# THRIVENT INVESTMENT MANAGEMENT - Held NMS Stocks and Options Order Routing Public Report

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## 3rd Quarter, 2024

Note: Thrivent Investment Management, Inc. does not engage in any material arrangements, including any internalization or payment for order flow arrangements, for each of the venues listed below.

# July 2024

#### S&P 500 Stocks

#### Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 99.68  | 0.10   | 0.15   | 0.07  |

| Venue -<br>Non-directed<br>Order Flow           | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| VIRTU<br>Americas, LLC<br>(NITE)                | 27.75                          | 27.98                   | 16.67                             | 1.20                                      | 55.56                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Citadel<br>Securities LLC<br>(CDRG)             | 25.29                          | 25.50                   | 22.22                             | 2.39                                      | 38.89                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)         | 19.03                          | 19.22                   | 0.00                              | 0.80                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)           | 17.06                          | 17.24                   | 0.00                              | 0.40                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| National<br>Financial<br>Services LLC<br>(XSTM) | 7.42                           | 7.49                    | 11.11                             | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| StoneX<br>Financial INC.<br>(INTL)              | 1.03                           | 1.04                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS<br>Securities, LLC<br>(UBSS)                | 0.95                           | 0.96                    | 0.00                              | 0.40                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)          | 0.55                           | 0.55                    | 0.00                              | 0.00                                      | 5.56                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)         | 0.44                           | 0.00                    | 0.00                              | 49.00                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ)  | 0.42                           | 0.00                    | 50.00                             | 42.63                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

## Non-S&P 500 Stocks

## Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 98.66  | 0.78   | 0.53   | 0.03  |

| Venue -<br>Non-directed<br>Order Flow           | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| National<br>Financial<br>Services LLC<br>(XSTM) | 27.89                          | 28.09                   | 40.96                             | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)                | 21.32                          | 21.64                   | 13.31                             | 2.16                                      | 58.33                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Citadel<br>Securities LLC<br>(CDRG)             | 19.58                          | 19.86                   | 14.18                             | 2.43                                      | 25.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)         | 14.64                          | 14.88                   | 8.10                              | 1.75                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)           | 13.24                          | 13.45                   | 8.68                              | 0.81                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| StoneX<br>Financial INC.<br>(INTL)              | 0.69                           | 0.70                    | 0.58                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS Securities,<br>LLC (UBSS)                   | 0.69                           | 0.70                    | 0.43                              | 0.00                                      | 8.33                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Instinet<br>BlockCross<br>(BLKX)                | 0.44                           | 0.30                    | 13.31                             | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NYSE Arca<br>(ARCA)                             | 0.39                           | 0.00                    | 0.29                              | 31.85                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)          | 0.34                           | 0.35                    | 0.14                              | 0.13                                      | 8.33                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

# **Options**

## Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 3.04   | 86.05  | 10.91  | 0.00  |

| Venue -<br>Non-directed<br>Order Flow            | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received<br>for Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Citadel Securities<br>LLC (CDRG)                 | 47.41                          | 52.94                   | 49.89                             | 30.14                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Susquehanna<br>Capital Group<br>(SUSQ)           | 21.47                          | 35.29                   | 22.81                             | 9.59                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Dash Financial<br>Technologies<br>LLC (DASH)     | 18.25                          | 11.76                   | 18.12                             | 20.55                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Morgan Stanley<br>& Company LLC<br>(MSCO)        | 7.33                           | 0.00                    | 8.32                              | 2.74                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Wolverine<br>Execution<br>Services LLC<br>(WEXX) | 5.55                           | 0.00                    | 0.85                              | 36.99                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

# August 2024

# S&P 500 Stocks

### Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 99.53  | 0.24   | 0.22   | 0.02  |

| Venue -<br>Non-directed<br>Order Flow           | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| VIRTU<br>Americas, LLC<br>(NITE)                | 27.64                          | 27.94                   | 7.14                              | 1.58                                      | 50.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Citadel<br>Securities LLC<br>(CDRG)             | 25.59                          | 25.85                   | 14.29                             | 1.58                                      | 25.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)           | 20.66                          | 20.87                   | 7.14                              | 1.58                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)         | 14.71                          | 14.87                   | 2.38                              | 1.19                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| National<br>Financial<br>Services LLC<br>(XSTM) | 7.47                           | 7.55                    | 4.76                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS<br>Securities, LLC<br>(UBSS)                | 0.97                           | 0.97                    | 0.00                              | 0.00                                      | 25.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| StoneX<br>Financial INC.<br>(INTL)              | 0.92                           | 0.93                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)          | 0.66                           | 0.67                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)         | 0.60                           | 0.00                    | 0.00                              | 60.47                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ)  | 0.40                           | 0.00                    | 64.29                             | 29.25                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

# August 2024

# Non-S&P 500 Stocks

### Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 98.35  | 0.83   | 0.79   | 0.03  |

| Venue -<br>Non-directed<br>Order Flow           | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| National<br>Financial<br>Services LLC<br>(XSTM) | 26.74                          | 27.28                   | 47.15                             | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)                | 21.16                          | 21.74                   | 16.42                             | 2.07                                      | 30.77                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Citadel<br>Securities LLC<br>(CDRG)             | 19.65                          | 20.22                   | 12.52                             | 1.34                                      | 61.54                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)           | 15.81                          | 16.27                   | 11.54                             | 1.04                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)         | 11.59                          | 11.94                   | 6.83                              | 0.79                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NYSE Arca<br>(ARCA)                             | 0.87                           | 0.00                    | 0.49                              | 32.32                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS<br>Securities,<br>LLC (UBSS)                | 0.73                           | 0.76                    | 0.33                              | 0.00                                      | 7.69                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)         | 0.73                           | 0.00                    | 0.16                              | 27.13                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| StoneX<br>Financial INC.<br>(INTL)              | 0.69                           | 0.71                    | 0.49                              | 0.06                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities,<br>LLC (SOHO)          | 0.53                           | 0.54                    | 1.14                              | 0.06                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

# August 2024

# **Options**

### Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 4.03   | 88.22  | 7.75   | 0.00  |

| Venue -<br>Non-directed<br>Order Flow            | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received<br>for Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Citadel Securities<br>LLC (CDRG)                 | 50.05                          | 44.74                   | 51.82                             | 40.88                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Dash Financial<br>Technologies<br>LLC (DASH)     | 19.46                          | 23.68                   | 19.59                             | 17.52                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Susquehanna<br>Capital Group<br>(SUSQ)           | 17.15                          | 23.68                   | 19.59                             | 0.73                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Morgan Stanley<br>& Company LLC<br>(MSCO)        | 7.62                           | 5.26                    | 8.64                              | 2.19                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Wolverine<br>Execution<br>Services LLC<br>(WEXX) | 5.62                           | 0.00                    | 0.36                              | 38.69                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Interactive<br>Brokers LLC<br>(IBKR)             | 0.10                           | 2.63                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

# September 2024

# S&P 500 Stocks

### Summary

|   | Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |  |  |
|---|---|--|--|--|---|--|--|
| 1 | 100.00                                    | 99.28  | 0.17   | 0.45   | 0.10  |  |  |

| Venue -<br>Non-directed<br>Order Flow           | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Citadel<br>Securities LLC<br>(CDRG)             | 27.51                          | 27.97                   | 12.00                             | 4.08                                      | 60.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)                | 21.44                          | 21.85                   | 16.00                             | 0.96                                      | 25.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)         | 19.48                          | 19.87                   | 4.00                              | 1.92                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)           | 19.13                          | 19.51                   | 0.00                              | 2.64                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| National<br>Financial<br>Services LLC<br>(XSTM) | 7.34                           | 7.48                    | 16.00                             | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)         | 1.17                           | 0.00                    | 0.00                              | 59.47                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)          | 0.98                           | 0.98                    | 0.00                              | 0.24                                      | 15.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS<br>Securities, LLC<br>(UBSS)                | 0.95                           | 0.97                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| StoneX<br>Financial INC.<br>(INTL)              | 0.81                           | 0.82                    | 0.00                              | 0.24                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ)  | 0.57                           | 0.00                    | 48.00                             | 26.14                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

# September 2024

## Non-S&P 500 Stocks

## Summary

|   | Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |  |  |
|---|---|--|--|--|---|--|--|
| 1 | 100.00                                    | 98.67  | 0.82   | 0.48   | 0.03  |  |  |

| Venue -<br>Non-directed<br>Order Flow           | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market | Net Payment Paid/<br>Received for Market<br>Orders(cents per | Net Payment Paid/<br>Received for<br>Marketable Limit | Net Payment Paid/<br>Received for<br>Marketable Limit | Net Payment Paid/<br>Received for Non-<br>Marketable Limit | Net Payment Paid/<br>Received for Non-<br>Marketable Limit | Net Payment<br>Paid/Received for<br>Other | Net Payment Paid/<br>Received for Other<br>Orders(cents per |
|---|--------------------------------|-------------------------|-----------------------------------|------------------------------------|------------------------|--|--|---|---|--|--|---|---|
|   |                                |                         |                                   | (%)                                |                        | Orders(USD)                                | hundred shares)  | Orders(USD)   | Orders(cents per<br>hundred shares)                   | Orders(USD)  | Orders(cents per<br>hundred shares)                        | Orders(USD)                               | hundred shares)   |
| National<br>Financial<br>Services LLC<br>(XSTM) | 27.08                          | 27.41                   | 39.91                             | 0.00                               | 0.00                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| Citadel<br>Securities LLC<br>(CDRG)             | 21.15                          | 21.59                   | 12.54                             | 1.70                               | 63.64                  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| VIRTU<br>Americas, LLC<br>(NITE)                | 16.78                          | 17.12                   | 10.86                             | 1.59                               | 27.27                  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| G1 Execution<br>Services, LLC<br>(ETMM)         | 15.38                          | 15.70                   | 9.17                              | 1.49                               | 0.00                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| Jane Street<br>Capital, LLC<br>(JNST)           | 14.88                          | 15.19                   | 9.02                              | 1.27                               | 0.00                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| NYSE Arca<br>(ARCA)                             | 0.88                           | 0.00                    | 0.61                              | 51.17                              | 0.00                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| UBS Securities,<br>LLC (UBSS)                   | 0.76                           | 0.78                    | 0.46                              | 0.00                               | 9.09                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| StoneX<br>Financial INC.<br>(INTL)              | 0.70                           | 0.72                    | 0.31                              | 0.11                               | 0.00                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| Two Sigma<br>Securities, LLC<br>(SOHO)          | 0.68                           | 0.69                    | 0.92                              | 0.00                               | 0.00                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |
| Instinet<br>BlockCross<br>(BLKX)                | 0.60                           | 0.43                    | 15.75                             | 0.00                               | 0.00                   | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  |

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## **Options**

## Summary

|   | Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |  |  |
|---|---|--|--|--|---|--|--|
| I | 100.00                                    | 2.68   | 88.82  | 8.50   | 0.00  |  |  |

| Venue -<br>Non-directed<br>Order Flow            | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received<br>for Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Citadel Securities<br>LLC (CDRG)                 | 49.66                          | 47.06                   | 51.56                             | 33.83                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Susquehanna<br>Capital Group<br>(SUSQ)           | 24.00                          | 26.47                   | 26.43                             | 2.26                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Dash Financial<br>Technologies<br>LLC (DASH)     | 16.05                          | 17.65                   | 14.64                             | 27.82                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Morgan Stanley<br>& Company LLC<br>(MSCO)        | 5.98                           | 5.88                    | 6.50                              | 1.50                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Wolverine<br>Execution<br>Services LLC<br>(WEXX) | 4.31                           | 2.94                    | 0.87                              | 34.59                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |