

**CME Exchange ADV Report - Monthly**

August 2019

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|                              | ADV<br>AUG 2019 | ADV<br>AUG 2018 | % CHG  | ADV<br>JUL 2019 | % CHG    | ADV<br>Y.T.D 2019 | ADV<br>Y.T.D 2018 | % CHG   |
|------------------------------|-----------------|-----------------|--------|-----------------|----------|-------------------|-------------------|---------|
| <b>Interest Rate Futures</b> |                 |                 |        |                 |          |                   |                   |         |
| 1-MONTH EURODOLLAR           | 9               | 2.65            | 256.5% | 0.05            | 20679.1% | 2                 | 187               | -98.7%  |
| EURODOLLARS                  | 3,322,778       | 1,902,537.39    | 74.6%  | 2,558,454.77    | 29.9%    | 3,026,264         | 2,996,231         | 1.0%    |
| SOFR                         | 39,925          | 6,091.96        | 555.4% | 37,122.18       | 7.6%     | 31,089            | 1,646             | 1789.1% |
| SONIA                        | 8,226           | 0               | -      | 13,289.41       | -38.1%   | 8,645             | 0                 | -       |
| <b>Interest Rate Options</b> |                 |                 |        |                 |          |                   |                   |         |
| EURODOLLARS                  | 1,350,420       | 528,761.35      | 155.4% | 1,093,278.09    | 23.5%    | 1,215,957         | 715,594           | 69.9%   |
| EURO MIDCURVE                | 485,409         | 491,534.39      | -1.2%  | 433,753.5       | 11.9%    | 685,059           | 719,491           | -4.8%   |

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|-----------------------------|-----------------|-----------------|---------|-----------------|---------|-------------------|-------------------|---------|
| <b>Equity Index Futures</b> |                 |                 |         |                 |         |                   |                   |         |
| BITCOIN FUTURES             | 4,536           | 5,517.74        | -17.8%  | 6,949.91        | -34.7%  | 7,107             | 3,540             | 100.7%  |
| E-MINI COM SERVICES SELECT  | 207             | 0               | -       | 191.36          | 8.3%    | 269               | 0                 | -       |
| E-mini FTSE 100 (USD)       | 0               | 29.65           | -100.0% | 0               | -       | 2                 | 68                | -97.1%  |
| E-mini FTSE China 50        | 0               | 40.17           | -100.0% | 0               | -       | 4                 | 54                | -92.1%  |
| E-MINI MIDCAP               | 14,917          | 9,881.57        | 51.0%   | 12,555.91       | 18.8%   | 15,838            | 17,515            | -9.6%   |
| E-MINI NASDAQ 100           | 608,959         | 330,116.3       | 84.5%   | 360,050.5       | 69.1%   | 482,796           | 416,238           | 16.0%   |
| E-MINI RUSSELL 1000         | 148             | 272.65          | -45.8%  | 92.73           | 59.4%   | 383               | 638               | -40.0%  |
| E-MINI RUSSELL 1000 GROWTH  | 196             | 280.74          | -30.1%  | 39.36           | 398.8%  | 258               | 512               | -49.6%  |
| E-MINI RUSSELL 1000 VALUE   | 531             | 435.74          | 21.8%   | 125.36          | 323.4%  | 679               | 685               | -0.9%   |
| E-MINI RUSSELL 2000         | 159,671         | 96,246.22       | 65.9%   | 111,984.27      | 42.6%   | 143,617           | 130,062           | 10.4%   |
| E-MINI S&P500               | 2,032,176       | 1,090,688.96    | 86.3%   | 1,157,956.05    | 75.5%   | 1,610,308         | 1,588,724         | 1.4%    |
| E-MINI S&P REAL ESTATE SELE | 150             | 274.65          | -45.2%  | 152.68          | -1.5%   | 206               | 351               | -41.4%  |
| FT-SE 100                   | 0               | 64.35           | -100.0% | 0               | -       | 2                 | 63                | -96.5%  |
| FTSE Emerging               | 65              | 74.26           | -12.2%  | 77.59           | -15.9%  | 99                | 22                | 346.4%  |
| IBOVESPA INDEX              | 41              | 67.83           | -39.2%  | 15.36           | 168.3%  | 30                | 56                | -46.1%  |
| MICRO E-MINI NASDAQ 100     | 300,160         | 0               | -       | 198,298.27      | 51.4%   | 101,128           | 0                 | -       |
| MICRO E-MINI RUSSELL 2000   | 45,829          | 0               | -       | 29,104.91       | 57.5%   | 15,282            | 0                 | -       |
| MICRO E-MINI S&P500         | 434,248         | 0               | -       | 207,425.86      | 109.4%  | 139,672           | 0                 | -       |
| NASDAQ BIOTECH              | 9               | 0               | -       | 16.23           | -46.5%  | 14                | 32                | -55.6%  |
| NIFTY 50                    | 0               | 0               | -       | 0               | -       | 0                 | 322               | -100.0% |
| NIKKEI 225 (\$) STOCK       | 12,979          | 7,533.17        | 72.3%   | 6,900.77        | 88.1%   | 10,613            | 14,742            | -28.0%  |
| NIKKEI 225 (YEN) STOCK      | 55,713          | 27,385.13       | 103.4%  | 32,357.68       | 72.2%   | 38,979            | 41,070            | -5.1%   |
| S&P 500                     | 4,488           | 2,716.17        | 65.2%   | 2,533           | 77.2%   | 4,678             | 6,317             | -25.9%  |
| S&P 500 ANNUAL DIVIDEND IND | 907             | 315.48          | 187.6%  | 934.14          | -2.9%   | 1,113             | 565               | 96.9%   |
| S&P 500/GI                  | 0               | 0.04            | -100.0% | 0               | -       | 0                 | 0                 | -24.1%  |
| S&P 500 QUARLY DIVIDEND IND | 39              | 4.35            | 799.1%  | 2.73            | 1333.3% | 9                 | 3                 | 157.9%  |
| S&P 600 SMALLCAP EMINI      | 12              | 0               | -       | 18.32           | -35.7%  | 7                 | 0                 | -       |
| S&P CONSUMER DSCRTNRY SE    | 289             | 430             | -32.7%  | 123.14          | 135.0%  | 416               | 801               | -48.0%  |
| S&P CONSUMER STAPLES SECT   | 368             | 537.22          | -31.6%  | 506.36          | -27.4%  | 905               | 1,073             | -15.6%  |
| S&P ENERGY SECTOR           | 505             | 1,412.22        | -64.2%  | 353             | 43.2%   | 832               | 1,553             | -46.4%  |
| S&P FINANCIAL SECTOR        | 1,132           | 1,274.22        | -11.2%  | 998.73          | 13.3%   | 1,539             | 2,208             | -30.3%  |
| S&P HEALTH CARE SECTOR      | 773             | 592             | 30.5%   | 490.64          | 57.4%   | 873               | 714               | 22.2%   |
| S&P INDUSTRIAL SECTOR       | 450             | 831.74          | -45.8%  | 224.45          | 100.7%  | 591               | 703               | -15.9%  |
| S&P MATERIALS SECTOR        | 393             | 355.52          | 10.6%   | 168.36          | 133.6%  | 501               | 472               | 6.1%    |
| S&P TECHNOLOGY SECTOR       | 378             | 615.48          | -38.5%  | 213.32          | 77.3%   | 691               | 1,143             | -39.6%  |
| S&P UTILITIES SECTOR        | 1,075           | 1,452.74        | -26.0%  | 541.77          | 98.4%   | 1,422             | 1,769             | -19.6%  |
| S&P VALUE INDEX FUTURES     | 0               | 0               | -       | 0               | -       | 0                 | 0                 | -13.8%  |
| YEN DENOMINATED TOPIX       | 1,183           | 34.7            | 3309.5% | 990.45          | 19.4%   | 899               | 23                | 3854.6% |

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|-----------------------------|-----------------|-----------------|--------|-----------------|--------|-------------------|-------------------|--------|
| <b>Equity Index Options</b> |                 |                 |        |                 |        |                   |                   |        |
| E-MINI NASDAQ 100           | 13,423          | 8,966.09        | 49.7%  | 8,039.77        | 67.0%  | 10,184            | 11,408            | -10.7% |
| E-MINI RUSSELL 2000         | 1,137           | 636.39          | 78.6%  | 271.18          | 319.2% | 650               | 609               | 6.7%   |
| E-MINI S&P500               | 429,561         | 252,750.83      | 70.0%  | 172,071.27      | 149.6% | 255,066           | 273,467           | -6.7%  |
| EOM E-MINI RUSSELL 2000 END | 601             | 281.74          | 113.3% | 332.95          | 80.5%  | 429               | 276               | 55.4%  |
| EOM EMINI S&P               | 151,534         | 112,445.3       | 34.8%  | 68,978.59       | 119.7% | 95,442            | 121,924           | -21.7% |
| EOM S&P 500                 | 5,348           | 6,778.57        | -21.1% | 5,111.86        | 4.6%   | 6,066             | 8,990             | -32.5% |
| EOW1 E-MINI RUSSELL 2000 WE | 51              | 32.7            | 56.1%  | 118.41          | -56.9% | 75                | 98                | -23.6% |
| EOW1 E-MINI RUSSELL 2000 WE | 115             | 48.65           | 136.8% | 111             | 3.8%   | 92                | 131               | -30.0% |
| EOW1 EMINI S&P 500          | 54,832          | 41,837.87       | 31.1%  | 46,157.64       | 18.8%  | 46,993            | 51,255            | -8.3%  |
| EOW1 S&P 500                | 3,155           | 3,550.52        | -11.1% | 3,790.64        | -16.8% | 3,196             | 3,876             | -17.5% |
| EOW2 E-MINI RUSSELL 2000 WE | 200             | 119.91          | 66.9%  | 589.95          | -66.1% | 236               | 241               | -1.9%  |
| EOW2 EMINI S&P 500          | 56,900          | 38,856.87       | 46.4%  | 36,176          | 57.3%  | 48,088            | 59,473            | -19.1% |
| EOW2 S&P 500                | 5,430           | 8,071.48        | -32.7% | 5,519.32        | -1.6%  | 5,832             | 7,558             | -22.8% |
| EOW3 E-MINI RUSSELL 2000 WE | 674             | 578.61          | 16.4%  | 686.41          | -1.9%  | 548               | 1,005             | -45.4% |
| EOW3 EMINI S&P 500          | 139,687         | 117,931.7       | 18.4%  | 110,217.27      | 26.7%  | 113,414           | 171,976           | -34.1% |
| EOW3 S&P 500                | 5,031           | 10,293.26       | -51.1% | 7,556.91        | -33.4% | 6,269             | 14,489            | -56.7% |
| EOW4 E-MINI RUSSELL 2000 WE | 187             | 134.26          | 39.2%  | 172.64          | 8.3%   | 152               | 271               | -44.1% |
| EOW4 EMINI S&P 500          | 59,804          | 43,124.35       | 38.7%  | 31,984.91       | 87.0%  | 40,881            | 56,193            | -27.2% |
| S&P 500                     | 13,202          | 12,455.7        | 6.0%   | 6,527.41        | 102.3% | 11,092            | 14,308            | -22.5% |

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|------------------------|-----------------|-----------------|---------|-----------------|--------|-------------------|-------------------|---------|
| <b>FX Futures</b>      |                 |                 |         |                 |        |                   |                   |         |
| AD/CD CROSS RATES      | 0               | 0.39            | -7.1%   | 0.23            | 60.0%  | 1                 | 0                 | 110.1%  |
| AD/JY CROSS RATES      | 148             | 195.65          | -24.3%  | 80.14           | 84.9%  | 148               | 200               | -26.1%  |
| AD/NE CROSS RATES      | 10              | 5.22            | 84.7%   | 10.68           | -9.8%  | 6                 | 4                 | 44.5%   |
| AUSTRALIAN DOLLAR      | 85,562          | 106,134.61      | -19.4%  | 85,287.14       | 0.3%   | 100,876           | 112,905           | -10.7%  |
| BP/JY CROSS RATES      | 191             | 137.96          | 38.3%   | 152.45          | 25.1%  | 138               | 157               | -12.4%  |
| BP/SF CROSS RATES      | 11              | 19.83           | -44.7%  | 38.5            | -71.5% | 21                | 17                | 22.4%   |
| BRAZIL REAL            | 11,997          | 7,770.09        | 54.4%   | 5,374.59        | 123.2% | 7,331             | 6,854             | 7.0%    |
| BRITISH POUND          | 106,424         | 100,807.04      | 5.6%    | 94,633.14       | 12.5%  | 112,994           | 127,982           | -11.7%  |
| CANADIAN DOLLAR        | 75,073          | 71,274.3        | 5.3%    | 63,253.27       | 18.7%  | 76,815            | 83,620            | -8.1%   |
| CD/JY CROSS RATES      | 0               | 13.35           | -99.7%  | 0.27            | -83.3% | 1                 | 8                 | -90.2%  |
| CHINESE RENMINBI (CNH) | 1,707           | 892.61          | 91.3%   | 1,224.55        | 39.4%  | 1,310             | 226               | 480.2%  |
| CZECK KORUNA (EC)      | 0               | 0               | -       | 0               | -      | 0                 | 0                 | 807.6%  |
| CZECK KORUNA (US)      | 0               | 1.83            | -100.0% | 0               | -      | 0                 | 0                 | -100.0% |
| EC/AD CROSS RATES      | 135             | 97.87           | 37.8%   | 158.64          | -15.0% | 240               | 94                | 154.2%  |
| EC/CD CROSS RATES      | 74              | 51.96           | 43.3%   | 72.45           | 2.8%   | 140               | 166               | -15.8%  |
| EC/NOK CROSS RATES     | 33              | 21.65           | 51.6%   | 16.82           | 95.1%  | 29                | 18                | 65.1%   |
| EC/SEK CROSS RATES     | 12              | 14.48           | -18.1%  | 18.59           | -36.2% | 35                | 37                | -4.6%   |
| EFX/BP CROSS RATES     | 3,527           | 2,369.17        | 48.9%   | 3,629.59        | -2.8%  | 4,350             | 3,854             | 12.9%   |
| EFX/JY CROSS RATES     | 3,005           | 2,809.87        | 6.9%    | 1,864.77        | 61.1%  | 3,130             | 4,032             | -22.4%  |
| EFX/SF CROSS RATES     | 1,449           | 1,085.22        | 33.5%   | 1,261.82        | 14.8%  | 1,628             | 1,348             | 20.8%   |
| E-MICRO AUD/USD        | 4,549           | 6,498.22        | -30.0%  | 4,446.68        | 2.3%   | 5,318             | 5,008             | 6.2%    |
| E-MICRO CAD/USD        | 867             | 816.96          | 6.2%    | 802.91          | 8.0%   | 820               | 862               | -4.8%   |
| E-MICRO CHF/USD        | 277             | 74.43           | 271.5%  | 195.09          | 41.8%  | 131               | 67                | 96.5%   |
| E-MICRO EUR/USD        | 9,915           | 14,035.22       | -29.4%  | 10,200.73       | -2.8%  | 11,655            | 17,943            | -35.0%  |
| E-MICRO GBP/USD        | 2,101           | 1,568.22        | 34.0%   | 1,858.18        | 13.1%  | 2,042             | 2,260             | -9.7%   |
| E-MICRO INR/USD        | 301             | 268.26          | 12.2%   | 266.36          | 13.0%  | 239               | 207               | 15.5%   |
| E-MICRO JPY/USD        | 1,979           | 1,210.17        | 63.5%   | 1,137           | 74.0%  | 1,408             | 1,493             | -5.7%   |
| E-MINI EURO FX         | 3,862           | 3,730.43        | 3.5%    | 3,826.82        | 0.9%   | 4,595             | 4,902             | -6.3%   |
| E-MINI JAPANESE YEN    | 1,962           | 538.3           | 264.6%  | 1,096.95        | 78.9%  | 776               | 643               | 20.8%   |
| EURO FX                | 181,319         | 261,288.87      | -30.6%  | 172,075.05      | 5.4%   | 203,463           | 279,110           | -27.1%  |
| HUNGARIAN FORINT (EC)  | 0               | 0               | -       | 0               | -      | 0                 | 0                 | -100.0% |
| HUNGARIAN FORINT (US)  | 0               | 17.65           | -100.0% | 0               | -      | 0                 | 3                 | -98.2%  |
| INDIAN RUPEE           | 4,496           | 3,199.61        | 40.5%   | 2,676.32        | 68.0%  | 3,408             | 4,116             | -17.2%  |
| JAPANESE YEN           | 153,533         | 109,664.65      | 40.0%   | 98,564.5        | 55.8%  | 128,838           | 146,488           | -12.0%  |
| KOREAN WON             | 36              | 16.83           | 112.1%  | 17.41           | 105.0% | 34                | 18                | 87.5%   |
| MEXICAN PESO           | 53,447          | 58,447.96       | -8.6%   | 39,607.36       | 34.9%  | 60,526            | 67,217            | -10.0%  |
| NEW ZEALND DOLLAR      | 23,902          | 25,206.57       | -5.2%   | 22,657.55       | 5.5%   | 27,487            | 30,740            | -10.6%  |
| NKR/USD CROSS RATE     | 284             | 243.7           | 16.4%   | 214.59          | 32.2%  | 245               | 218               | 12.2%   |
| POLISH ZLOTY (EC)      | 1               | 2.78            | -78.8%  | 0.5             | 18.2%  | 3                 | 1                 | 218.1%  |
| POLISH ZLOTY (US)      | 3               | 4.57            | -25.3%  | 5.55            | -38.5% | 6                 | 5                 | 21.6%   |
| RMB USD                | 0               | 0.22            | -79.1%  | 0               | -      | 0                 | 0                 | -73.8%  |
| RUSSIAN RUBLE          | 3,428           | 1,989.39        | 72.3%   | 2,322.41        | 47.6%  | 3,745             | 2,765             | 35.4%   |
| S.AFRICAN RAND         | 3,992           | 2,828.78        | 41.1%   | 2,632.55        | 51.6%  | 2,452             | 2,270             | 8.0%    |
| SF/JY CROSS RATES      | 0               | 0               | -       | 0               | -      | 0                 | 1                 | -96.3%  |
| SHEKEL                 | 0               | 1.04            | -100.0% | 0               | -      | 0                 | 15                | -100.0% |
| SKR/USD CROSS RATES    | 119             | 185.3           | -36.1%  | 109.09          | 8.6%   | 154               | 208               | -26.0%  |
| SWISS FRANC            | 28,355          | 27,538.91       | 3.0%    | 21,071.68       | 34.6%  | 26,412            | 28,711            | -8.0%   |
| TURKISH LIRA           | 8               | 42.65           | -82.1%  | 6.41            | 19.1%  | 49                | 205               | -76.1%  |
| USDZAR                 | 0               | 0               | -       | 0               | -      | 0                 | 0                 | 302.0%  |

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| <b>FX Options</b>               |                 |                 |         |                 |        |                   |                   |         |
| AUD/USD PQO 2pm Fix             | 4,280           | 5,819.57        | -26.5%  | 3,214.86        | 33.1%  | 4,651             | 6,196             | -24.9%  |
| BRAZIL REAL                     | 3               | 0               | -       | 1.05            | 147.8% | 1                 | 0                 | -       |
| BRITISH POUND (EU)              | 0               | 0.78            | -100.0% | 0               | -      | 0                 | 2                 | -100.0% |
| CAD/USD PQO 2pm Fix             | 4,161           | 5,706.96        | -27.1%  | 3,100.82        | 34.2%  | 4,752             | 7,801             | -39.1%  |
| CANADIAN DOLLAR (EU)            | 0               | 0               | -       | 0               | -      | 0                 | 0                 | -100.0% |
| CHF/USD PQO 2pm Fix             | 137             | 101.65          | 35.3%   | 118.41          | 16.1%  | 140               | 145               | -3.6%   |
| EFX/BP CROSS RATES              | 0               | 0               | -       | 0               | -      | 0                 | 0                 | -       |
| EFX/JY CROSS RATES              | 0               | 0               | -       | 0               | -      | 0                 | 17                | -100.0% |
| EURO FX (EU)                    | 0               | 0.87            | -100.0% | 0               | -      | 0                 | 0                 | -100.0% |
| EUR/USD PQO 2pm Fix             | 27,239          | 33,739.3        | -19.3%  | 25,362.59       | 7.4%   | 26,225            | 37,413            | -29.9%  |
| GBP/USD PQO 2pm Fix             | 4,660           | 13,318.96       | -65.0%  | 6,586.86        | -29.3% | 7,776             | 11,982            | -35.1%  |
| JAPANESE YEN (EU)               | 0               | 0               | -       | 0               | -      | 0                 | 0                 | -       |
| JPY/USD PQO 2pm Fix             | 12,479          | 11,114.65       | 12.3%   | 7,510.64        | 66.1%  | 10,206            | 12,715            | -19.7%  |
| MEXICAN PESO                    | 150             | 33.22           | 351.8%  | 54.32           | 176.3% | 87                | 98                | -11.5%  |
| NEW ZEALND DOLLAR               | 24              | 0               | -       | 23.77           | 2.7%   | 22                | 0                 | -       |
| <b>Foreign Exchange Futures</b> |                 |                 |         |                 |        |                   |                   |         |
| CHILEAN PESO                    | 0               | 85.22           | -100.0% | 0               | -      | 2                 | 93                | -97.4%  |
| <b>Foreign Exchange Options</b> |                 |                 |         |                 |        |                   |                   |         |
| AUD/USD PQO 2pm Fix             | 26              | 77.48           | -66.9%  | 25.14           | 2.0%   | 39                | 41                | -5.5%   |

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| <b>Ag Products Futures</b> |                 |                 |         |                 |         |                   |                   |         |
| BUTTER CS                  | 222             | 142.48          | 56.0%   | 259.14          | -14.2%  | 197               | 202               | -2.4%   |
| CASH-SETTLED CHEESE        | 405             | 443             | -8.6%   | 590.05          | -31.4%  | 534               | 482               | 10.8%   |
| CATTLE                     | 60,847          | 52,412.65       | 16.1%   | 60,070.45       | 1.3%    | 68,871            | 65,216            | 5.6%    |
| CAT WEATHER EUROPEAN       | 0               | 0               | -       | 0               | -       | 19                | 0                 | -       |
| CDD SEASONAL STRIP         | 0               | 0               | -       | 0               | -       | 3                 | 4                 | -24.6%  |
| CDD WEATHER                | 9               | 0               | -       | 72.73           | -87.5%  | 53                | 13                | 319.9%  |
| CLASS IV MILK              | 131             | 26.3            | 399.1%  | 61.82           | 112.4%  | 119               | 29                | 317.6%  |
| DRY WHEY                   | 33              | 53.83           | -38.0%  | 41.27           | -19.2%  | 59                | 60                | -1.3%   |
| FEEDER CATTLE              | 16,541          | 16,190.52       | 2.2%    | 13,867.77       | 19.3%   | 15,163            | 14,475            | 4.8%    |
| GOLDMAN SACHS              | 1,222           | 1,321.83        | -7.6%   | 1,249.23        | -2.2%   | 1,356             | 1,501             | -9.7%   |
| GSCI EXCESS RETURN FUT     | 368             | 126.26          | 191.6%  | 17.27           | 2031.6% | 1,349             | 1,439             | -6.3%   |
| HDD SEASONAL STRIP         | 0               | 0               | -       | 0               | -       | 0                 | 0                 | -       |
| HDD WEATHER                | 0               | 0               | -       | 0               | -       | 13                | 3                 | 318.3%  |
| HDD WEATHER EUROPEAN       | 0               | 782.61          | -100.0% | 0               | -       | 18                | 107               | -83.2%  |
| HOGS                       | 55,307          | 56,886.83       | -2.8%   | 71,385.73       | -22.5%  | 64,310            | 54,138            | 18.8%   |
| HOUSING INDEX              | 0               | 0.35            | 30.7%   | 0.45            | 0.0%    | 1                 | 0                 | 40.9%   |
| LUMBER                     | 615             | 868.83          | -29.2%  | 567.18          | 8.4%    | 677               | 922               | -26.6%  |
| MALAYSIAN PALM SWAP        | 333             | 154.78          | 115.0%  | 417.27          | -20.3%  | 190               | 222               | -14.3%  |
| MILK                       | 1,120           | 1,209.96        | -7.5%   | 1,188.82        | -5.8%   | 1,187             | 1,093             | 8.6%    |
| MLK MID OPTIONS            | 0               | 0               | -       | 0               | -       | 0                 | 0                 | -       |
| NFD MILK                   | 280             | 208.04          | 34.3%   | 244.23          | 14.4%   | 311               | 248               | 25.3%   |
| S&P GSCI ENHANCED ER SWAP  | 0               | 0               | -       | 0               | -       | 133               | 156               | -14.4%  |
| USD CRUDE PALM OIL         | 45              | 31.74           | 40.3%   | 22.27           | 100.0%  | 56                | 36                | 54.8%   |
| <b>Ag Products Options</b> |                 |                 |         |                 |         |                   |                   |         |
| BUTTER CS                  | 74              | 164.22          | -55.1%  | 103.5           | -28.7%  | 165               | 184               | -10.4%  |
| CASH-SETTLED CHEESE        | 330             | 406.91          | -18.8%  | 394.18          | -16.2%  | 464               | 471               | -1.5%   |
| CATTLE                     | 9,657           | 6,730.52        | 43.5%   | 6,006           | 60.8%   | 9,439             | 11,623            | -18.8%  |
| CAT WEATHER EUROPEAN       | 0               | 0               | -       | 0               | -       | 12                | 0                 | -       |
| CDD SEASONAL STRIP         | 0               | 0               | -       | 0               | -       | 30                | 4                 | 618.5%  |
| CLASS IV MILK              | 136             | 97.78           | 39.2%   | 161.77          | -15.9%  | 191               | 54                | 251.7%  |
| DRY WHEY                   | 1               | 40.65           | -97.1%  | 14.77           | -92.0%  | 39                | 30                | 29.7%   |
| FEEDER CATTLE              | 1,551           | 1,306.3         | 18.7%   | 1,323.41        | 17.2%   | 1,544             | 1,439             | 7.3%    |
| HDD EURO SEASONAL STRIP    | 0               | 0               | -       | 0               | -       | 0                 | 0                 | -       |
| HDD SEASONAL STRIP         | 0               | 0               | -       | 0               | -       | 0                 | 18                | -100.0% |
| HDD WEATHER                | 0               | 0               | -       | 0               | -       | 0                 | 0                 | -       |
| HOGS                       | 16,684          | 16,824.04       | -0.8%   | 19,560.09       | -14.7%  | 17,917            | 11,025            | 62.5%   |
| HOUSING INDEX              | 0               | 0               | -       | 0               | -       | 0                 | 0                 | -       |
| LUMBER                     | 66              | 52.74           | 25.1%   | 91.09           | -27.5%  | 90                | 84                | 7.0%    |
| LV CATL CSO                | 0               | 0               | -       | 0               | -       | 3                 | 1                 | 326.4%  |
| MILK                       | 1,613           | 2,100.87        | -23.2%  | 1,845.59        | -12.6%  | 1,791             | 1,607             | 11.4%   |
| MLK MID OPTIONS            | 0               | 3               | -93.9%  | 0.95            | -80.9%  | 1                 | 2                 | -46.5%  |
| NFD MILK                   | 180             | 143.3           | 25.4%   | 231.18          | -22.3%  | 318               | 240               | 32.8%   |

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|                            | ADV<br>AUG 2019   | ADV<br>AUG 2018     | % CHG        | ADV<br>JUL 2019     | % CHG        | ADV<br>Y.T.D 2019   | ADV<br>Y.T.D 2018   | % CHG        |
|----------------------------|-------------------|---------------------|--------------|---------------------|--------------|---------------------|---------------------|--------------|
| <b>TOTAL FUTURES GROUP</b> |                   |                     |              |                     |              |                     |                     |              |
| Interest Rate Futures      | 3,370,938         | 1,908,632           | 76.6%        | 2,608,866.41        | 29.2%        | 3,066,001           | 2,998,064           | 2.3%         |
| Equity Index Futures       | 3,682,529         | 1,579,481           | 133.1%       | 2,132,393.23        | 72.7%        | 2,581,763           | 2,232,040           | 15.7%        |
| FX Futures                 | 768,093           | 813,122.78          | -5.5%        | 642,869.32          | 19.5%        | 792,999             | 937,000             | -15.4%       |
| Foreign Exchange Futures   | 0                 | 85.22               | -100.0%      | 0                   | -            | 2                   | 93                  | -97.4%       |
| Ag Products Futures        | 137,476           | 130,860             | 5.1%         | 150,055.68          | -8.4%        | 154,618             | 140,344             | 10.2%        |
| <b>TOTAL FUTURES</b>       | <b>7,959,037</b>  | <b>4,432,181</b>    | <b>79.6%</b> | <b>5,534,184.64</b> | <b>43.8%</b> | <b>6,595,382.95</b> | <b>6,307,540.19</b> | <b>4.6%</b>  |
| <b>TOTAL OPTIONS GROUP</b> |                   |                     |              |                     |              |                     |                     |              |
| Interest Rate Options      | 1,835,829         | 1,020,295.74        | 79.9%        | 1,527,031.59        | 20.2%        | 1,901,016           | 1,435,085           | 32.5%        |
| Equity Index Options       | 940,872           | 658,894.78          | 42.8%        | 504,414.14          | 86.5%        | 644,703             | 797,548             | -19.2%       |
| FX Options                 | 53,133            | 69,835.96           | -23.9%       | 45,973.32           | 15.6%        | 53,860              | 76,369              | -29.5%       |
| Foreign Exchange Options   | 26                | 77.48               | -66.9%       | 25.14               | 2.0%         | 39                  | 41                  | -5.5%        |
| Ag Products Options        | 30,291            | 27,870.35           | 8.7%         | 29,732.55           | 1.9%         | 32,004              | 26,783              | 19.5%        |
| <b>TOTAL OPTIONS</b>       | <b>2,860,151</b>  | <b>1,776,974.31</b> | <b>61.0%</b> | <b>2,107,176.73</b> | <b>35.7%</b> | <b>2,631,622.01</b> | <b>2,335,826.14</b> | <b>12.7%</b> |
| <b>TOTAL COMBINED</b>      |                   |                     |              |                     |              |                     |                     |              |
| Interest Rate              | 5,206,767         | 2,928,927.74        | 77.8%        | 4,135,898           | 25.9%        | 4,967,016           | 4,433,149           | 12.0%        |
| Equity Index               | 4,623,401         | 2,238,375.78        | 106.6%       | 2,636,807.36        | 75.3%        | 3,226,466           | 3,029,588           | 6.5%         |
| FX                         | 821,226           | 882,958.74          | -7.0%        | 688,842.64          | 19.2%        | 846,859             | 1,013,369           | -16.4%       |
| Foreign Exchange           | 26                | 162.7               | -84.2%       | 25.14               | 2.0%         | 41                  | 134                 | -69.4%       |
| Ag Products                | 167,768           | 158,730.35          | 5.7%         | 179,788.23          | -6.7%        | 186,623             | 167,127             | 11.7%        |
| <b>GRAND TOTAL</b>         | <b>10,819,187</b> | <b>6,209,155.31</b> | <b>74.2%</b> | <b>7,641,361.36</b> | <b>41.6%</b> | <b>9,227,004.96</b> | <b>8,643,366.33</b> | <b>6.8%</b>  |