11,821  | 11,995   | 5,170    |
|                      | Swaps                          | 8,583   | 20,533   | 47,096    | 12,669  | 6,816   | 10,780  | 6,100   | 5,079   | 26,444    | 11,821  | 11,995   | 5,170    |
| <b>Equities</b>      | <b>Total</b>                   | 10,704  | 19,300   | 23,326    | 10,143  | 8,566   | 11,142  | 8,001   | 6,955   | 12,280    | 11,620  | 13,806   | 11,870   |
|                      | <b>Cash</b>                    | 5,249   | 8,208    | 13,958    | 6,609   | 5,393   | 6,911   | 5,018   | 4,279   | 7,039     | 6,441   | 7,494    | 6,573    |
|                      | <b>Total</b>                   | 5,249   | 8,208    | 13,958    | 6,609   | 5,393   | 6,911   | 5,018   | 4,279   | 7,039     | 6,441   | 7,494    | 6,573    |
|                      | U.S. ETFs                      | 3,582   | 5,790    | 9,974     | 4,749   | 3,782   | 4,857   | 3,268   | 2,920   | 5,388     | 4,679   | 4,771    | 4,528    |
|                      | European ETFs                  | 1,667   | 2,418    | 3,984     | 1,860   | 1,612   | 2,054   | 1,750   | 1,359   | 1,650     | 1,762   | 2,723    | 2,045    |
|                      | <b>Derivatives</b>             | 5,455   | 11,092   | 9,368     | 3,533   | 3,173   | 4,231   | 2,983   | 2,676   | 5,241     | 5,180   | 6,312    | 5,297    |
|                      | <b>Total</b>                   | 5,455   | 11,092   | 9,368     | 3,533   | 3,173   | 4,231   | 2,983   | 2,676   | 5,241     | 5,180   | 6,312    | 5,297    |
|                      | Options / Convertibles / Swaps | 3,478   | 7,111    | 1,713     | 473     | 942     | 1,113   | 1,058   | 929     | 1,583     | 2,299   | 3,367    | 2,329    |
|                      | Equity Futures                 | 1,976   | 3,981    | 7,655     | 3,060   | 2,230   | 3,118   | 1,926   | 1,746   | 3,658     | 2,881   | 2,945    | 2,968    |
| <b>Money Markets</b> | <b>Total</b>                   | 253,131 | 259,287  | 255,336   | 237,991 | 243,541 | 249,231 | 258,595 | 258,438 | 267,690   | 333,805 | 341,444  | 315,225  |
|                      | <b>Cash</b>                    | 253,131 | 259,287  | 255,336   | 237,991 | 243,541 | 249,231 | 258,595 | 258,438 | 267,690   | 333,805 | 341,444  | 315,225  |
|                      | <b>Total</b>                   | 253,131 | 259,287  | 255,336   | 237,991 | 243,541 | 249,231 | 258,595 | 258,438 | 267,690   | 333,805 | 341,444  | 315,225  |
|                      | Repurchase Agreements (Repo)   | 233,593 | 242,355  | 235,119   | 222,683 | 231,326 | 238,556 | 248,457 | 245,763 | 255,779   | 322,280 | 330,411  | 304,536  |
|                      | Other Money Markets            | 19,538  | 16,932   | 20,217    | 15,307  | 12,214  | 10,675  | 10,138  | 12,675  | 11,911    | 11,525  | 11,034   | 10,689   |

# TRADEWEB MARKETS – 2021 MONTHLY ADV (USD mm)

| Asset Class          | Product                        | 2021      |           |           |         |         |           |         |        |           |         |          |          |
|----------------------|--------------------------------|-----------|-----------|-----------|---------|---------|-----------|---------|--------|-----------|---------|----------|----------|
|                      |                                | January   | February  | March     | April   | May     | June      | July    | August | September | October | November | December |
| <b>Total</b>         |                                | 1,037,806 | 1,060,148 | 1,074,674 | 897,001 | 980,393 | 1,052,031 | 972,200 |        |           |         |          |          |
| <b>Rates</b>         | <b>Total</b>                   | 661,829   | 668,393   | 666,904   | 521,598 | 563,565 | 638,977   | 579,919 |        |           |         |          |          |
|                      | <b>Cash</b>                    |           |           |           |         |         |           |         |        |           |         |          |          |
|                      | <b>Total</b>                   | 399,518   | 389,524   | 351,522   | 300,467 | 326,240 | 330,834   | 339,380 |        |           |         |          |          |
|                      | U.S. Government Bonds          | 114,472   | 117,302   | 113,397   | 95,796  | 105,036 | 119,416   | 116,090 |        |           |         |          |          |
|                      | European Government Bonds      | 30,297    | 33,651    | 30,986    | 28,383  | 30,902  | 32,102    | 29,542  |        |           |         |          |          |
|                      | Mortgages                      | 249,084   | 233,227   | 201,938   | 171,764 | 186,460 | 175,294   | 190,004 |        |           |         |          |          |
|                      | Other Government Bonds         | 5,665     | 5,345     | 5,201     | 4,524   | 3,841   | 4,021     | 3,745   |        |           |         |          |          |
|                      | <b>Derivatives</b>             |           |           |           |         |         |           |         |        |           |         |          |          |
|                      | <b>Total</b>                   | 262,311   | 278,869   | 315,382   | 221,131 | 237,325 | 308,143   | 240,539 |        |           |         |          |          |
|                      | Swaps/Swaptions ≥ 1Y           | 145,403   | 171,248   | 222,073   | 138,487 | 151,029 | 205,574   | 151,311 |        |           |         |          |          |
|                      | Swaps/Swaptions < 1Y           | 116,272   | 106,615   | 92,418    | 81,964  | 85,499  | 101,508   | 88,337  |        |           |         |          |          |
|                      | Futures                        | 636       | 1,006     | 890       | 680     | 797     | 1,061     | 891     |        |           |         |          |          |
| <b>Credit</b>        | <b>Total</b>                   | 20,329    | 19,301    | 39,343    | 19,137  | 17,568  | 17,514    | 16,205  |        |           |         |          |          |
|                      | <b>Cash</b>                    |           |           |           |         |         |           |         |        |           |         |          |          |
|                      | <b>Total</b>                   | 10,819    | 9,977     | 10,313    | 9,383   | 9,103   | 10,036    | 8,737   |        |           |         |          |          |
|                      | U.S. High Grade                | 5,864     | 5,324     | 5,544     | 5,162   | 4,877   | 5,192     | 4,230   |        |           |         |          |          |
|                      | U.S. High Yield                | 722       | 876       | 857       | 881     | 773     | 850       | 856     |        |           |         |          |          |
|                      | European Credit                | 2,021     | 2,059     | 2,111     | 1,912   | 1,740   | 2,064     | 1,943   |        |           |         |          |          |
|                      | Municipal Bonds                | 204       | 208       | 201       | 188     | 191     | 200       | 172     |        |           |         |          |          |
|                      | Chinese Bonds                  | 1,874     | 1,400     | 1,477     | 1,131   | 1,426   | 1,570     | 1,409   |        |           |         |          |          |
|                      | Other Credit Bonds             | 134       | 110       | 123       | 110     | 96      | 159       | 127     |        |           |         |          |          |
|                      | <b>Derivatives</b>             |           |           |           |         |         |           |         |        |           |         |          |          |
|                      | <b>Total</b>                   | 9,511     | 9,324     | 29,030    | 9,754   | 8,465   | 7,479     | 7,468   |        |           |         |          |          |
|                      | Swaps                          | 9,511     | 9,324     | 29,030    | 9,754   | 8,465   | 7,479     | 7,468   |        |           |         |          |          |
| <b>Equities</b>      | <b>Total</b>                   | 14,818    | 14,352    | 18,818    | 16,147  | 16,828  | 15,261    | 16,051  |        |           |         |          |          |
|                      | <b>Cash</b>                    |           |           |           |         |         |           |         |        |           |         |          |          |
|                      | <b>Total</b>                   | 8,718     | 8,039     | 10,086    | 8,739   | 8,015   | 7,967     | 8,706   |        |           |         |          |          |
|                      | U.S. ETFs                      | 5,636     | 5,222     | 7,066     | 6,399   | 5,731   | 5,534     | 6,188   |        |           |         |          |          |
|                      | European ETFs                  | 3,081     | 2,817     | 3,021     | 2,340   | 2,284   | 2,432     | 2,518   |        |           |         |          |          |
|                      | <b>Derivatives</b>             |           |           |           |         |         |           |         |        |           |         |          |          |
|                      | <b>Total</b>                   | 6,100     | 6,313     | 8,732     | 7,408   | 8,813   | 7,294     | 7,345   |        |           |         |          |          |
|                      | Options / Convertibles / Swaps | 2,829     | 2,847     | 3,414     | 2,886   | 4,931   | 3,780     | 3,746   |        |           |         |          |          |
|                      | Equity Futures                 | 3,271     | 3,466     | 5,318     | 4,522   | 3,882   | 3,514     | 3,599   |        |           |         |          |          |
| <b>Money Markets</b> | <b>Total</b>                   | 340,830   | 358,101   | 349,609   | 340,119 | 382,432 | 380,279   | 360,024 |        |           |         |          |          |
|                      | <b>Cash</b>                    |           |           |           |         |         |           |         |        |           |         |          |          |
|                      | <b>Total</b>                   | 340,830   | 358,101   | 349,609   | 340,119 | 382,432 | 380,279   | 360,024 |        |           |         |          |          |
|                      | Repurchase Agreements (Repo)   | 328,445   | 343,832   | 334,506   | 326,339 | 369,316 | 366,371   | 345,052 |        |           |         |          |          |
|                      | Other Money Markets            | 12,386    | 14,269    | 15,103    | 13,780  | 13,116  | 13,908    | 14,972  |        |           |         |          |          |

# TRADEWEB MARKETS – 2017 MONTHLY VOLUMES (USD mm)

| Asset Class   |  | Product                        | 2017      |           |           |           |           |           |           |           |           |           |           |           |
|---------------|--|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|               |  |                                | January   | February  | March     | April     | May       | June      | July      | August    | September | October   | November  | December  |
| Total         |  |                                | 7,595,189 | 6,984,104 | 9,139,391 | 6,801,442 | 8,034,772 | 8,921,942 | 7,346,624 | 8,216,954 | 9,334,315 | 8,849,953 | 9,591,440 | 8,798,953 |
| Rates         |  | Total                          | 4,936,606 | 4,445,137 | 5,931,247 | 4,207,807 | 4,934,221 | 5,720,783 | 4,641,837 | 5,111,970 | 6,170,231 | 5,526,675 | 6,194,228 | 5,655,234 |
|               |  | Cash                           | 3,997,798 | 3,506,524 | 4,220,085 | 3,413,077 | 3,821,915 | 4,132,503 | 3,607,445 | 4,137,106 | 4,073,167 | 4,475,929 | 4,440,737 | 3,897,393 |
|               |  | U.S. Government Bonds          | 1,031,247 | 966,333   | 1,122,033 | 1,001,000 | 1,145,881 | 1,084,389 | 947,754   | 1,099,461 | 1,110,729 | 1,140,830 | 1,219,810 | 1,143,481 |
|               |  | European Government Bonds      | 285,757   | 301,288   | 313,087   | 256,811   | 280,519   | 345,508   | 290,225   | 254,587   | 353,669   | 354,970   | 372,740   | 239,765   |
|               |  | Mortgages                      | 2,648,225 | 2,211,724 | 2,753,040 | 2,126,203 | 2,369,073 | 2,670,881 | 2,338,110 | 2,753,823 | 2,572,828 | 2,948,974 | 2,811,638 | 2,487,326 |
|               |  | Other Government Bonds         | 32,569    | 27,179    | 31,925    | 29,064    | 26,443    | 31,724    | 31,357    | 29,235    | 35,941    | 31,155    | 36,549    | 26,821    |
|               |  | Derivatives                    | 938,807   | 938,613   | 1,711,161 | 794,730   | 1,112,307 | 1,588,281 | 1,034,392 | 974,864   | 2,097,064 | 1,050,746 | 1,753,491 | 1,757,841 |
|               |  | Swaps/Swaptions ≥ 1Y           | 816,130   | 898,481   | 1,483,457 | 755,224   | 1,046,249 | 1,401,808 | 968,027   | 954,433   | 1,458,455 | 980,356   | 1,175,015 | 1,693,363 |
|               |  | Swaps/Swaptions < 1Y           | 118,720   | 34,068    | 219,611   | 33,459    | 60,403    | 181,327   | 63,695    | 14,431    | 633,299   | 60,749    | 567,861   | 60,376    |
|               |  | Futures                        | 3,957     | 6,064     | 8,093     | 6,047     | 5,654     | 5,146     | 2,670     | 6,000     | 5,310     | 9,641     | 10,615    | 4,102     |
| Credit        |  | Total                          | 100,719   | 105,616   | 271,936   | 120,360   | 114,314   | 135,060   | 110,518   | 135,352   | 330,184   | 185,599   | 164,947   | 89,483    |
|               |  | Cash                           | 43,298    | 47,162    | 54,959    | 42,038    | 53,360    | 55,440    | 55,065    | 60,044    | 62,106    | 74,216    | 75,584    | 52,579    |
|               |  | U.S. High Grade                | 13,935    | 15,420    | 19,775    | 14,144    | 20,733    | 22,223    | 22,297    | 26,161    | 21,049    | 31,547    | 28,942    | 19,382    |
|               |  | U.S. High Yield                | 3,918     | 4,122     | 4,042     | 2,668     | 3,339     | 3,364     | 2,773     | 3,120     | 3,158     | 3,834     | 5,896     | 2,616     |
|               |  | European Credit                | 18,198    | 20,391    | 22,575    | 18,617    | 21,555    | 22,461    | 19,094    | 17,505    | 22,931    | 24,388    | 25,524    | 15,164    |
|               |  | Municipal Bonds                | 6,007     | 5,840     | 6,667     | 5,463     | 6,417     | 6,119     | 5,535     | 6,189     | 4,922     | 5,571     | 5,793     | 6,379     |
|               |  | Chinese Bonds                  |           |           |           |           |           |           | 4,382     | 5,500     | 8,641     | 7,285     | 7,917     | 7,737     |
|               |  | Other Credit Bonds             | 1,240     | 1,389     | 1,901     | 1,146     | 1,316     | 1,274     | 985       | 1,569     | 1,405     | 1,592     | 1,512     | 1,301     |
|               |  | Derivatives                    | 57,421    | 58,453    | 216,977   | 78,323    | 60,953    | 79,620    | 55,453    | 75,307    | 268,079   | 111,384   | 89,363    | 36,904    |
|               |  | Swaps                          | 57,421    | 58,453    | 216,977   | 78,323    | 60,953    | 79,620    | 55,453    | 75,307    | 268,079   | 111,384   | 89,363    | 36,904    |
| Equities      |  | Total                          | 96,072    | 70,455    | 113,776   | 87,883    | 97,819    | 97,776    | 66,620    | 86,484    | 102,063   | 103,399   | 130,451   | 160,663   |
|               |  | Cash                           | 56,189    | 43,386    | 66,214    | 51,009    | 54,799    | 56,320    | 44,459    | 50,281    | 60,818    | 61,780    | 70,111    | 86,931    |
|               |  | U.S. ETFs                      | 40,042    | 30,577    | 47,322    | 36,299    | 35,834    | 43,003    | 29,526    | 36,719    | 45,234    | 45,410    | 53,441    | 74,153    |
|               |  | European ETFs                  | 16,147    | 12,809    | 18,892    | 14,710    | 18,965    | 13,317    | 14,932    | 13,562    | 15,584    | 16,370    | 16,669    | 12,778    |
|               |  | Derivatives                    | 39,883    | 27,069    | 47,562    | 36,874    | 43,021    | 41,456    | 22,161    | 36,203    | 41,245    | 41,619    | 60,340    | 73,732    |
|               |  | Options / Convertibles / Swaps | 9,339     | 5,101     | 11,513    | 11,116    | 17,811    | 8,989     | 5,666     | 11,327    | 9,783     | 11,466    | 19,419    | 13,842    |
|               |  | Equity Futures                 | 30,544    | 21,967    | 36,049    | 25,758    | 25,209    | 32,467    | 16,495    | 24,876    | 31,462    | 30,153    | 40,921    | 59,890    |
| Money Markets |  | Total                          | 2,461,792 | 2,362,896 | 2,822,432 | 2,385,392 | 2,888,417 | 2,968,322 | 2,527,649 | 2,883,149 | 2,731,837 | 3,034,280 | 3,101,814 | 2,893,573 |
|               |  | Cash                           | 2,461,792 | 2,362,896 | 2,822,432 | 2,385,392 | 2,888,417 | 2,968,322 | 2,527,649 | 2,883,149 | 2,731,837 | 3,034,280 | 3,101,814 | 2,893,573 |
|               |  | Repurchase Agreements (Repo)   | 2,052,268 | 1,963,913 | 2,330,431 | 1,990,362 | 2,428,890 | 2,520,847 | 2,135,661 | 2,447,578 | 2,304,671 | 2,592,714 | 2,696,422 | 2,483,027 |
|               |  | Other Money Markets            | 409,524   | 398,983   | 492,001   | 395,030   | 459,527   | 447,475   | 391,988   | 435,571   | 427,166   | 441,566   | 405,392   | 410,547   |

# TRADEWEB MARKETS – 2018 MONTHLY VOLUMES (USD mm)

| Asset Class          | Product                               | 2018       |            |            |            |            |            |            |            |            |            |            |            |
|----------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                      |                                       | January    | February   | March      | April      | May        | June       | July       | August     | September  | October    | November   | December   |
| <b>Total</b>         |                                       | 10,917,630 | 10,790,305 | 10,987,312 | 10,314,915 | 11,744,494 | 12,352,030 | 10,973,480 | 11,368,936 | 11,371,281 | 12,954,617 | 11,630,901 | 11,830,687 |
| <b>Rates</b>         | <b>Total</b>                          | 7,138,660  | 7,063,997  | 6,882,748  | 6,428,638  | 7,623,573  | 8,338,256  | 7,204,178  | 7,216,461  | 7,290,193  | 8,210,661  | 7,355,521  | 7,866,110  |
|                      | <b>Cash</b>                           | 4,914,218  | 4,718,939  | 4,562,763  | 4,526,668  | 5,037,937  | 4,631,946  | 4,391,851  | 4,304,277  | 4,499,919  | 5,665,577  | 4,657,143  | 4,400,596  |
|                      | <b>U.S. Government Bonds</b>          | 1,481,778  | 1,516,860  | 1,379,877  | 1,346,985  | 1,470,549  | 1,311,481  | 1,361,610  | 1,418,004  | 1,350,556  | 1,716,932  | 1,564,492  | 1,536,532  |
|                      | <b>European Government Bonds</b>      | 422,852    | 394,094    | 433,504    | 394,452    | 498,006    | 433,510    | 392,625    | 355,463    | 405,330    | 520,941    | 453,407    | 334,382    |
|                      | <b>Mortgages</b>                      | 2,968,223  | 2,768,289  | 2,704,816  | 2,742,074  | 3,027,687  | 2,846,083  | 2,592,836  | 2,492,054  | 2,701,910  | 3,379,880  | 2,597,650  | 2,497,190  |
|                      | <b>Other Government Bonds</b>         | 41,365     | 39,695     | 44,565     | 43,156     | 41,695     | 40,872     | 44,779     | 38,757     | 42,123     | 47,825     | 41,594     | 32,492     |
|                      | <b>Derivatives</b>                    | 2,224,442  | 2,345,059  | 2,319,985  | 1,901,971  | 2,585,636  | 3,706,310  | 2,812,327  | 2,912,185  | 2,790,274  | 2,545,083  | 2,698,377  | 3,465,515  |
|                      | <b>Swaps/Swaptions ≥ 1Y</b>           | 2,038,997  | 2,026,183  | 2,196,158  | 1,775,410  | 2,372,362  | 2,838,541  | 2,047,483  | 2,193,177  | 2,395,195  | 2,363,293  | 2,224,092  | 3,261,682  |
|                      | <b>Swaps/Swaptions &lt; 1Y</b>        | 172,289    | 306,462    | 111,301    | 115,291    | 201,508    | 852,975    | 754,412    | 708,548    | 385,226    | 169,390    | 458,840    | 195,543    |
|                      | <b>Futures</b>                        | 13,157     | 12,413     | 12,526     | 11,270     | 11,766     | 14,795     | 10,432     | 10,460     | 9,852      | 12,401     | 15,445     | 8,290      |
| <b>Credit</b>        | <b>Total</b>                          | 212,086    | 288,789    | 426,159    | 244,191    | 275,950    | 227,273    | 189,588    | 184,095    | 387,034    | 324,098    | 243,664    | 184,743    |
|                      | <b>Cash</b>                           | 98,056     | 83,767     | 84,696     | 86,982     | 91,358     | 93,677     | 83,899     | 82,766     | 85,540     | 103,253    | 94,667     | 70,202     |
|                      | <b>U.S. High Grade</b>                | 35,764     | 31,459     | 34,981     | 34,361     | 40,079     | 34,713     | 31,239     | 37,344     | 39,193     | 51,064     | 42,244     | 32,538     |
|                      | <b>U.S. High Yield</b>                | 5,796      | 5,392      | 4,343      | 5,139      | 5,045      | 4,758      | 4,341      | 5,278      | 5,017      | 6,710      | 5,802      | 3,994      |
|                      | <b>European Credit</b>                | 35,804     | 34,831     | 30,250     | 30,065     | 28,727     | 27,114     | 24,673     | 21,295     | 25,389     | 29,942     | 29,091     | 17,067     |
|                      | <b>Municipal Bonds</b>                | 6,082      | 5,343      | 5,549      | 5,969      | 5,580      | 5,452      | 5,023      | 5,887      | 5,224      | 6,263      | 6,020      | 5,548      |
|                      | <b>Chinese Bonds</b>                  | 12,483     | 5,062      | 7,936      | 9,872      | 10,410     | 20,293     | 17,225     | 11,872     | 9,474      | 7,938      | 10,714     | 10,361     |
|                      | <b>Other Credit Bonds</b>             | 2,128      | 1,681      | 1,637      | 1,578      | 1,516      | 1,347      | 1,398      | 1,091      | 1,243      | 1,336      | 797        | 694        |
|                      | <b>Derivatives</b>                    | 114,030    | 205,022    | 341,463    | 157,209    | 184,592    | 133,595    | 105,690    | 101,329    | 301,493    | 220,845    | 148,997    | 114,541    |
|                      | <b>Swaps</b>                          | 114,030    | 205,022    | 341,463    | 157,209    | 184,592    | 133,595    | 105,690    | 101,329    | 301,493    | 220,845    | 148,997    | 114,541    |
| <b>Equities</b>      | <b>Total</b>                          | 171,958    | 246,915    | 193,055    | 147,262    | 138,739    | 158,163    | 109,360    | 119,880    | 140,486    | 213,518    | 145,025    | 183,686    |
|                      | <b>Cash</b>                           | 98,679     | 139,871    | 108,880    | 87,018     | 83,074     | 85,102     | 59,085     | 64,732     | 77,321     | 134,151    | 85,426     | 110,702    |
|                      | <b>U.S. ETFs</b>                      | 75,150     | 110,673    | 86,097     | 66,274     | 55,561     | 57,779     | 37,749     | 44,075     | 55,660     | 104,027    | 59,423     | 83,408     |
|                      | <b>European ETFs</b>                  | 23,529     | 29,198     | 22,783     | 20,744     | 27,513     | 27,323     | 21,336     | 20,657     | 21,660     | 30,124     | 26,002     | 27,294     |
|                      | <b>Derivatives</b>                    | 73,279     | 107,044    | 84,174     | 60,243     | 55,665     | 73,061     | 50,275     | 55,148     | 63,165     | 79,367     | 59,599     | 72,985     |
|                      | <b>Options / Convertibles / Swaps</b> | 20,771     | 16,729     | 9,935      | 13,502     | 19,883     | 24,988     | 28,071     | 30,885     | 22,241     | 19,252     | 25,164     | 17,760     |
|                      | <b>Equity Futures</b>                 | 52,508     | 90,315     | 74,240     | 46,742     | 35,783     | 48,073     | 22,204     | 24,263     | 40,923     | 60,114     | 34,435     | 55,225     |
| <b>Money Markets</b> | <b>Total</b>                          | 3,394,926  | 3,190,604  | 3,485,351  | 3,494,824  | 3,706,231  | 3,628,338  | 3,470,354  | 3,848,500  | 3,553,569  | 4,206,340  | 3,886,691  | 3,596,147  |
|                      | <b>Cash</b>                           | 3,394,926  | 3,190,604  | 3,485,351  | 3,494,824  | 3,706,231  | 3,628,338  | 3,470,354  | 3,848,500  | 3,553,569  | 4,206,340  | 3,886,691  | 3,596,147  |
|                      | <b>Repurchase Agreements (Repo)</b>   | 2,925,489  | 2,715,584  | 2,982,574  | 3,066,306  | 3,237,368  | 3,121,043  | 3,048,515  | 3,412,392  | 3,159,195  | 3,730,032  | 3,505,438  | 3,214,530  |
|                      | <b>Other Money Markets</b>            | 469,437    | 475,020    | 502,777    | 428,518    | 468,863    | 507,295    | 421,840    | 436,107    | 394,373    | 476,308    | 381,252    | 381,618    |

# TRADEWEB MARKETS – 2019 MONTHLY VOLUMES (USD mm)

| Asset Class   |  | Product                        | 2019       |            |            |            |            |            |            |            |            |            |            |            |
|---------------|--|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|               |  |                                | January    | February   | March      | April      | May        | June       | July       | August     | September  | October    | November   | December   |
| Total         |  |                                | 13,196,407 | 11,556,165 | 14,866,382 | 13,875,664 | 16,230,349 | 17,150,768 | 16,695,305 | 18,238,454 | 17,668,338 | 15,710,669 | 13,532,677 | 13,562,243 |
| Rates         |  | Total                          | 8,688,181  | 7,604,073  | 10,065,090 | 9,196,757  | 10,780,366 | 12,041,308 | 11,298,292 | 12,765,575 | 12,243,326 | 10,697,390 | 8,967,749  | 8,526,094  |
|               |  | Cash                           | 5,661,513  | 5,021,471  | 6,136,283  | 5,675,975  | 5,767,580  | 6,062,979  | 5,639,320  | 6,290,555  | 6,330,665  | 6,176,020  | 5,436,824  | 5,026,452  |
|               |  | U.S. Government Bonds          | 1,672,779  | 1,573,331  | 1,763,696  | 1,601,214  | 1,759,805  | 1,720,202  | 1,608,831  | 1,880,522  | 1,766,569  | 1,714,784  | 1,544,892  | 1,514,783  |
|               |  | European Government Bonds      | 482,549    | 447,945    | 520,611    | 443,109    | 463,585    | 511,289    | 549,131    | 461,594    | 531,812    | 468,056    | 451,850    | 337,289    |
|               |  | Mortgages                      | 3,453,345  | 2,923,821  | 3,765,747  | 3,549,867  | 3,468,520  | 3,760,932  | 3,407,373  | 3,869,394  | 3,953,672  | 3,917,202  | 3,382,027  | 3,113,677  |
|               |  | Other Government Bonds         | 52,839     | 76,374     | 86,229     | 81,785     | 75,669     | 70,557     | 73,984     | 79,046     | 78,612     | 75,977     | 58,055     | 60,703     |
|               |  | Derivatives                    | 3,026,668  | 2,582,602  | 3,928,807  | 3,520,782  | 5,012,786  | 5,978,329  | 5,658,972  | 6,475,020  | 5,912,661  | 4,521,370  | 3,530,924  | 3,499,642  |
|               |  | Swaps/Swaptions ≥ 1Y           | 2,724,665  | 2,480,109  | 3,590,224  | 2,107,724  | 2,569,520  | 3,693,563  | 3,167,679  | 3,016,155  | 3,428,649  | 3,241,152  | 2,796,892  | 2,701,544  |
|               |  | Swaps/Swaptions < 1Y           | 288,526    | 95,683     | 328,233    | 1,403,887  | 2,422,037  | 2,271,973  | 2,482,065  | 3,443,518  | 2,471,346  | 1,269,807  | 721,226    | 781,665    |
|               |  | Futures                        | 13,478     | 6,810      | 10,350     | 9,172      | 21,229     | 12,792     | 9,228      | 15,346     | 12,666     | 10,411     | 12,807     | 16,432     |
| Credit        |  | Total                          | 274,026    | 224,353    | 511,658    | 225,489    | 251,500    | 289,809    | 228,221    | 322,123    | 566,786    | 360,901    | 260,765    | 206,330    |
|               |  | Cash                           | 120,032    | 110,148    | 113,546    | 116,198    | 113,080    | 120,200    | 119,657    | 110,734    | 122,382    | 138,084    | 133,018    | 102,765    |
|               |  | U.S. High Grade                | 57,461     | 55,517     | 58,575     | 61,923     | 54,757     | 59,040     | 52,810     | 47,067     | 59,044     | 69,799     | 66,836     | 63,198     |
|               |  | U.S. High Yield                | 8,208      | 6,750      | 5,132      | 5,696      | 5,603      | 6,546      | 7,598      | 6,125      | 7,348      | 7,888      | 7,155      | 7,109      |
|               |  | European Credit                | 28,093     | 26,792     | 28,318     | 25,896     | 25,802     | 28,072     | 30,263     | 20,885     | 28,261     | 31,415     | 31,866     | 19,825     |
|               |  | Municipal Bonds                | 5,780      | 5,538      | 5,709      | 5,335      | 5,370      | 5,009      | 4,801      | 5,092      | 4,541      | 4,769      | 4,228      | 4,429      |
|               |  | Chinese Bonds                  | 19,481     | 14,351     | 14,461     | 16,080     | 20,216     | 20,409     | 22,994     | 30,372     | 21,835     | 22,770     | 21,814     | 7,229      |
|               |  | Other Credit Bonds             | 1,009      | 1,200      | 1,351      | 1,268      | 1,332      | 1,123      | 1,190      | 1,193      | 1,353      | 1,444      | 1,119      | 975        |
|               |  | Derivatives                    | 153,994    | 114,206    | 398,112    | 109,290    | 138,420    | 169,609    | 108,564    | 211,389    | 444,405    | 222,817    | 127,747    | 103,565    |
|               |  | Swaps                          | 153,994    | 114,206    | 398,112    | 109,290    | 138,420    | 169,609    | 108,564    | 211,389    | 444,405    | 222,817    | 127,747    | 103,565    |
| Equities      |  | Total                          | 171,412    | 137,480    | 171,044    | 147,448    | 138,878    | 159,159    | 119,393    | 169,199    | 187,538    | 168,888    | 179,690    | 226,645    |
|               |  | Cash                           | 104,402    | 81,922     | 89,883     | 81,887     | 85,391     | 90,524     | 72,916     | 110,969    | 107,525    | 84,978     | 85,289     | 120,769    |
|               |  | U.S. ETFs                      | 72,276     | 48,226     | 61,243     | 52,431     | 51,799     | 58,750     | 38,287     | 70,037     | 67,968     | 52,630     | 50,872     | 86,849     |
|               |  | European ETFs                  | 32,126     | 33,696     | 28,640     | 29,456     | 33,592     | 31,774     | 34,629     | 40,932     | 39,557     | 32,348     | 34,417     | 33,919     |
|               |  | Derivatives                    | 67,009     | 55,558     | 81,162     | 65,562     | 53,486     | 68,635     | 46,477     | 58,230     | 80,014     | 83,910     | 94,401     | 105,877    |
|               |  | Options / Convertibles / Swaps | 26,078     | 32,025     | 32,092     | 35,886     | 25,762     | 25,594     | 30,946     | 22,056     | 30,722     | 54,367     | 64,876     | 48,950     |
|               |  | Equity Futures                 | 40,932     | 23,534     | 49,070     | 29,676     | 27,724     | 43,041     | 15,531     | 36,174     | 49,291     | 29,544     | 29,525     | 56,927     |
| Money Markets |  | Total                          | 4,062,789  | 3,590,259  | 4,118,589  | 4,305,970  | 5,059,606  | 4,660,492  | 5,049,400  | 4,981,557  | 4,670,688  | 4,483,490  | 4,124,473  | 4,603,174  |
|               |  | Cash                           | 4,062,789  | 3,590,259  | 4,118,589  | 4,305,970  | 5,059,606  | 4,660,492  | 5,049,400  | 4,981,557  | 4,670,688  | 4,483,490  | 4,124,473  | 4,603,174  |
|               |  | Repurchase Agreements (Repo)   | 3,650,533  | 3,243,735  | 3,731,831  | 3,926,709  | 4,653,313  | 4,263,024  | 4,673,730  | 4,583,591  | 4,301,035  | 4,074,334  | 3,776,090  | 4,233,580  |
|               |  | Other Money Markets            | 412,256    | 346,524    | 386,758    | 379,262    | 406,293    | 397,467    | 375,670    | 397,966    | 369,653    | 409,156    | 348,383    | 369,593    |

# TRADEWEB MARKETS – 2020 MONTHLY VOLUMES (USD mm)

| Asset Class   | Product                        | 2020       |            |            |            |            |            |            |            |            |            |            |            |
|---------------|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|               |                                | January    | February   | March      | April      | May        | June       | July       | August     | September  | October    | November   | December   |
| Total         |                                | 16,979,706 | 16,963,583 | 22,027,253 | 15,860,208 | 15,815,401 | 17,177,833 | 16,093,881 | 15,674,763 | 18,496,162 | 19,232,648 | 18,720,388 | 18,177,460 |
| Rates         | Total                          | 11,073,095 | 11,094,019 | 14,700,947 | 10,277,221 | 10,481,397 | 11,037,402 | 9,880,659  | 9,857,987  | 11,824,947 | 11,461,605 | 11,378,194 | 10,762,714 |
|               | Cash                           | 6,871,490  | 6,674,918  | 7,683,251  | 6,165,884  | 6,017,091  | 6,534,849  | 6,661,520  | 6,592,693  | 6,697,089  | 6,969,236  | 6,853,688  | 6,559,106  |
|               | U.S. Government Bonds          | 1,842,482  | 1,835,593  | 2,120,053  | 1,868,052  | 1,835,612  | 2,108,735  | 1,840,805  | 1,834,885  | 1,889,512  | 1,761,608  | 1,902,637  | 2,023,225  |
|               | European Government Bonds      | 588,626    | 516,708    | 694,292    | 546,886    | 514,906    | 618,708    | 543,592    | 465,827    | 595,500    | 601,191    | 566,412    | 428,696    |
|               | Mortgages                      | 4,355,198  | 4,238,642  | 4,732,870  | 3,651,451  | 3,578,003  | 3,704,258  | 4,197,869  | 4,212,736  | 4,132,470  | 4,514,551  | 4,302,498  | 4,034,962  |
|               | Other Government Bonds         | 85,184     | 83,975     | 136,036    | 99,494     | 88,570     | 103,147    | 79,254     | 79,245     | 79,608     | 91,885     | 82,140     | 72,223     |
|               | Derivatives                    | 4,201,605  | 4,419,101  | 7,017,696  | 4,111,338  | 4,464,306  | 4,502,553  | 3,219,139  | 3,265,294  | 5,127,859  | 4,492,369  | 4,524,506  | 4,203,608  |
|               | Swaps/Swaptions ≥ 1Y           | 3,025,565  | 2,726,532  | 4,261,282  | 2,975,429  | 2,579,583  | 3,256,963  | 1,972,373  | 2,562,392  | 3,384,520  | 2,587,435  | 3,228,524  | 3,185,674  |
|               | Swaps/Swaptions < 1Y           | 1,162,263  | 1,678,091  | 2,746,805  | 1,127,604  | 1,876,628  | 1,237,120  | 1,240,524  | 693,847    | 1,733,307  | 1,892,927  | 1,282,462  | 1,010,380  |
|               | Futures                        | 13,776     | 14,479     | 9,610      | 8,305      | 8,096      | 8,469      | 6,241      | 9,054      | 10,032     | 12,007     | 13,519     | 7,553      |
| Credit        | Total                          | 332,885    | 542,165    | 1,195,737  | 416,213    | 291,872    | 412,232    | 295,798    | 243,555    | 729,705    | 426,589    | 421,131    | 271,809    |
|               | Cash                           | 148,385    | 141,797    | 159,614    | 156,095    | 155,549    | 175,072    | 158,623    | 136,901    | 159,972    | 172,778    | 183,334    | 160,401    |
|               | U.S. High Grade                | 83,157     | 75,710     | 83,275     | 93,472     | 96,684     | 103,000    | 84,638     | 77,240     | 82,690     | 98,011     | 93,003     | 81,321     |
|               | U.S. High Yield                | 9,118      | 10,321     | 10,694     | 11,218     | 9,624      | 9,806      | 8,523      | 7,181      | 10,275     | 11,697     | 12,772     | 12,986     |
|               | European Credit                | 37,531     | 35,258     | 33,325     | 29,260     | 23,723     | 31,615     | 27,331     | 20,354     | 36,145     | 35,002     | 38,087     | 25,534     |
|               | Municipal Bonds                | 4,764      | 4,480      | 8,658      | 6,098      | 4,775      | 4,693      | 4,446      | 4,032      | 4,373      | 4,406      | 3,553      | 4,390      |
|               | Chinese Bonds                  | 12,313     | 14,822     | 22,581     | 14,923     | 19,731     | 24,954     | 32,416     | 27,032     | 24,844     | 21,566     | 34,418     | 34,073     |
|               | Other Credit Bonds             | 1,501      | 1,206      | 1,081      | 1,123      | 1,011      | 1,005      | 1,269      | 1,062      | 1,644      | 2,097      | 1,502      | 2,096      |
|               | Derivatives                    | 184,500    | 400,368    | 1,036,123  | 260,118    | 136,324    | 237,160    | 137,174    | 106,654    | 569,733    | 253,811    | 237,797    | 111,408    |
|               | Swaps                          | 184,500    | 400,368    | 1,036,123  | 260,118    | 136,324    | 237,160    | 137,174    | 106,654    | 569,733    | 253,811    | 237,797    | 111,408    |
| Equities      | Total                          | 227,634    | 370,923    | 513,175    | 210,762    | 171,317    | 245,118    | 178,540    | 146,060    | 260,350    | 255,648    | 280,198    | 257,343    |
|               | Cash                           | 111,889    | 158,364    | 307,087    | 136,939    | 107,867    | 152,044    | 112,140    | 89,869     | 149,459    | 141,694    | 152,595    | 142,559    |
|               | U.S. ETFs                      | 75,224     | 110,004    | 219,430    | 99,736     | 75,636     | 106,863    | 71,890     | 61,320     | 113,157    | 102,934    | 95,414     | 99,618     |
|               | European ETFs                  | 36,665     | 48,361     | 87,657     | 37,203     | 32,230     | 45,180     | 40,250     | 28,549     | 36,301     | 38,760     | 57,181     | 42,941     |
|               | Derivatives                    | 115,745    | 212,559    | 206,088    | 73,824     | 63,450     | 93,074     | 66,400     | 56,191     | 110,892    | 113,955    | 127,603    | 114,784    |
|               | Options / Convertibles / Swaps | 74,209     | 136,755    | 37,682     | 9,615      | 18,841     | 24,485     | 24,016     | 19,515     | 33,938     | 50,572     | 68,578     | 49,729     |
|               | Equity Futures                 | 41,535     | 75,804     | 168,407    | 64,209     | 44,609     | 68,589     | 42,384     | 36,676     | 76,953     | 63,382     | 59,025     | 65,055     |
| Money Markets | Total                          | 5,346,092  | 4,956,475  | 5,617,393  | 4,956,012  | 4,870,815  | 5,483,082  | 5,738,885  | 5,427,161  | 5,681,159  | 7,088,806  | 6,640,866  | 6,885,595  |
|               | Cash                           | 5,346,092  | 4,956,475  | 5,617,393  | 4,956,012  | 4,870,815  | 5,483,082  | 5,738,885  | 5,427,161  | 5,681,159  | 7,088,806  | 6,640,866  | 6,885,595  |
|               | Repurchase Agreements (Repo)   | 4,934,360  | 4,633,571  | 5,172,609  | 4,635,507  | 4,626,528  | 5,248,242  | 5,515,288  | 5,161,028  | 5,430,235  | 6,846,049  | 6,430,177  | 6,650,965  |
|               | Other Money Markets            | 411,731    | 322,904    | 444,784    | 320,505    | 244,286    | 234,839    | 223,596    | 266,133    | 250,924    | 242,756    | 210,689    | 234,629    |

# TRADEWEB MARKETS – 2021 MONTHLY VOLUMES (USD mm)

| Asset Class   | Product                        | 2021       |            |            |            |            |            |            |        |           |         |          |          |
|---------------|--------------------------------|------------|------------|------------|------------|------------|------------|------------|--------|-----------|---------|----------|----------|
|               |                                | January    | February   | March      | April      | May        | June       | July       | August | September | October | November | December |
| Total         |                                | 19,949,493 | 20,384,235 | 24,717,496 | 19,301,109 | 19,593,934 | 23,143,105 | 20,614,708 |        |           |         |          |          |
| Rates         | Total                          | 12,720,159 | 12,855,681 | 15,338,788 | 11,240,106 | 11,260,270 | 14,057,489 | 12,285,690 |        |           |         |          |          |
|               | Cash                           |            |            |            |            |            |            |            |        |           |         |          |          |
|               | Total                          | 7,624,355  | 7,434,140  | 8,085,012  | 6,547,816  | 6,521,950  | 7,278,342  | 7,155,994  |        |           |         |          |          |
|               | U.S. Government Bonds          | 2,174,972  | 2,228,730  | 2,608,138  | 2,107,516  | 2,100,729  | 2,627,160  | 2,437,880  |        |           |         |          |          |
|               | European Government Bonds      | 605,936    | 673,016    | 712,679    | 567,650    | 618,047    | 706,241    | 649,917    |        |           |         |          |          |
|               | Mortgages                      | 4,732,592  | 4,431,312  | 4,644,571  | 3,778,805  | 3,729,196  | 3,856,472  | 3,990,078  |        |           |         |          |          |
|               | Other Government Bonds         | 110,856    | 101,082    | 119,623    | 93,846     | 73,978     | 88,469     | 78,119     |        |           |         |          |          |
|               | Derivatives                    |            |            |            |            |            |            |            |        |           |         |          |          |
|               | Total                          | 5,095,804  | 5,421,541  | 7,253,777  | 4,692,290  | 4,738,321  | 6,779,146  | 5,129,696  |        |           |         |          |          |
|               | Swaps/Swaptions ≥ 1Y           | 2,829,663  | 3,325,053  | 5,107,690  | 2,906,838  | 3,012,413  | 4,522,622  | 3,235,123  |        |           |         |          |          |
|               | Swaps/Swaptions < 1Y           | 2,254,065  | 2,077,378  | 2,125,611  | 1,770,493  | 1,709,966  | 2,233,177  | 1,875,850  |        |           |         |          |          |
|               | Futures                        | 12,077     | 19,110     | 20,476     | 14,959     | 15,942     | 23,347     | 18,724     |        |           |         |          |          |
| Credit        | Total                          | 394,080    | 367,147    | 904,888    | 408,145    | 348,468    | 383,745    | 346,890    |        |           |         |          |          |
|               | Cash                           |            |            |            |            |            |            |            |        |           |         |          |          |
|               | Total                          | 209,509    | 186,092    | 237,192    | 201,353    | 179,209    | 219,212    | 186,898    |        |           |         |          |          |
|               | U.S. High Grade                | 111,410    | 101,161    | 127,517    | 113,570    | 97,547     | 114,227    | 88,833     |        |           |         |          |          |
|               | U.S. High Yield                | 13,724     | 16,652     | 19,713     | 19,377     | 15,451     | 18,695     | 17,985     |        |           |         |          |          |
|               | European Credit                | 40,415     | 41,171     | 48,549     | 38,233     | 34,806     | 45,416     | 42,740     |        |           |         |          |          |
|               | Municipal Bonds                | 3,877      | 3,954      | 4,634      | 4,134      | 3,824      | 4,409      | 3,622      |        |           |         |          |          |
|               | Chinese Bonds                  | 37,481     | 20,996     | 33,960     | 23,746     | 25,659     | 32,972     | 30,988     |        |           |         |          |          |
|               | Other Credit Bonds             | 2,603      | 2,157      | 2,819      | 2,294      | 1,923      | 3,492      | 2,730      |        |           |         |          |          |
|               | Derivatives                    |            |            |            |            |            |            |            |        |           |         |          |          |
|               | Total                          | 184,571    | 181,055    | 667,696    | 206,792    | 169,259    | 164,533    | 159,992    |        |           |         |          |          |
|               | Swaps                          | 184,571    | 181,055    | 667,696    | 206,792    | 169,259    | 164,533    | 159,992    |        |           |         |          |          |
| Equities      | Total                          | 285,959    | 276,926    | 432,807    | 335,345    | 336,558    | 335,738    | 340,499    |        |           |         |          |          |
|               | Cash                           |            |            |            |            |            |            |            |        |           |         |          |          |
|               | Total                          | 168,719    | 155,559    | 231,980    | 181,179    | 160,290    | 175,265    | 185,344    |        |           |         |          |          |
|               | U.S. ETFs                      | 107,093    | 99,212     | 162,508    | 134,369    | 114,619    | 121,758    | 129,946    |        |           |         |          |          |
|               | European ETFs                  | 61,626     | 56,347     | 69,472     | 46,810     | 45,671     | 53,507     | 55,398     |        |           |         |          |          |
|               | Derivatives                    |            |            |            |            |            |            |            |        |           |         |          |          |
|               | Total                          | 117,241    | 121,368    | 200,827    | 154,166    | 176,267    | 160,473    | 155,155    |        |           |         |          |          |
|               | Options / Convertibles / Swaps | 55,067     | 55,448     | 78,518     | 59,274     | 98,619     | 83,154     | 79,556     |        |           |         |          |          |
|               | Equity Futures                 | 62,174     | 65,920     | 122,309    | 94,892     | 77,648     | 77,319     | 75,599     |        |           |         |          |          |
| Money Markets | Total                          | 6,549,295  | 6,884,480  | 8,041,012  | 7,317,512  | 7,648,638  | 8,366,134  | 7,641,629  |        |           |         |          |          |
|               | Cash                           |            |            |            |            |            |            |            |        |           |         |          |          |
|               | Total                          | 6,549,295  | 6,884,480  | 8,041,012  | 7,317,512  | 7,648,638  | 8,366,134  | 7,641,629  |        |           |         |          |          |
|               | Repurchase Agreements (Repo)   | 6,313,133  | 6,612,596  | 7,693,638  | 7,015,368  | 7,386,323  | 8,060,151  | 7,326,927  |        |           |         |          |          |
|               | Other Money Markets            | 236,162    | 271,884    | 347,374    | 302,144    | 262,315    | 305,982    | 314,702    |        |           |         |          |          |

# TRADEWEB MARKETS – 2017 MONTHLY BLENDED TRADE DAYS

| Asset Class   | Product                        | 2017    |          |       |       |       |       |       |        |           |         |          |          |
|---------------|--------------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
|               |                                | January | February | March | April | May   | June  | July  | August | September | October | November | December |
| Total         |                                | 20.07   | 19.10    | 22.99 | 18.91 | 21.99 | 22.00 | 20.11 | 22.99  | 20.16     | 21.11   | 21.11    | 19.99    |
| Rates         | Total                          | 20.08   | 19.12    | 22.99 | 18.90 | 21.98 | 22.00 | 20.13 | 22.99  | 20.20     | 21.11   | 21.12    | 19.99    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 20.07   | 19.09    | 23.00 | 18.92 | 22.00 | 22.00 | 20.08 | 23.00  | 20.09     | 21.08   | 21.08    | 20.00    |
|               | U.S. Government Bonds          | 20.00   | 19.00    | 23.00 | 19.00 | 22.00 | 22.00 | 20.00 | 23.00  | 20.00     | 21.00   | 21.00    | 20.00    |
|               | European Government Bonds      | 21.00   | 20.00    | 23.00 | 18.00 | 22.00 | 22.00 | 21.00 | 23.00  | 21.00     | 22.00   | 22.00    | 20.00    |
|               | Mortgages                      | 20.00   | 19.00    | 23.00 | 19.00 | 22.00 | 22.00 | 20.00 | 23.00  | 20.00     | 21.00   | 21.00    | 20.00    |
|               | Other Government Bonds         | 20.05   | 19.88    | 22.66 | 18.79 | 21.31 | 22.00 | 20.57 | 22.72  | 20.55     | 21.60   | 21.22    | 20.40    |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 20.13   | 19.23    | 22.98 | 18.80 | 21.95 | 22.00 | 20.30 | 22.95  | 20.42     | 21.26   | 21.22    | 19.96    |
|               | Swaps/Swaptions ≥ 1Y           | 20.14   | 19.22    | 22.97 | 18.80 | 21.94 | 22.00 | 20.27 | 22.95  | 20.25     | 21.24   | 21.28    | 19.96    |
|               | Swaps/Swaptions < 1Y           | 20.07   | 19.52    | 23.00 | 18.64 | 22.00 | 22.00 | 20.75 | 23.00  | 20.82     | 21.59   | 21.09    | 19.99    |
|               | Futures                        | 20.00   | 19.00    | 23.00 | 19.00 | 22.00 | 22.00 | 20.00 | 23.00  | 20.01     | 21.00   | 21.00    | 20.00    |
| Credit        | Total                          | 20.37   | 19.45    | 23.00 | 18.58 | 22.00 | 22.00 | 20.39 | 23.00  | 20.42     | 21.37   | 21.46    | 20.08    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 20.42   | 19.44    | 23.00 | 18.53 | 22.00 | 22.00 | 20.42 | 23.00  | 20.51     | 21.42   | 21.44    | 20.14    |
|               | U.S. High Grade                | 20.00   | 19.00    | 23.00 | 19.00 | 22.00 | 22.00 | 20.00 | 23.00  | 20.00     | 21.00   | 21.00    | 20.00    |
|               | U.S. High Yield                | 20.00   | 19.00    | 23.00 | 19.00 | 22.00 | 22.00 | 20.00 | 23.00  | 20.00     | 21.00   | 21.00    | 20.00    |
|               | European Credit                | 21.00   | 20.00    | 23.00 | 18.00 | 22.00 | 22.00 | 21.00 | 23.00  | 21.00     | 22.00   | 22.00    | 20.00    |
|               | Municipal Bonds                | 20.00   | 19.00    | 23.00 | 19.00 | 22.00 | 22.00 | 20.00 | 23.00  | 20.00     | 21.00   | 21.00    | 20.00    |
|               | Chinese Bonds                  |         |          |       |       |       |       | 21.00 | 23.00  | 21.00     | 22.00   | 22.00    | 21.00    |
|               | Other Credit Bonds             | 20.41   | 19.55    | 23.00 | 18.64 | 22.00 | 22.00 | 20.47 | 23.00  | 20.49     | 21.40   | 21.40    | 20.00    |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 20.33   | 19.45    | 23.00 | 18.60 | 22.00 | 22.00 | 20.36 | 23.00  | 20.40     | 21.33   | 21.48    | 20.00    |
|               | Swaps                          | 20.33   | 19.45    | 23.00 | 18.60 | 22.00 | 22.00 | 20.36 | 23.00  | 20.40     | 21.33   | 21.48    | 20.00    |
| Equities      | Total                          | 20.26   | 19.23    | 23.00 | 18.69 | 22.00 | 22.00 | 20.30 | 23.00  | 20.25     | 22.00   | 21.26    | 20.00    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 20.28   | 19.28    | 23.00 | 18.70 | 22.00 | 22.00 | 20.33 | 23.00  | 20.25     | 22.00   | 21.23    | 20.00    |
|               | U.S. ETFs                      | 20.00   | 19.00    | 23.00 | 19.00 | 22.00 | 22.00 | 20.00 | 23.00  | 20.00     | 22.00   | 21.00    | 20.00    |
|               | European ETFs                  | 21.00   | 20.00    | 23.00 | 18.00 | 22.00 | 22.00 | 21.00 | 23.00  | 21.00     | 22.00   | 22.00    | 20.00    |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 20.23   | 19.16    | 23.00 | 18.68 | 22.00 | 22.00 | 20.24 | 23.00  | 20.26     | 22.00   | 21.29    | 20.00    |
|               | Options / Convertibles / Swaps | 20.96   | 19.81    | 23.00 | 18.04 | 22.00 | 22.00 | 20.93 | 23.00  | 20.94     | 22.00   | 21.92    | 20.00    |
|               | Equity Futures                 | 20.01   | 19.01    | 23.00 | 18.97 | 22.00 | 22.00 | 20.02 | 23.00  | 20.06     | 22.00   | 21.01    | 20.00    |
| Money Markets | Total                          | 20.02   | 19.03    | 23.00 | 18.97 | 22.00 | 22.00 | 20.05 | 23.00  | 20.05     | 21.06   | 21.06    | 20.00    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 20.02   | 19.03    | 23.00 | 18.97 | 22.00 | 22.00 | 20.05 | 23.00  | 20.05     | 21.06   | 21.06    | 20.00    |
|               | Repurchase Agreements (Repo)   | 20.01   | 19.02    | 23.00 | 18.98 | 22.00 | 22.00 | 20.04 | 23.00  | 20.05     | 21.06   | 21.06    | 20.00    |
|               | Other Money Markets            | 20.09   | 19.10    | 23.00 | 18.89 | 22.00 | 22.00 | 20.10 | 23.00  | 20.09     | 21.06   | 21.07    | 20.00    |



# TRADEWEB MARKETS – 2018 MONTHLY BLENDED TRADE DAYS

| Asset Class   | Product                        | 2018    |          |       |       |       |       |       |        |           |         |          |          |
|---------------|--------------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
|               |                                | January | February | March | April | May   | June  | July  | August | September | October | November | December |
| Total         |                                | 21.13   | 19.14    | 21.00 | 20.83 | 22.00 | 21.00 | 21.17 | 23.00  | 19.19     | 22.18   | 20.39    | 19.18    |
| Rates         | Total                          | 21.15   | 19.16    | 21.00 | 20.81 | 21.99 | 21.00 | 21.19 | 22.99  | 19.21     | 22.20   | 20.43    | 19.22    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 21.08   | 19.08    | 21.00 | 20.90 | 22.00 | 21.00 | 21.09 | 23.00  | 19.09     | 22.09   | 20.19    | 19.08    |
|               | U.S. Government Bonds          | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 21.00 | 21.00 | 23.00  | 19.00     | 22.00   | 20.00    | 19.00    |
|               | European Government Bonds      | 22.00   | 20.00    | 21.00 | 20.00 | 22.00 | 21.00 | 22.00 | 23.00  | 20.00     | 23.00   | 22.00    | 20.00    |
|               | Mortgages                      | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 21.00 | 21.00 | 23.00  | 19.00     | 22.00   | 20.00    | 19.00    |
|               | Other Government Bonds         | 20.82   | 19.63    | 21.00 | 20.06 | 21.65 | 21.00 | 21.50 | 23.00  | 19.11     | 22.50   | 21.38    | 19.43    |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 21.31   | 19.30    | 21.00 | 20.58 | 21.99 | 21.00 | 21.33 | 22.99  | 19.41     | 22.45   | 20.87    | 19.41    |
|               | Swaps/Swaptions ≥ 1Y           | 21.32   | 19.34    | 21.00 | 20.61 | 21.98 | 21.00 | 21.40 | 22.98  | 19.40     | 22.44   | 20.93    | 19.39    |
|               | Swaps/Swaptions < 1Y           | 21.23   | 19.06    | 21.00 | 20.15 | 22.00 | 21.00 | 21.16 | 23.00  | 19.48     | 22.63   | 20.60    | 19.73    |
|               | Futures                        | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 21.00 | 21.02 | 23.00  | 19.01     | 22.01   | 20.00    | 19.00    |
| Credit        | Total                          | 21.45   | 19.27    | 21.02 | 20.46 | 22.00 | 20.91 | 21.52 | 23.00  | 19.48     | 22.29   | 20.88    | 19.39    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 21.49   | 19.10    | 21.09 | 20.26 | 22.00 | 20.77 | 21.50 | 23.00  | 19.29     | 21.91   | 20.81    | 19.38    |
|               | U.S. High Grade                | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 21.00 | 21.00 | 23.00  | 19.00     | 22.00   | 20.00    | 19.00    |
|               | U.S. High Yield                | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 21.00 | 21.00 | 23.00  | 19.00     | 22.00   | 20.00    | 19.00    |
|               | European Credit                | 22.00   | 20.00    | 21.00 | 20.00 | 22.00 | 21.00 | 22.00 | 23.00  | 20.00     | 23.00   | 22.00    | 20.00    |
|               | Municipal Bonds                | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 21.00 | 21.00 | 23.00  | 19.00     | 22.00   | 20.00    | 19.00    |
|               | Chinese Bonds                  | 22.00   | 15.00    | 22.00 | 18.00 | 22.00 | 20.00 | 22.00 | 23.00  | 19.00     | 18.00   | 22.00    | 20.00    |
|               | Other Credit Bonds             | 21.51   | 19.52    | 21.00 | 20.52 | 22.00 | 21.00 | 21.57 | 23.00  | 19.44     | 22.55   | 21.21    | 19.44    |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 21.42   | 19.34    | 21.00 | 20.57 | 22.00 | 21.00 | 21.54 | 23.00  | 19.54     | 22.48   | 20.93    | 19.39    |
|               | Swaps                          | 21.42   | 19.34    | 21.00 | 20.57 | 22.00 | 21.00 | 21.54 | 23.00  | 19.54     | 22.48   | 20.93    | 19.39    |
| Equities      | Total                          | 21.24   | 19.18    | 21.00 | 20.75 | 22.00 | 21.00 | 21.40 | 23.00  | 19.38     | 23.00   | 21.33    | 19.29    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 21.23   | 19.20    | 21.00 | 20.75 | 22.00 | 21.00 | 21.35 | 23.00  | 19.27     | 23.00   | 21.29    | 19.24    |
|               | U.S. ETFs                      | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 21.00 | 21.00 | 23.00  | 19.00     | 23.00   | 21.00    | 19.00    |
|               | European ETFs                  | 22.00   | 20.00    | 21.00 | 20.00 | 22.00 | 21.00 | 22.00 | 23.00  | 20.00     | 23.00   | 22.00    | 20.00    |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 21.25   | 19.14    | 21.00 | 20.74 | 22.00 | 21.00 | 21.47 | 23.00  | 19.51     | 23.00   | 21.38    | 19.36    |
|               | Options / Convertibles / Swaps | 21.92   | 19.90    | 21.00 | 20.08 | 22.00 | 21.00 | 21.84 | 23.00  | 19.92     | 23.00   | 21.88    | 19.87    |
|               | Equity Futures                 | 21.00   | 19.01    | 21.00 | 20.93 | 22.00 | 21.00 | 21.01 | 23.00  | 19.29     | 23.00   | 21.02    | 19.20    |
| Money Markets | Total                          | 21.07   | 19.08    | 21.00 | 20.91 | 22.00 | 21.00 | 21.12 | 23.00  | 19.10     | 22.10   | 20.24    | 19.07    |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 21.07   | 19.08    | 21.00 | 20.91 | 22.00 | 21.00 | 21.12 | 23.00  | 19.10     | 22.10   | 20.24    | 19.07    |
|               | Repurchase Agreements (Repo)   | 21.07   | 19.09    | 21.00 | 20.91 | 22.00 | 21.00 | 21.13 | 23.00  | 19.10     | 22.10   | 20.25    | 19.08    |
|               | Other Money Markets            | 21.08   | 19.06    | 21.00 | 20.93 | 22.00 | 21.00 | 21.07 | 23.00  | 19.06     | 22.06   | 20.10    | 19.04    |

# TRADEWEB MARKETS – 2019 MONTHLY BLENDED TRADE DAYS

| Asset Class   | Product                        | 2019    |          |       |       |       |       |       |        |           |         |          |          |
|---------------|--------------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
|               |                                | January | February | March | April | May   | June  | July  | August | September | October | November | December |
| Total         |                                | 21.17   | 19.18    | 21.00 | 20.83 | 21.99 | 20.00 | 22.22 | 21.99  | 20.19     | 22.22   | 19.37    | 20.80    |
| Rates         | Total                          | 21.19   | 19.21    | 20.99 | 20.82 | 21.98 | 20.00 | 22.26 | 21.99  | 20.20     | 22.26   | 19.39    | 20.75    |
|               | Cash Total                     | 21.08   | 19.09    | 21.00 | 20.91 | 21.99 | 20.00 | 22.10 | 21.99  | 20.08     | 22.07   | 19.16    | 20.92    |
|               | U.S. Government Bonds          | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 20.00 | 22.00 | 22.00  | 20.00     | 22.00   | 19.00    | 21.00    |
|               | European Government Bonds      | 22.00   | 20.00    | 21.00 | 20.00 | 22.00 | 20.00 | 23.00 | 22.00  | 21.00     | 23.00   | 21.00    | 20.00    |
|               | Mortgages                      | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 20.00 | 22.00 | 22.00  | 20.00     | 22.00   | 19.00    | 21.00    |
|               | Other Government Bonds         | 20.49   | 19.26    | 20.74 | 20.40 | 21.00 | 20.00 | 22.27 | 21.31  | 19.84     | 21.86   | 20.29    | 20.52    |
|               | Derivatives Total              | 21.40   | 19.44    | 20.99 | 20.67 | 21.97 | 20.00 | 22.42 | 21.98  | 20.33     | 22.52   | 19.75    | 20.50    |
|               | Swaps/Swaptions ≥ 1Y           | 21.40   | 19.42    | 20.99 | 20.56 | 21.94 | 20.00 | 22.46 | 21.96  | 20.45     | 22.58   | 19.80    | 20.50    |
|               | Swaps/Swaptions < 1Y           | 21.40   | 19.91    | 21.00 | 20.82 | 22.00 | 20.00 | 22.37 | 22.00  | 20.18     | 22.37   | 19.59    | 20.49    |
|               | Futures                        | 21.01   | 19.00    | 21.00 | 21.00 | 22.00 | 20.00 | 22.00 | 22.00  | 20.00     | 22.00   | 19.00    | 20.98    |
| Credit        | Total                          | 21.41   | 19.01    | 21.00 | 20.69 | 22.00 | 19.93 | 22.45 | 22.00  | 20.45     | 22.04   | 19.87    | 20.66    |
|               | Cash Total                     | 21.39   | 18.59    | 21.00 | 20.76 | 22.00 | 19.82 | 22.44 | 22.00  | 20.23     | 21.43   | 19.77    | 20.79    |
|               | U.S. High Grade                | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 20.00 | 22.00 | 22.00  | 20.00     | 22.00   | 19.00    | 21.00    |
|               | U.S. High Yield                | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 20.00 | 22.00 | 22.00  | 20.00     | 22.00   | 19.00    | 21.00    |
|               | European Credit                | 22.00   | 20.00    | 21.00 | 20.00 | 22.00 | 20.00 | 23.00 | 22.00  | 21.00     | 23.00   | 21.00    | 20.00    |
|               | Municipal Bonds                | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 20.00 | 22.00 | 22.00  | 20.00     | 22.00   | 19.00    | 21.00    |
|               | Chinese Bonds                  | 22.00   | 15.00    | 21.00 | 21.00 | 22.00 | 19.00 | 23.00 | 22.00  | 20.00     | 18.00   | 21.00    | 21.00    |
|               | Other Credit Bonds             | 21.59   | 19.56    | 21.00 | 20.41 | 22.00 | 20.00 | 22.53 | 22.00  | 20.64     | 22.67   | 20.18    | 20.43    |
|               | Derivatives Total              | 21.43   | 19.43    | 21.00 | 20.62 | 22.00 | 20.00 | 22.45 | 22.00  | 20.51     | 22.43   | 19.98    | 20.53    |
|               | Swaps                          | 21.43   | 19.43    | 21.00 | 20.62 | 22.00 | 20.00 | 22.45 | 22.00  | 20.51     | 22.43   | 19.98    | 20.53    |
| Equities      | Total                          | 21.32   | 19.44    | 21.00 | 20.58 | 22.00 | 20.00 | 22.51 | 22.00  | 20.41     | 23.00   | 20.32    | 20.67    |
|               | Cash Total                     | 21.30   | 19.40    | 21.00 | 20.63 | 22.00 | 20.00 | 22.46 | 22.00  | 20.36     | 23.00   | 20.39    | 20.71    |
|               | U.S. ETFs                      | 21.00   | 19.00    | 21.00 | 21.00 | 22.00 | 20.00 | 22.00 | 22.00  | 20.00     | 23.00   | 20.00    | 21.00    |
|               | European ETFs                  | 22.00   | 20.00    | 21.00 | 20.00 | 22.00 | 20.00 | 23.00 | 22.00  | 21.00     | 23.00   | 21.00    | 20.00    |
|               | Derivatives Total              | 21.35   | 19.51    | 21.00 | 20.51 | 22.00 | 20.00 | 22.57 | 22.00  | 20.48     | 23.00   | 20.26    | 20.62    |
|               | Options / Convertibles / Swaps | 21.83   | 19.83    | 21.00 | 20.16 | 22.00 | 20.00 | 22.82 | 22.00  | 20.89     | 23.00   | 20.36    | 20.38    |
|               | Equity Futures                 | 21.05   | 19.08    | 21.00 | 20.94 | 22.00 | 20.00 | 22.09 | 22.00  | 20.23     | 23.00   | 20.04    | 20.82    |
| Money Markets | Total                          | 21.11   | 19.12    | 21.00 | 20.88 | 22.00 | 20.00 | 22.13 | 22.00  | 20.14     | 22.12   | 19.24    | 20.91    |
|               | Cash Total                     | 21.11   | 19.12    | 21.00 | 20.88 | 22.00 | 20.00 | 22.13 | 22.00  | 20.14     | 22.12   | 19.24    | 20.91    |
|               | Repurchase Agreements (Repo)   | 21.11   | 19.12    | 21.00 | 20.88 | 22.00 | 20.00 | 22.13 | 22.00  | 20.15     | 22.12   | 19.25    | 20.91    |
|               | Other Money Markets            | 21.06   | 19.06    | 21.00 | 20.94 | 22.00 | 20.00 | 22.06 | 22.00  | 20.06     | 22.07   | 19.13    | 20.93    |

# TRADEWEB MARKETS – 2020 MONTHLY BLENDED TRADE DAYS

| Asset Class   | Product                        | 2020    |          |       |       |       |       |       |        |           |         |          |          |
|---------------|--------------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
|               |                                | January | February | March | April | May   | June  | July  | August | September | October | November | December |
| Total         |                                | 21.19   | 19.17    | 21.99 | 20.79 | 19.98 | 22.00 | 22.21 | 20.99  | 21.25     | 21.26   | 19.53    | 21.78    |
| Rates         | Total                          | 21.22   | 19.18    | 21.99 | 20.78 | 19.98 | 22.00 | 22.21 | 20.98  | 21.25     | 21.27   | 19.54    | 21.75    |
|               | Cash Total                     | 21.08   | 19.07    | 21.99 | 20.90 | 19.99 | 22.00 | 22.08 | 20.99  | 21.08     | 21.09   | 19.16    | 21.92    |
|               | U.S. Government Bonds          | 21.00   | 19.00    | 22.00 | 21.00 | 20.00 | 22.00 | 22.00 | 21.00  | 21.00     | 21.00   | 19.00    | 22.00    |
|               | European Government Bonds      | 22.00   | 20.00    | 22.00 | 20.00 | 20.00 | 22.00 | 23.00 | 21.00  | 22.00     | 22.00   | 21.00    | 21.00    |
|               | Mortgages                      | 21.00   | 19.00    | 22.00 | 21.00 | 20.00 | 22.00 | 22.00 | 21.00  | 21.00     | 21.00   | 19.00    | 22.00    |
|               | Other Government Bonds         | 20.85   | 18.88    | 21.64 | 20.76 | 19.35 | 22.00 | 21.85 | 20.26  | 20.96     | 21.56   | 20.24    | 21.38    |
|               | Derivatives Total              | 21.45   | 19.33    | 21.99 | 20.59 | 19.96 | 22.00 | 22.50 | 20.96  | 21.46     | 21.56   | 20.15    | 21.47    |
|               | Swaps/Swaptions ≥ 1Y           | 21.49   | 19.41    | 21.98 | 20.58 | 19.93 | 22.00 | 22.47 | 20.95  | 21.39     | 21.46   | 20.05    | 21.54    |
|               | Swaps/Swaptions < 1Y           | 21.35   | 19.21    | 22.00 | 20.62 | 20.00 | 22.00 | 22.55 | 21.00  | 21.61     | 21.71   | 20.43    | 21.27    |
|               | Futures                        | 21.01   | 19.00    | 22.00 | 21.00 | 20.00 | 22.00 | 22.00 | 21.00  | 21.00     | 21.00   | 19.00    | 22.00    |
| Credit        | Total                          | 21.14   | 19.46    | 22.00 | 20.63 | 19.85 | 21.87 | 22.42 | 21.00  | 21.51     | 21.02   | 19.79    | 21.83    |
|               | Cash Total                     | 20.71   | 19.35    | 22.00 | 20.80 | 19.72 | 21.69 | 22.37 | 21.00  | 21.38     | 20.40   | 19.75    | 22.03    |
|               | U.S. High Grade                | 21.00   | 19.00    | 22.00 | 21.00 | 20.00 | 22.00 | 22.00 | 21.00  | 21.00     | 21.00   | 19.00    | 22.00    |
|               | U.S. High Yield                | 21.00   | 19.00    | 22.00 | 21.00 | 20.00 | 22.00 | 22.00 | 21.00  | 21.00     | 21.00   | 19.00    | 22.00    |
|               | European Credit                | 22.00   | 20.00    | 22.00 | 20.00 | 20.00 | 22.00 | 23.00 | 21.00  | 22.00     | 22.00   | 21.00    | 21.00    |
|               | Municipal Bonds                | 21.00   | 19.00    | 22.00 | 21.00 | 20.00 | 22.00 | 22.00 | 21.00  | 21.00     | 21.00   | 19.00    | 22.00    |
|               | Chinese Bonds                  | 16.00   | 20.00    | 22.00 | 21.00 | 18.00 | 20.00 | 23.00 | 21.00  | 22.00     | 16.00   | 21.00    | 23.00    |
|               | Other Credit Bonds             | 21.72   | 19.67    | 22.00 | 20.40 | 20.00 | 22.00 | 22.66 | 21.00  | 21.54     | 21.41   | 20.11    | 21.62    |
|               | Derivatives Total              | 21.50   | 19.50    | 22.00 | 20.53 | 20.00 | 22.00 | 22.49 | 21.00  | 21.54     | 21.47   | 19.82    | 21.55    |
|               | Swaps                          | 21.50   | 19.50    | 22.00 | 20.53 | 20.00 | 22.00 | 22.49 | 21.00  | 21.54     | 21.47   | 19.82    | 21.55    |
| Equities      | Total                          | 21.27   | 19.22    | 22.00 | 20.78 | 20.00 | 22.00 | 22.31 | 21.00  | 21.20     | 22.00   | 20.30    | 21.68    |
|               | Cash Total                     | 21.32   | 19.29    | 22.00 | 20.72 | 20.00 | 22.00 | 22.35 | 21.00  | 21.23     | 22.00   | 20.36    | 21.69    |
|               | U.S. ETFs                      | 21.00   | 19.00    | 22.00 | 21.00 | 20.00 | 22.00 | 22.00 | 21.00  | 21.00     | 22.00   | 20.00    | 22.00    |
|               | European ETFs                  | 22.00   | 20.00    | 22.00 | 20.00 | 20.00 | 22.00 | 23.00 | 21.00  | 22.00     | 22.00   | 21.00    | 21.00    |
|               | Derivatives Total              | 21.22   | 19.16    | 22.00 | 20.89 | 20.00 | 22.00 | 22.26 | 21.00  | 21.16     | 22.00   | 20.22    | 21.67    |
|               | Options / Convertibles / Swaps | 21.33   | 19.23    | 22.00 | 20.33 | 20.00 | 22.00 | 22.70 | 21.00  | 21.43     | 22.00   | 20.37    | 21.36    |
|               | Equity Futures                 | 21.01   | 19.04    | 22.00 | 20.98 | 20.00 | 22.00 | 22.01 | 21.00  | 21.04     | 22.00   | 20.04    | 21.92    |
| Money Markets | Total                          | 21.12   | 19.12    | 22.00 | 20.82 | 20.00 | 22.00 | 22.19 | 21.00  | 21.22     | 21.24   | 19.45    | 21.84    |
|               | Cash Total                     | 21.12   | 19.12    | 22.00 | 20.82 | 20.00 | 22.00 | 22.19 | 21.00  | 21.22     | 21.24   | 19.45    | 21.84    |
|               | Repurchase Agreements (Repo)   | 21.12   | 19.12    | 22.00 | 20.82 | 20.00 | 22.00 | 22.20 | 21.00  | 21.23     | 21.24   | 19.46    | 21.84    |
|               | Other Money Markets            | 21.07   | 19.07    | 22.00 | 20.94 | 20.00 | 22.00 | 22.06 | 21.00  | 21.07     | 21.06   | 19.10    | 21.95    |

# TRADEWEB MARKETS – 2021 MONTHLY BLENDED TRADE DAYS

| Asset Class   | Product                        | 2021    |          |       |       |       |       |       |        |           |         |          |          |
|---------------|--------------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
|               |                                | January | February | March | April | May   | June  | July  | August | September | October | November | December |
| Total         |                                | 19.22   | 19.23    | 23.00 | 21.52 | 19.99 | 22.00 | 21.21 |        |           |         |          |          |
| Rates         | Total                          | 19.22   | 19.23    | 23.00 | 21.55 | 19.98 | 22.00 | 21.19 |        |           |         |          |          |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 19.08   | 19.09    | 23.00 | 21.79 | 19.99 | 22.00 | 21.09 |        |           |         |          |          |
|               | U.S. Government Bonds          | 19.00   | 19.00    | 23.00 | 22.00 | 20.00 | 22.00 | 21.00 |        |           |         |          |          |
|               | European Government Bonds      | 20.00   | 20.00    | 23.00 | 20.00 | 20.00 | 22.00 | 22.00 |        |           |         |          |          |
|               | Mortgages                      | 19.00   | 19.00    | 23.00 | 22.00 | 20.00 | 22.00 | 21.00 |        |           |         |          |          |
|               | Other Government Bonds         | 19.57   | 18.91    | 23.00 | 20.74 | 19.26 | 22.00 | 20.86 |        |           |         |          |          |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 19.43   | 19.44    | 23.00 | 21.22 | 19.97 | 22.00 | 21.33 |        |           |         |          |          |
|               | Swaps/Swaptions ≥ 1Y           | 19.46   | 19.42    | 23.00 | 20.99 | 19.95 | 22.00 | 21.38 |        |           |         |          |          |
|               | Swaps/Swaptions < 1Y           | 19.39   | 19.48    | 23.00 | 21.60 | 20.00 | 22.00 | 21.24 |        |           |         |          |          |
|               | Futures                        | 19.00   | 19.00    | 23.00 | 21.98 | 20.00 | 22.00 | 21.01 |        |           |         |          |          |
| Credit        | Total                          | 19.38   | 19.02    | 23.00 | 21.33 | 19.83 | 21.91 | 21.41 |        |           |         |          |          |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 19.37   | 18.65    | 23.00 | 21.46 | 19.69 | 21.84 | 21.39 |        |           |         |          |          |
|               | U.S. High Grade                | 19.00   | 19.00    | 23.00 | 22.00 | 20.00 | 22.00 | 21.00 |        |           |         |          |          |
|               | U.S. High Yield                | 19.00   | 19.00    | 23.00 | 22.00 | 20.00 | 22.00 | 21.00 |        |           |         |          |          |
|               | European Credit                | 20.00   | 20.00    | 23.00 | 20.00 | 20.00 | 22.00 | 22.00 |        |           |         |          |          |
|               | Municipal Bonds                | 19.00   | 19.00    | 23.00 | 22.00 | 20.00 | 22.00 | 21.00 |        |           |         |          |          |
|               | Chinese Bonds                  | 20.00   | 15.00    | 23.00 | 21.00 | 18.00 | 21.00 | 22.00 |        |           |         |          |          |
|               | Other Credit Bonds             | 19.46   | 19.59    | 23.00 | 20.91 | 20.00 | 22.00 | 21.54 |        |           |         |          |          |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 19.41   | 19.42    | 23.00 | 21.20 | 19.99 | 22.00 | 21.42 |        |           |         |          |          |
|               | Swaps                          | 19.41   | 19.42    | 23.00 | 21.20 | 19.99 | 22.00 | 21.42 |        |           |         |          |          |
| Equities      | Total                          | 19.30   | 19.29    | 23.00 | 20.77 | 20.00 | 22.00 | 21.21 |        |           |         |          |          |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 19.35   | 19.35    | 23.00 | 20.73 | 20.00 | 22.00 | 21.29 |        |           |         |          |          |
|               | U.S. ETFs                      | 19.00   | 19.00    | 23.00 | 21.00 | 20.00 | 22.00 | 21.00 |        |           |         |          |          |
|               | European ETFs                  | 20.00   | 20.00    | 23.00 | 20.00 | 20.00 | 22.00 | 22.00 |        |           |         |          |          |
|               | Derivatives                    |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 19.22   | 19.22    | 23.00 | 20.81 | 20.00 | 22.00 | 21.12 |        |           |         |          |          |
|               | Options / Convertibles / Swaps | 19.46   | 19.47    | 23.00 | 20.54 | 20.00 | 22.00 | 21.24 |        |           |         |          |          |
|               | Equity Futures                 | 19.01   | 19.02    | 23.00 | 20.98 | 20.00 | 22.00 | 21.01 |        |           |         |          |          |
| Money Markets | Total                          | 19.22   | 19.22    | 23.00 | 21.51 | 20.00 | 22.00 | 21.23 |        |           |         |          |          |
|               | Cash                           |         |          |       |       |       |       |       |        |           |         |          |          |
|               | Total                          | 19.22   | 19.22    | 23.00 | 21.51 | 20.00 | 22.00 | 21.23 |        |           |         |          |          |
|               | Repurchase Agreements (Repo)   | 19.22   | 19.23    | 23.00 | 21.50 | 20.00 | 22.00 | 21.23 |        |           |         |          |          |
|               | Other Money Markets            | 19.07   | 19.05    | 23.00 | 21.93 | 20.00 | 22.00 | 21.02 |        |           |         |          |          |

# TRADEWEB MARKETS / TRACE – ANNUAL

|          |                 |                          | ADV (USD mm) |        |        |        |        |        |        |
|----------|-----------------|--------------------------|--------------|--------|--------|--------|--------|--------|--------|
|          | Product         | Type                     | 2014         | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
| Tradeweb | U.S. High Grade | Total                    | 204          | 272    | 608    | 1,127  | 1,899  | 2,943  | 4,296  |
|          |                 | Electronically Processed | 0            | 25     | 255    | 669    | 1,192  | 1,741  | 2,446  |
|          |                 | Fully Electronic         | 204          | 246    | 352    | 457    | 706    | 1,201  | 1,849  |
|          | U.S. High Yield | Total                    | 67           | 67     | 138    | 187    | 259    | 339    | 512    |
|          |                 | Electronically Processed | 0            | 3      | 67     | 109    | 162    | 162    | 254    |
|          |                 | Fully Electronic         | 67           | 64     | 71     | 78     | 98     | 177    | 257    |
| TRACE    | U.S. High Grade | Total                    | 14,449       | 16,731 | 18,329 | 19,728 | 21,016 | 22,671 | 25,764 |
|          | U.S. High Yield | Total                    | 5,538        | 8,139  | 8,679  | 8,424  | 8,321  | 9,103  | 10,835 |

|          |                 |                          | Volume (USD mm) |           |           |           |           |           |           |
|----------|-----------------|--------------------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|
|          | Product         | Type                     | 2014            | 2015      | 2016      | 2017      | 2018      | 2019      | 2020      |
| Tradeweb | U.S. High Grade | Total                    | 50,981          | 68,174    | 151,886   | 281,714   | 472,762   | 735,679   | 1,078,228 |
|          |                 | Electronically Processed | 0               | 6,304     | 63,834    | 167,348   | 296,855   | 435,350   | 614,064   |
|          |                 | Fully Electronic         | 50,981          | 61,870    | 88,052    | 114,366   | 175,907   | 300,329   | 464,164   |
|          | U.S. High Yield | Total                    | 16,674          | 16,778    | 34,546    | 46,752    | 64,585    | 84,863    | 128,463   |
|          |                 | Electronically Processed | 0               | 765       | 16,684    | 27,346    | 40,247    | 40,597    | 63,832    |
|          |                 | Fully Electronic         | 16,674          | 16,014    | 17,863    | 19,405    | 24,338    | 44,266    | 64,631    |
| TRACE    | U.S. High Grade | Total                    | 3,612,298       | 4,199,487 | 4,582,262 | 4,932,085 | 5,233,019 | 5,667,835 | 6,466,638 |
|          | U.S. High Yield | Total                    | 1,384,385       | 2,042,829 | 2,169,803 | 2,105,939 | 2,071,939 | 2,275,626 | 2,719,359 |

|          |                 |                          | Volume (% of TRACE) |        |        |        |        |        |        |
|----------|-----------------|--------------------------|---------------------|--------|--------|--------|--------|--------|--------|
|          | Product         | Type                     | 2014                | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
| Tradeweb | U.S. High Grade | Total                    | 1.4%                | 1.6%   | 3.3%   | 5.7%   | 9.0%   | 13.0%  | 16.7%  |
|          |                 | Electronically Processed | 0.0%                | 0.2%   | 1.4%   | 3.4%   | 5.7%   | 7.7%   | 9.5%   |
|          |                 | Fully Electronic         | 1.4%                | 1.5%   | 1.9%   | 2.3%   | 3.4%   | 5.3%   | 7.2%   |
|          | U.S. High Yield | Total                    | 1.2%                | 0.8%   | 1.6%   | 2.2%   | 3.1%   | 3.7%   | 4.7%   |
|          |                 | Electronically Processed | 0.0%                | 0.0%   | 0.8%   | 1.3%   | 1.9%   | 1.8%   | 2.3%   |
|          |                 | Fully Electronic         | 1.2%                | 0.8%   | 0.8%   | 0.9%   | 1.2%   | 1.9%   | 2.4%   |
| TRACE    | U.S. High Grade | Total                    | 100.0%              | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
|          | U.S. High Yield | Total                    | 100.0%              | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

## FOOTNOTES

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.

# TRADEWEB MARKETS / TRACE – QUARTERLY

|          |                 |                          | ADV (USD mm) |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|-----------------|--------------------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|          | Product         | Type                     | Q1 2017      | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 | Q4 2018 | Q1 2019 | Q2 2019 | Q3 2019 | Q4 2019 | Q1 2020 | Q2 2020 | Q3 2020 | Q4 2020 | Q1 2021 | Q2 2021 |
| Tradeweb | U.S. High Grade | Total                    | 906          | 1,010   | 1,204   | 1,388   | 1,796   | 1,819   | 1,810   | 2,177   | 2,946   | 2,905   | 2,590   | 3,341   | 4,041   | 4,773   | 3,906   | 4,468   | 5,675   | 5,176   |
|          |                 | Electronically Processed | 477          | 558     | 760     | 883     | 1,121   | 1,188   | 1,146   | 1,316   | 1,955   | 1,738   | 1,492   | 1,792   | 2,441   | 2,977   | 2,208   | 2,159   | 2,718   | 2,231   |
|          |                 | Fully Electronic         | 429          | 452     | 444     | 505     | 675     | 630     | 665     | 861     | 991     | 1,167   | 1,098   | 1,549   | 1,600   | 1,796   | 1,698   | 2,309   | 2,957   | 2,945   |
|          | U.S. High Yield | Total                    | 212          | 165     | 159     | 213     | 270     | 246     | 242     | 280     | 342     | 298     | 345     | 373     | 504     | 504     | 422     | 620     | 843     | 852     |
|          |                 | Electronically Processed | 144          | 98      | 86      | 110     | 160     | 157     | 158     | 171     | 211     | 132     | 168     | 140     | 257     | 315     | 204     | 242     | 362     | 359     |
|          |                 | Fully Electronic         | 68           | 67      | 73      | 103     | 109     | 89      | 85      | 109     | 131     | 166     | 177     | 233     | 247     | 189     | 218     | 378     | 482     | 493     |
| TRACE    | U.S. High Grade | Total                    | 22,084       | 19,315  | 18,824  | 18,711  | 23,265  | 21,256  | 18,904  | 20,697  | 25,977  | 23,270  | 20,595  | 20,954  | 26,996  | 31,229  | 22,031  | 22,834  | 29,207  | 24,333  |
|          | U.S. High Yield | Total                    | 10,190       | 8,009   | 7,387   | 8,133   | 9,765   | 8,085   | 7,204   | 8,278   | 10,071  | 9,217   | 8,440   | 8,717   | 12,436  | 12,539  | 8,865   | 9,533   | 12,131  | 10,161  |

|          |                 |                          | Volume (USD mm) |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
|----------|-----------------|--------------------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|          | Product         | Type                     | Q1 2017         | Q2 2017   | Q3 2017   | Q4 2017   | Q1 2018   | Q2 2018   | Q3 2018   | Q4 2018   | Q1 2019   | Q2 2019   | Q3 2019   | Q4 2019   | Q1 2020   | Q2 2020   | Q3 2020   | Q4 2020   | Q1 2021   | Q2 2021   |
| Tradeweb | U.S. High Grade | Total                    | 56,157          | 63,621    | 75,851    | 86,085    | 109,543   | 116,385   | 114,058   | 132,775   | 179,728   | 183,023   | 165,780   | 207,148   | 250,565   | 300,689   | 249,984   | 276,990   | 346,171   | 331,277   |
|          |                 | Electronically Processed | 29,570          | 35,139    | 47,886    | 54,753    | 68,370    | 76,045    | 72,177    | 80,262    | 119,276   | 109,480   | 95,505    | 111,089   | 151,343   | 187,524   | 141,339   | 133,857   | 165,769   | 142,770   |
|          |                 | Fully Electronic         | 26,587          | 28,482    | 27,965    | 31,332    | 41,173    | 40,340    | 41,881    | 52,513    | 60,452    | 73,543    | 70,275    | 96,059    | 99,222    | 113,165   | 108,644   | 143,133   | 180,402   | 188,507   |
|          | U.S. High Yield | Total                    | 13,129          | 10,410    | 9,996     | 13,216    | 16,466    | 15,751    | 15,268    | 17,101    | 20,857    | 18,778    | 22,084    | 23,144    | 31,248    | 31,775    | 26,977    | 38,464    | 51,448    | 54,508    |
|          |                 | Electronically Processed | 8,936           | 6,175     | 5,425     | 6,811     | 9,788     | 10,078    | 9,938     | 10,443    | 12,875    | 8,301     | 10,742    | 8,679     | 15,934    | 19,857    | 13,038    | 15,003    | 22,058    | 22,975    |
|          |                 | Fully Electronic         | 4,193           | 4,235     | 4,572     | 6,405     | 6,679     | 5,672     | 5,329     | 6,658     | 7,982     | 10,477    | 11,342    | 14,465    | 15,314    | 11,918    | 13,939    | 23,461    | 29,390    | 31,533    |
| TRACE    | U.S. High Grade | Total                    | 1,369,194       | 1,216,869 | 1,185,922 | 1,160,100 | 1,419,188 | 1,360,391 | 1,190,934 | 1,262,506 | 1,584,599 | 1,465,994 | 1,318,065 | 1,299,178 | 1,673,746 | 1,967,431 | 1,409,990 | 1,415,728 | 1,781,637 | 1,557,296 |
|          | U.S. High Yield | Total                    | 631,765         | 504,537   | 465,364   | 504,273   | 595,647   | 517,439   | 453,871   | 504,982   | 614,328   | 580,686   | 540,148   | 540,464   | 771,027   | 789,976   | 567,333   | 591,069   | 740,002   | 650,316   |

|          |                 |                          | Volume (% of TRACE) |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------|-----------------|--------------------------|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|          | Product         | Type                     | Q1 2017             | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 | Q4 2018 | Q1 2019 | Q2 2019 | Q3 2019 | Q4 2019 | Q1 2020 | Q2 2020 | Q3 2020 | Q4 2020 | Q1 2021 | Q2 2021 |
| Tradeweb | U.S. High Grade | Total                    | 4.1%                | 5.2%    | 6.4%    | 7.4%    | 7.7%    | 8.6%    | 9.6%    | 10.5%   | 11.3%   | 12.5%   | 12.6%   | 15.9%   | 15.0%   | 15.3%   | 17.7%   | 19.6%   | 19.4%   | 21.3%   |
|          |                 | Electronically Processed | 2.2%                | 2.9%    | 4.0%    | 4.7%    | 4.8%    | 5.6%    | 6.1%    | 6.4%    | 7.5%    | 7.5%    | 7.2%    | 8.6%    | 9.0%    | 9.5%    | 10.0%   | 9.5%    | 9.3%    | 9.2%    |
|          |                 | Fully Electronic         | 1.9%                | 2.3%    | 2.4%    | 2.7%    | 2.9%    | 3.0%    | 3.5%    | 4.2%    | 3.8%    | 5.0%    | 5.3%    | 7.4%    | 5.9%    | 5.8%    | 7.7%    | 10.1%   | 10.1%   | 12.1%   |
|          | U.S. High Yield | Total                    | 2.1%                | 2.1%    | 2.1%    | 2.6%    | 2.8%    | 3.0%    | 3.4%    | 3.4%    | 3.4%    | 3.2%    | 4.1%    | 4.3%    | 4.1%    | 4.0%    | 4.8%    | 6.5%    | 7.0%    | 8.4%    |
|          |                 | Electronically Processed | 1.4%                | 1.2%    | 1.2%    | 1.4%    | 1.6%    | 1.9%    | 2.2%    | 2.1%    | 2.1%    | 1.4%    | 2.0%    | 1.6%    | 2.1%    | 2.5%    | 2.3%    | 2.5%    | 3.0%    | 3.5%    |
|          |                 | Fully Electronic         | 0.7%                | 0.8%    | 1.0%    | 1.3%    | 1.1%    | 1.1%    | 1.2%    | 1.3%    | 1.3%    | 1.8%    | 2.1%    | 2.7%    | 2.0%    | 1.5%    | 2.5%    | 4.0%    | 4.0%    | 4.8%    |
| TRACE    | U.S. High Grade | Total                    | 100.0%              | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  |
|          | U.S. High Yield | Total                    | 100.0%              | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  | 100.0%  |

## FOOTNOTES

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.

# TRADEWEB MARKETS / TRACE – MONTHLY ADV (USD mm)

|          |                 |                          | 2017    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 815     | 926      | 968    | 842    | 1,049  | 1,116  | 1,209  | 1,239  | 1,158     | 1,606   | 1,474    | 1,071    |
|          |                 | Electronically Processed | 391     | 493      | 538    | 451    | 595    | 613    | 775    | 802    | 697       | 1,062   | 962      | 613      |
|          |                 | Fully Electronic         | 423     | 433      | 430    | 391    | 454    | 503    | 434    | 437    | 461       | 544     | 512      | 457      |
|          | U.S. High Yield | Total                    | 213     | 234      | 193    | 156    | 169    | 169    | 153    | 150    | 174       | 199     | 294      | 143      |
|          |                 | Electronically Processed | 148     | 161      | 127    | 98     | 98     | 98     | 95     | 82     | 83        | 107     | 152      | 68       |
|          |                 | Fully Electronic         | 65      | 72       | 66     | 58     | 71     | 71     | 59     | 69     | 91        | 92      | 143      | 74       |
| TRACE    | U.S. High Grade | Total                    | 21,929  | 22,485   | 21,887 | 18,646 | 19,964 | 19,245 | 18,601 | 17,852 | 20,166    | 20,994  | 19,926   | 15,039   |
|          | U.S. High Yield | Total                    | 9,593   | 10,358   | 10,570 | 7,603  | 8,320  | 8,047  | 7,230  | 6,797  | 8,222     | 8,849   | 9,408    | 6,044    |

|          |                 |                          | 2018    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 1,819   | 1,781    | 1,785  | 1,754  | 1,934  | 1,762  | 1,586  | 1,722  | 2,166     | 2,428   | 2,234    | 1,825    |
|          |                 | Electronically Processed | 1,077   | 1,142    | 1,146  | 1,105  | 1,280  | 1,175  | 1,047  | 1,105  | 1,305     | 1,506   | 1,382    | 1,026    |
|          |                 | Fully Electronic         | 743     | 639      | 640    | 649    | 654    | 587    | 540    | 617    | 861       | 922     | 851      | 799      |
|          | U.S. High Yield | Total                    | 293     | 299      | 220    | 258    | 242    | 238    | 217    | 239    | 275       | 315     | 299      | 220      |
|          |                 | Electronically Processed | 185     | 161      | 135    | 174    | 158    | 140    | 145    | 163    | 165       | 176     | 191      | 145      |
|          |                 | Fully Electronic         | 108     | 138      | 85     | 85     | 84     | 98     | 71     | 76     | 110       | 138     | 109      | 76       |
| TRACE    | U.S. High Grade | Total                    | 23,053  | 23,658   | 23,123 | 21,416 | 21,021 | 21,343 | 18,472 | 16,770 | 21,963    | 22,339  | 21,691   | 17,749   |
|          | U.S. High Yield | Total                    | 9,905   | 10,987   | 8,519  | 8,207  | 8,420  | 7,612  | 7,250  | 6,487  | 8,022     | 9,226   | 8,571    | 6,873    |

|          |                 |                          | 2019    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 2,865   | 3,063    | 2,922  | 3,074  | 2,600  | 3,063  | 2,504  | 2,247  | 3,063     | 3,279   | 3,636    | 3,139    |
|          |                 | Electronically Processed | 1,876   | 2,055    | 1,945  | 1,894  | 1,623  | 1,700  | 1,462  | 1,262  | 1,778     | 1,792   | 2,004    | 1,599    |
|          |                 | Fully Electronic         | 990     | 1,008    | 977    | 1,181  | 977    | 1,363  | 1,042  | 984    | 1,285     | 1,487   | 1,632    | 1,540    |
|          | U.S. High Yield | Total                    | 402     | 368      | 258    | 287    | 268    | 342    | 360    | 295    | 384       | 375     | 394      | 353      |
|          |                 | Electronically Processed | 252     | 235      | 148    | 142    | 142    | 110    | 181    | 149    | 174       | 130     | 147      | 143      |
|          |                 | Fully Electronic         | 151     | 132      | 110    | 145    | 127    | 233    | 180    | 145    | 210       | 244     | 247      | 210      |
| TRACE    | U.S. High Grade | Total                    | 25,517  | 26,424   | 26,032 | 24,086 | 21,568 | 24,284 | 20,201 | 19,039 | 22,740    | 21,963  | 22,963   | 18,080   |
|          | U.S. High Yield | Total                    | 10,697  | 10,329   | 9,212  | 8,917  | 8,646  | 10,162 | 8,361  | 7,680  | 9,362     | 9,459   | 9,262    | 7,447    |

## FOOTNOTES

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.

# TRADEWEB MARKETS / TRACE – MONTHLY ADV (USD mm)

|          |                 |                          | 2020    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 4,095   | 4,115    | 3,927  | 4,583  | 4,951  | 4,793  | 3,932  | 3,764  | 4,020     | 4,737   | 4,978    | 3,769    |
|          |                 | Electronically Processed | 2,300   | 2,241    | 2,748  | 3,041  | 3,055  | 2,844  | 2,328  | 2,155  | 2,137     | 2,405   | 2,418    | 1,701    |
|          |                 | Fully Electronic         | 1,794   | 1,874    | 1,179  | 1,542  | 1,896  | 1,949  | 1,604  | 1,610  | 1,883     | 2,332   | 2,560    | 2,068    |
|          | U.S. High Yield | Total                    | 450     | 563      | 505    | 555    | 498    | 462    | 401    | 357    | 507       | 571     | 688      | 609      |
|          |                 | Electronically Processed | 205     | 237      | 323    | 401    | 320    | 230    | 193    | 162    | 256       | 230     | 296      | 207      |
|          |                 | Fully Electronic         | 245     | 326      | 181    | 154    | 179    | 233    | 208    | 195    | 251       | 341     | 392      | 402      |
| TRACE    | U.S. High Grade | Total                    | 24,816  | 25,337   | 30,509 | 32,970 | 32,167 | 28,715 | 22,598 | 20,735 | 22,734    | 24,591  | 24,696   | 19,550   |
|          | U.S. High Yield | Total                    | 10,746  | 12,614   | 13,896 | 13,499 | 12,201 | 11,931 | 8,745  | 8,264  | 9,589     | 9,645   | 10,165   | 8,881    |

|          |                 |                          | 2021    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 5,972   | 5,421    | 5,640  | 5,250  | 4,968  | 5,299  | 4,299  |        |           |         |          |          |
|          |                 | Electronically Processed | 3,015   | 2,661    | 2,518  | 2,404  | 2,239  | 2,050  | 1,736  |        |           |         |          |          |
|          |                 | Fully Electronic         | 2,957   | 2,759    | 3,121  | 2,846  | 2,728  | 3,249  | 2,563  |        |           |         |          |          |
|          | U.S. High Yield | Total                    | 743     | 897      | 882    | 897    | 785    | 866    | 870    |        |           |         |          |          |
|          |                 | Electronically Processed | 356     | 389      | 344    | 412    | 337    | 326    | 309    |        |           |         |          |          |
|          |                 | Fully Electronic         | 387     | 508      | 538    | 485    | 448    | 541    | 561    |        |           |         |          |          |
| TRACE    | U.S. High Grade | Total                    | 29,023  | 28,298   | 30,110 | 24,172 | 24,032 | 24,773 | 21,306 |        |           |         |          |          |
|          | U.S. High Yield | Total                    | 11,853  | 12,388   | 12,149 | 10,091 | 10,359 | 10,048 | 8,760  |        |           |         |          |          |

## FOOTNOTES

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.



# TRADEWEB MARKETS / TRACE – MONTHLY VOLUMES (USD mm)

|          |                 |                          | 2017    |          |         |         |         |         |         |         |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 16,291  | 17,603   | 22,263  | 15,991  | 23,088  | 24,542  | 24,183  | 28,499  | 23,169    | 33,724  | 30,950   | 21,411   |
|          |                 | Electronically Processed | 7,829   | 9,374    | 12,367  | 8,565   | 13,091  | 13,483  | 15,495  | 18,443  | 13,949    | 22,292  | 20,196   | 12,266   |
|          |                 | Fully Electronic         | 8,462   | 8,229    | 9,896   | 7,426   | 9,997   | 11,059  | 8,689   | 10,056  | 9,220     | 11,432  | 10,754   | 9,146    |
|          | U.S. High Yield | Total                    | 4,257   | 4,444    | 4,428   | 2,965   | 3,722   | 3,724   | 3,068   | 3,453   | 3,476     | 4,180   | 6,181    | 2,855    |
|          |                 | Electronically Processed | 2,954   | 3,067    | 2,914   | 1,858   | 2,156   | 2,162   | 1,897   | 1,876   | 1,652     | 2,255   | 3,188    | 1,368    |
|          |                 | Fully Electronic         | 1,303   | 1,377    | 1,514   | 1,107   | 1,566   | 1,563   | 1,171   | 1,577   | 1,824     | 1,925   | 2,993    | 1,487    |
| TRACE    | U.S. High Grade | Total                    | 438,579 | 427,217  | 503,397 | 354,267 | 439,203 | 423,399 | 372,010 | 410,585 | 403,326   | 440,882 | 418,443  | 300,775  |
|          | U.S. High Yield | Total                    | 191,853 | 196,796  | 243,117 | 144,454 | 183,047 | 177,037 | 144,595 | 156,338 | 164,431   | 185,825 | 197,561  | 120,887  |

|          |                 |                          | 2018    |          |         |         |         |         |         |         |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 38,208  | 33,847   | 37,488  | 36,842  | 42,550  | 36,993  | 33,309  | 39,601  | 41,148    | 53,424  | 44,671   | 34,681   |
|          |                 | Electronically Processed | 22,610  | 21,702   | 24,057  | 23,212  | 28,157  | 24,676  | 21,978  | 25,410  | 24,790    | 33,130  | 27,641   | 19,491   |
|          |                 | Fully Electronic         | 15,598  | 12,145   | 13,430  | 13,630  | 14,393  | 12,317  | 11,331  | 14,191  | 16,358    | 20,294  | 17,030   | 15,190   |
|          | U.S. High Yield | Total                    | 6,157   | 5,689    | 4,620   | 5,421   | 5,330   | 4,999   | 4,549   | 5,499   | 5,219     | 6,924   | 5,989    | 4,187    |
|          |                 | Electronically Processed | 3,886   | 3,058    | 2,844   | 3,646   | 3,484   | 2,949   | 3,052   | 3,760   | 3,127     | 3,878   | 3,815    | 2,751    |
|          |                 | Fully Electronic         | 2,272   | 2,631    | 1,776   | 1,775   | 1,846   | 2,051   | 1,498   | 1,740   | 2,092     | 3,047   | 2,175    | 1,436    |
| TRACE    | U.S. High Grade | Total                    | 484,120 | 449,493  | 485,576 | 449,727 | 462,468 | 448,196 | 387,914 | 385,717 | 417,303   | 491,450 | 433,824  | 337,231  |
|          | U.S. High Yield | Total                    | 207,998 | 208,749  | 178,900 | 172,345 | 185,236 | 159,858 | 152,246 | 149,208 | 152,417   | 202,967 | 171,425  | 130,590  |

|          |                 |                          | 2019    |          |         |         |         |         |         |         |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 60,175  | 58,198   | 61,355  | 64,561  | 57,196  | 61,266  | 55,095  | 49,424  | 61,261    | 72,142  | 69,085   | 65,921   |
|          |                 | Electronically Processed | 39,392  | 39,039   | 40,845  | 39,770  | 35,704  | 34,006  | 32,175  | 27,772  | 35,559    | 39,431  | 38,074   | 33,584   |
|          |                 | Fully Electronic         | 20,783  | 19,159   | 20,511  | 24,791  | 21,492  | 27,260  | 22,920  | 21,653  | 25,702    | 32,711  | 31,011   | 32,337   |
|          | U.S. High Yield | Total                    | 8,450   | 6,987    | 5,420   | 6,029   | 5,906   | 6,843   | 7,926   | 6,483   | 7,674     | 8,239   | 7,495    | 7,410    |
|          |                 | Electronically Processed | 5,289   | 4,472    | 3,115   | 2,990   | 3,119   | 2,192   | 3,973   | 3,287   | 3,483     | 2,867   | 2,802    | 3,010    |
|          |                 | Fully Electronic         | 3,162   | 2,514    | 2,306   | 3,039   | 2,786   | 4,651   | 3,954   | 3,196   | 4,191     | 5,372   | 4,693    | 4,400    |
| TRACE    | U.S. High Grade | Total                    | 535,859 | 502,061  | 546,679 | 505,810 | 474,501 | 485,683 | 444,412 | 418,857 | 454,796   | 483,194 | 436,302  | 379,682  |
|          | U.S. High Yield | Total                    | 224,628 | 196,243  | 193,457 | 187,251 | 190,203 | 203,233 | 183,950 | 168,959 | 187,239   | 208,100 | 175,977  | 156,387  |

## FOOTNOTES

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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.

# TRADEWEB MARKETS / TRACE – MONTHLY VOLUMES (USD mm)

|          |                 |                          | 2020    |          |         |         |         |         |         |         |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 85,985  | 78,181   | 86,398  | 96,233  | 99,013  | 105,443 | 86,506  | 79,049  | 84,428    | 99,480  | 94,591   | 82,919   |
|          |                 | Electronically Processed | 48,307  | 42,580   | 60,456  | 63,855  | 61,094  | 62,576  | 51,209  | 45,245  | 44,885    | 50,501  | 45,943   | 37,414   |
|          |                 | Fully Electronic         | 37,678  | 35,601   | 25,943  | 32,378  | 37,919  | 42,867  | 35,297  | 33,804  | 39,543    | 48,979  | 48,649   | 45,505   |
|          | U.S. High Yield | Total                    | 9,456   | 10,690   | 11,101  | 11,646  | 9,963   | 10,166  | 8,819   | 7,507   | 10,650    | 11,998  | 13,068   | 13,398   |
|          |                 | Electronically Processed | 4,315   | 4,505    | 7,114   | 8,414   | 6,392   | 5,050   | 4,253   | 3,408   | 5,377     | 4,832   | 5,627    | 4,544    |
|          |                 | Fully Electronic         | 5,142   | 6,185    | 3,987   | 3,232   | 3,570   | 5,116   | 4,566   | 4,099   | 5,274     | 7,166   | 7,442    | 8,853    |
| TRACE    | U.S. High Grade | Total                    | 521,138 | 481,408  | 671,200 | 692,367 | 643,332 | 631,732 | 497,159 | 435,425 | 477,406   | 516,413 | 469,218  | 430,097  |
|          | U.S. High Yield | Total                    | 225,657 | 239,658  | 305,712 | 283,486 | 244,012 | 262,474 | 192,400 | 173,554 | 201,379   | 202,548 | 193,141  | 195,380  |

|          |                 |                          | 2021    |          |         |         |         |         |         |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|---------|---------|---------|---------|---------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March   | April   | May     | June    | July    | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 113,471 | 102,990  | 129,710 | 115,500 | 99,359  | 116,577 | 90,276  |        |           |         |          |          |
|          |                 | Electronically Processed | 57,288  | 50,560   | 57,921  | 52,879  | 44,790  | 45,101  | 36,462  |        |           |         |          |          |
|          |                 | Fully Electronic         | 56,183  | 52,430   | 71,789  | 62,621  | 54,569  | 71,476  | 53,813  |        |           |         |          |          |
|          | U.S. High Yield | Total                    | 14,118  | 17,045   | 20,286  | 19,737  | 15,695  | 19,060  | 18,263  |        |           |         |          |          |
|          |                 | Electronically Processed | 6,758   | 7,388    | 7,911   | 9,074   | 6,735   | 7,165   | 6,479   |        |           |         |          |          |
|          |                 | Fully Electronic         | 7,360   | 9,656    | 12,375  | 10,662  | 8,960   | 11,895  | 11,784  |        |           |         |          |          |
| TRACE    | U.S. High Grade | Total                    | 551,442 | 537,664  | 692,531 | 531,781 | 480,630 | 545,007 | 447,431 |        |           |         |          |          |
|          | U.S. High Yield | Total                    | 225,208 | 235,377  | 279,417 | 221,999 | 207,172 | 221,061 | 183,963 |        |           |         |          |          |

## FOOTNOTES

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.

# TRADEWEB MARKETS / TRACE – MONTHLY VOLUMES (% OF TRACE)

|          |                 |                          | 2017    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 3.7%    | 4.1%     | 4.4%   | 4.5%   | 5.3%   | 5.8%   | 6.5%   | 6.9%   | 5.7%      | 7.6%    | 7.4%     | 7.1%     |
|          |                 | Electronically Processed | 1.8%    | 2.2%     | 2.5%   | 2.4%   | 3.0%   | 3.2%   | 4.2%   | 4.5%   | 3.5%      | 5.1%    | 4.8%     | 4.1%     |
|          |                 | Fully Electronic         | 1.9%    | 1.9%     | 2.0%   | 2.1%   | 2.3%   | 2.6%   | 2.3%   | 2.4%   | 2.3%      | 2.6%    | 2.6%     | 3.0%     |
|          | U.S. High Yield | Total                    | 2.2%    | 2.3%     | 1.8%   | 2.1%   | 2.0%   | 2.1%   | 2.1%   | 2.2%   | 2.1%      | 2.2%    | 3.1%     | 2.4%     |
|          |                 | Electronically Processed | 1.5%    | 1.6%     | 1.2%   | 1.3%   | 1.2%   | 1.2%   | 1.3%   | 1.2%   | 1.0%      | 1.2%    | 1.6%     | 1.1%     |
|          |                 | Fully Electronic         | 0.7%    | 0.7%     | 0.6%   | 0.8%   | 0.9%   | 0.9%   | 0.8%   | 1.0%   | 1.1%      | 1.0%    | 1.5%     | 1.2%     |
| TRACE    | U.S. High Grade | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |
|          | U.S. High Yield | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |

|          |                 |                          | 2018    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 7.9%    | 7.5%     | 7.7%   | 8.2%   | 9.2%   | 8.3%   | 8.6%   | 10.3%  | 9.9%      | 10.9%   | 10.3%    | 10.3%    |
|          |                 | Electronically Processed | 4.7%    | 4.8%     | 5.0%   | 5.2%   | 6.1%   | 5.5%   | 5.7%   | 6.6%   | 5.9%      | 6.7%    | 6.4%     | 5.8%     |
|          |                 | Fully Electronic         | 3.2%    | 2.7%     | 2.8%   | 3.0%   | 3.1%   | 2.7%   | 2.9%   | 3.7%   | 3.9%      | 4.1%    | 3.9%     | 4.5%     |
|          | U.S. High Yield | Total                    | 3.0%    | 2.7%     | 2.6%   | 3.1%   | 2.9%   | 3.1%   | 3.0%   | 3.7%   | 3.4%      | 3.4%    | 3.5%     | 3.2%     |
|          |                 | Electronically Processed | 1.9%    | 1.5%     | 1.6%   | 2.1%   | 1.9%   | 1.8%   | 2.0%   | 2.5%   | 2.1%      | 1.9%    | 2.2%     | 2.1%     |
|          |                 | Fully Electronic         | 1.1%    | 1.3%     | 1.0%   | 1.0%   | 1.0%   | 1.3%   | 1.0%   | 1.2%   | 1.4%      | 1.5%    | 1.3%     | 1.1%     |
| TRACE    | U.S. High Grade | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |
|          | U.S. High Yield | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |

|          |                 |                          | 2019    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 11.2%   | 11.6%    | 11.2%  | 12.8%  | 12.1%  | 12.6%  | 12.4%  | 11.8%  | 13.5%     | 14.9%   | 15.8%    | 17.4%    |
|          |                 | Electronically Processed | 7.4%    | 7.8%     | 7.5%   | 7.9%   | 7.5%   | 7.0%   | 7.2%   | 6.6%   | 7.8%      | 8.2%    | 8.7%     | 8.8%     |
|          |                 | Fully Electronic         | 3.9%    | 3.8%     | 3.8%   | 4.9%   | 4.5%   | 5.6%   | 5.2%   | 5.2%   | 5.7%      | 6.8%    | 7.1%     | 8.5%     |
|          | U.S. High Yield | Total                    | 3.8%    | 3.6%     | 2.8%   | 3.2%   | 3.1%   | 3.4%   | 4.3%   | 3.8%   | 4.1%      | 4.0%    | 4.3%     | 4.7%     |
|          |                 | Electronically Processed | 2.4%    | 2.3%     | 1.6%   | 1.6%   | 1.6%   | 1.1%   | 2.2%   | 1.9%   | 1.9%      | 1.4%    | 1.6%     | 1.9%     |
|          |                 | Fully Electronic         | 1.4%    | 1.3%     | 1.2%   | 1.6%   | 1.5%   | 2.3%   | 2.1%   | 1.9%   | 2.2%      | 2.6%    | 2.7%     | 2.8%     |
| TRACE    | U.S. High Grade | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |
|          | U.S. High Yield | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |

## FOOTNOTES

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.

# TRADEWEB MARKETS / TRACE – MONTHLY VOLUMES (% OF TRACE)

|          |                 |                          | 2020    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 16.5%   | 16.2%    | 12.9%  | 13.9%  | 15.4%  | 16.7%  | 17.4%  | 18.2%  | 17.7%     | 19.3%   | 20.2%    | 19.3%    |
|          |                 | Electronically Processed | 9.3%    | 8.8%     | 9.0%   | 9.2%   | 9.5%   | 9.9%   | 10.3%  | 10.4%  | 9.4%      | 9.8%    | 9.8%     | 8.7%     |
|          |                 | Fully Electronic         | 7.2%    | 7.4%     | 3.9%   | 4.7%   | 5.9%   | 6.8%   | 7.1%   | 7.8%   | 8.3%      | 8.3%    | 9.5%     | 10.4%    |
|          | U.S. High Yield | Total                    | 4.2%    | 4.5%     | 3.6%   | 4.1%   | 4.1%   | 3.9%   | 4.6%   | 4.3%   | 5.3%      | 5.9%    | 6.8%     | 6.9%     |
|          |                 | Electronically Processed | 1.9%    | 1.9%     | 2.3%   | 3.0%   | 2.6%   | 1.9%   | 2.2%   | 2.0%   | 2.7%      | 2.4%    | 2.9%     | 2.3%     |
|          |                 | Fully Electronic         | 2.3%    | 2.6%     | 1.3%   | 1.1%   | 1.5%   | 1.9%   | 2.4%   | 2.4%   | 2.6%      | 3.5%    | 3.9%     | 4.5%     |
| TRACE    | U.S. High Grade | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |
|          | U.S. High Yield | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0%    | 100.0%  | 100.0%   | 100.0%   |

|          |                 |                          | 2021    |          |        |        |        |        |        |        |           |         |          |          |
|----------|-----------------|--------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
|          | Product         | Type                     | January | February | March  | April  | May    | June   | July   | August | September | October | November | December |
| Tradeweb | U.S. High Grade | Total                    | 20.6%   | 19.2%    | 18.7%  | 21.7%  | 20.7%  | 21.4%  | 20.2%  |        |           |         |          |          |
|          |                 | Electronically Processed | 10.4%   | 9.4%     | 8.4%   | 9.9%   | 9.3%   | 8.3%   | 8.1%   |        |           |         |          |          |
|          |                 | Fully Electronic         | 10.2%   | 9.8%     | 10.4%  | 11.8%  | 11.4%  | 13.1%  | 12.0%  |        |           |         |          |          |
|          | U.S. High Yield | Total                    | 6.3%    | 7.2%     | 7.3%   | 8.9%   | 7.6%   | 8.6%   | 9.9%   |        |           |         |          |          |
|          |                 | Electronically Processed | 3.0%    | 3.1%     | 2.8%   | 4.1%   | 3.3%   | 3.2%   | 3.5%   |        |           |         |          |          |
|          |                 | Fully Electronic         | 3.3%    | 4.1%     | 4.4%   | 4.8%   | 4.3%   | 5.4%   | 6.4%   |        |           |         |          |          |
| TRACE    | U.S. High Grade | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |        |           |         |          |          |
|          | U.S. High Yield | Total                    | 100.0%  | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |        |           |         |          |          |

## FOOTNOTES

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.

# DISCLOSURES

## PRODUCT CATEGORIES INCLUDE

**U.S. Government Bonds:** U.S. Treasury bills, notes and bonds, and Treasury Inflation-protected Securities, including when-issued securities. Beginning on June 28, 2021, U.S. government bonds volumes include wholesale U.S. Treasury volumes from the Nasdaq Fixed Income business Tradeweb acquired on June 25, 2021.

**Mortgages:** To-be-announced mortgage-backed securities, specified pools, collateralized mortgage obligations, commercial mortgage-backed securities, other mortgage derivatives and other asset-backed securities.

**Other Government Bonds:** Japanese, Canadian, Australian and New Zealand government bonds, covered bonds (including Pfandbriefe), other government-guaranteed securities, supranational, sub-sovereign and agency 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 (see “footnotes” for segmentation methodology).

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

**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. Certain equity derivatives transactions have been reclassified as Equity Futures to better reflect the product group.

**Equities Futures:** Equity futures including the futures leg of EFPs. Certain equity derivatives transactions have been reclassified as Equity Futures to better reflect the product group.

**Other Money Markets:** Agency discount notes, commercial paper, certificates of deposits (including structured CDs), and deposits.

## VOLUMES

Volumes include Tradeweb, Dealerweb and Tradeweb Direct. Except with respect to U.S. Treasuries, both sides of a trade 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.

All volumes converted to U.S. Dollars.

Volumes for Mortgages represent current face value at time of trade.

Volumes can reflect cancellations and corrections that occur after prior postings; historical volumes are periodically updated.

In March 2020, certain transactions were reclassified based on availability of additional classification data.

## FOOTNOTES

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 BB+/Ba1/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 BB+/Ba1/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 BB+/Ba1/BB+ (but not including “other ratings”) then the bond is HG.
- If 2 of 3 of the bond’s ratings are better than BB+/Ba1/BB+ then the bond is HG.
- If 1 of 3 of the bond’s ratings is better than BB+/Ba1/BB+, and none are equal or worse, then the bond is HG.
- If 1 of 3 of the bond’s ratings is better than BB+/Ba1/BB+ and 1 of 3 is equal or worse, then the bond is HG. (i.e. The bond is split rated: 1 HG, 1 HY).

## FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of the federal securities laws. Statements related to, among other things, our outlook and future performance, the industry and markets in which we operate, our expectations, beliefs, plans, strategies, objectives, prospects and assumptions and future events 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, including those discussed under the heading “Risk Factors” in documents of Tradeweb Markets Inc. on file with or furnished to the SEC, may cause our actual results, performance or achievements to differ materially from those expressed or implied by these forward-looking statements. 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 report are not guarantees of future performance and 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 report. In addition, even if 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 report, they may not be predictive of results or developments in future periods.

Any forward-looking statement that we make in this report 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 report.

## ABOUT TRADEWEB MARKETS

Tradeweb Markets Inc. (Nasdaq: TW) is a leading, global operator of electronic marketplaces for rates, credit, equities and money markets. Founded in 1996, Tradeweb provides access to markets, data and analytics, electronic trading, straight-through-processing and reporting for more than 40 products to clients in the institutional, wholesale and retail markets. Advanced technologies developed by Tradeweb enhance price discovery, order execution and trade workflows while allowing for greater scale and helping to reduce risks in client trading operations. Tradeweb serves approximately 2,500 clients in more than 65 countries. On average, Tradeweb facilitated more than \$920 billion in notional value traded per day over the past four fiscal quarters.

For more information, please go to [www.tradeweb.com](http://www.tradeweb.com).

## LEGAL & COMPLIANCE STATEMENT

This report represents certain trades in instruments that have been reported publicly. The report does not necessarily reflect all transactions that were effected on the system. There is the possibility of errors or delays in the trade submission process. The information provided has been obtained from sources deemed to be reliable, however Tradeweb does not guarantee the accuracy of the information contained in this report.

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