

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

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4th Quarter, 2023

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.

October 2023

S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 98.73 | 0.58 | 0.68 | 0.01 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|--|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG) | 30.19 | 34.70 | 59.57 | 2.49 | 0.07 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 22.80 | 26.37 | 12.77 | 0.89 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 16.43 | 19.04 | 4.26 | 0.18 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 15.12 | 17.52 | 4.26 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| National Financial Services LLC (XSTM) | 9.71 | 0.00 | 0.00 | 0.00 | 99.32 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 2.47 | 0.00 | 0.00 | 66.37 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 1.31 | 1.52 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 1.11 | 0.00 | 17.02 | 28.47 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.53 | 0.61 | 2.13 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.21 | 0.24 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

October 2023

Non-S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 97.56 | 1.28 | 1.12 | 0.03 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|--|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| National Financial Services LLC (XSTM) | 27.39 | 0.00 | 0.00 | 0.00 | 98.74 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Citadel Securities LLC (CDRG) | 25.15 | 35.74 | 39.66 | 3.93 | 0.06 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 18.30 | 26.07 | 27.01 | 2.05 | 0.01 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 13.33 | 19.02 | 16.79 | 1.79 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 11.77 | 16.80 | 14.60 | 1.34 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 1.05 | 1.50 | 1.46 | 0.09 | 0.01 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 0.73 | 0.00 | 0.00 | 32.14 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.45 | 0.64 | 0.24 | 0.09 | 0.01 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NYSE Arca (ARCA) | 0.39 | 0.00 | 0.00 | 17.23 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 0.39 | 0.00 | 0.24 | 16.88 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

October 2023

Options

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 5.53 | 79.87 | 14.60 | 0.00 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG) | 47.12 | 56.00 | 48.85 | 36.71 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Susquehanna Capital Group (SUSQ) | 34.73 | 28.00 | 42.24 | 3.80 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Dash Financial Technologies LLC (DASH) | 7.52 | 4.00 | 6.03 | 15.19 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Wolverine Execution Services LLC (WEXX) | 7.52 | 4.00 | 0.29 | 40.51 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Morgan Stanley & Company LLC (MSCO) | 3.10 | 8.00 | 2.59 | 3.80 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

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S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 98.80 | 0.35 | 0.40 | 0.44 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|--|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG) | 31.07 | 34.28 | 30.30 | 0.69 | 2.50 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 23.07 | 25.46 | 6.06 | 0.34 | 2.23 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 18.40 | 20.47 | 3.03 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 15.69 | 17.43 | 9.09 | 0.69 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| National Financial Services LLC (XSTM) | 7.96 | 0.00 | 0.00 | 0.00 | 94.94 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 1.29 | 0.00 | 3.03 | 80.34 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 1.25 | 1.38 | 0.00 | 0.34 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.68 | 0.74 | 0.00 | 0.00 | 0.13 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 0.29 | 0.00 | 48.48 | 12.76 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.21 | 0.24 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

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Non-S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 97.36 | 1.40 | 1.22 | 0.02 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|--|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| National Financial Services LLC (XSTM) | 28.17 | 0.00 | 0.00 | 0.00 | 98.58 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Citadel Securities LLC (CDRG) | 24.13 | 34.97 | 32.10 | 2.01 | 0.01 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 17.39 | 25.19 | 23.80 | 1.39 | 0.03 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 14.19 | 20.51 | 24.67 | 0.77 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 11.76 | 17.07 | 15.94 | 0.54 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 1.00 | 0.00 | 0.00 | 39.89 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 1.00 | 1.45 | 1.09 | 0.08 | 0.01 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 0.41 | 0.00 | 0.44 | 16.03 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.40 | 0.58 | 1.09 | 0.00 | 0.01 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NYSE Arca (ARCA) | 0.40 | 0.00 | 0.66 | 15.80 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

November 2023

Options

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 12.80 | 66.81 | 20.39 | 0.00 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG) | 47.72 | 62.71 | 47.96 | 38.89 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Susquehanna Capital Group (SUSQ) | 28.85 | 28.81 | 37.76 | 4.63 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Dash Financial Technologies LLC (DASH) | 11.28 | 6.78 | 9.86 | 17.59 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Wolverine Execution Services LLC (WEXX) | 8.89 | 0.00 | 1.02 | 35.19 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Morgan Stanley & Company LLC (MSCO) | 3.25 | 1.69 | 3.40 | 3.70 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

December 2023

S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 99.22 | 0.26 | 0.25 | 0.27 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|--|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG) | 29.05 | 32.97 | 20.00 | 1.25 | 1.53 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 21.10 | 24.08 | 10.00 | 0.75 | 0.03 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 20.33 | 23.13 | 13.33 | 0.75 | 0.63 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 15.52 | 17.71 | 3.33 | 1.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| National Financial Services LLC (XSTM) | 10.55 | 0.00 | 0.00 | 0.00 | 96.84 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 0.98 | 1.12 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 0.97 | 0.00 | 3.33 | 64.16 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.66 | 0.75 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 0.44 | 0.00 | 50.00 | 25.31 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.20 | 0.23 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

December 2023

Non-S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 98.22 | 1.07 | 0.69 | 0.02 |

Venues

| Venue - Non-Directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|--|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| National Financial Services LLC (XSTM) | 30.05 | 0.00 | 0.00 | 0.00 | 98.19 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Citadel Securities LLC (CDRG) | 22.14 | 32.67 | 32.57 | 2.07 | 0.01 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 16.58 | 24.45 | 25.74 | 1.55 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 15.52 | 22.88 | 23.01 | 1.55 | 0.03 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 12.05 | 17.81 | 16.86 | 0.78 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 0.82 | 1.22 | 0.68 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Instinet BlockCross (BLKX) | 0.54 | 0.00 | 0.00 | 0.00 | 1.77 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.51 | 0.75 | 0.46 | 0.09 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 0.50 | 0.00 | 0.00 | 28.36 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 0.40 | 0.00 | 0.68 | 22.67 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

December 2023

Options

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00 | 9.76 | 72.28 | 17.96 | 0.00 |

Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG) | 51.00 | 52.27 | 52.88 | 44.21 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Susquehanna Capital Group (SUSQ) | 23.73 | 25.00 | 30.45 | 1.05 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Dash Financial Technologies LLC (DASH) | 13.08 | 15.91 | 10.90 | 18.95 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Wolverine Execution Services LLC (WEXX) | 6.43 | 0.00 | 0.00 | 30.53 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Morgan Stanley & Company LLC (MSCO) | 5.76 | 6.82 | 5.77 | 5.26 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |