

# AMERITAS INVESTMENT COMPANY,LLC - Held NMS Stocks and Options Order Routing Public Report

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1st Quarter, 2024

January 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                                    | 98.64  | 0.17   | 0.98   | 0.21  |

### Venues

| 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)            | 31.74                          | 33.10                   | 25.00                             | 3.06                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 23.30                          | 24.21                   | 50.00                             | 1.02                                      | 20.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 22.93                          | 23.87                   | 25.00                             | 2.04                                      | 10.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 16.47                          | 17.18                   | 0.00                              | 2.04                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 2.06                           | 0.00                    | 0.00                              | 51.02                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 1.32                           | 0.00                    | 0.00                              | 32.65                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 0.95                           | 0.95                    | 0.00                              | 0.00                                      | 10.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| StoneX<br>Financial INC.<br>(INTL)             | 0.37                           | 0.39                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US<br>Equities<br>Exchange<br>(EDGX) | 0.33                           | 0.00                    | 0.00                              | 8.16                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS  | 0.33                           | 0.30                    | 0.00                              | 0.00                                      | 10.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

| 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) |
|---------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Securities, LLC (UBSS)          |                         |                   |                             |                                 |                  |  |   |  |   |  |   |   |  |

Material Aspects:

Citadel Securities LLC (CDRG):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM):  
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Jane Street Capital, LLC (JNST):  
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New York Stock Exchange (NYSE):  
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Two Sigma Securities, LLC (SOHO):  
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StoneX Financial INC. (INTL):  
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Cboe EDGX US Equities Exchange (EDGX):  
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January 2024

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                                 | 98.73                                     | 0.42  | 0.73  | 0.12                                     |

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)   | 33.54                   | 34.94             | 10.71                       | 2.31                            | 8.33             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

| 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) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| VIRTU Americas, LLC (NITE)            | 24.22                   | 25.20             | 21.43                       | 0.93                            | 5.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM)     | 20.48                   | 21.22             | 42.86                       | 1.39                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Jane Street Capital, LLC (JNST)       | 15.70                   | 16.36             | 14.29                       | 0.93                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NASDAQ Execution Services, LLC (NSDQ) | 1.30                    | 0.00              | 3.57                        | 39.81                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)      | 1.11                    | 1.14              | 3.57                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 1.06                    | 0.00              | 3.57                        | 32.41                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Instinet BlockCross (BLKX)            | 0.78                    | 0.00              | 0.00                        | 0.00                            | 86.67            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| UBS Securities, LLC (UBSS)            | 0.61                    | 0.64              | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| StoneX Financial INC. (INTL)          | 0.48                    | 0.50              | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

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January 2024

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                                 | 42.70                                     | 11.24   | 31.46   | 14.61                                    |

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)           | 55.45                   | 65.79             | 50.00                       | 42.50                           | 69.23            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Dash Financial Technologies LLC (DASH)  | 18.81                   | 18.42             | 30.00                       | 15.00                           | 23.08            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Wolverine Execution Services LLC (WEXX) | 14.85                   | 0.00              | 0.00                        | 37.50                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Susquehanna Capital Group (SUSQ)        | 7.92                    | 10.53             | 20.00                       | 2.50                            | 7.69             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Morgan Stanley & Company LLC (MSCO)     | 2.97                    | 5.26              | 0.00                        | 2.50                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

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Dash Financial Technologies LLC (DASH):  
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February 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                                    | 98.44  | 0.16   | 0.62   | 0.78  |

Venues

| 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)            | 34.60                          | 35.35                   | 57.14                             | 5.41                                      | 42.42                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 24.90                          | 25.53                   | 14.29                             | 3.60                                      | 27.27                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 20.06                          | 20.67                   | 0.00                              | 1.80                                      | 15.15                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 15.44                          | 16.00                   | 14.29                             | 0.90                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 1.14                           | 0.00                    | 0.00                              | 40.54                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 1.12                           | 1.16                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 1.07                           | 0.00                    | 14.29                             | 36.94                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| StoneX<br>Financial INC.<br>(INTL)             | 0.66                           | 0.69                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS<br>Securities, LLC<br>(UBSS)               | 0.63                           | 0.61                    | 0.00                              | 0.00                                      | 6.06                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US<br>Equities<br>Exchange<br>(EDGX) | 0.25                           | 0.00                    | 0.00                              | 9.01                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

Material Aspects:

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February 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                                    | 98.49  | 0.43   | 0.59   | 0.49  |

Venues

| 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)            | 35.08                          | 36.02                   | 47.37                             | 3.68                                      | 14.93                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 25.33                          | 26.13                   | 18.42                             | 1.05                                      | 10.45                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 18.88                          | 19.46                   | 15.79                             | 3.68                                      | 3.73                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 15.95                          | 16.53                   | 18.42                             | 0.53                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Instinet<br>BlockCross<br>(BLKX)               | 1.01                           | 0.00                    | 0.00                              | 0.00                                      | 67.91                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 1.01                           | 1.03                    | 0.00                              | 0.00                                      | 1.49                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 0.74                           | 0.00                    | 0.00                              | 35.26                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock                              | 0.55                           | 0.00                    | 0.00                              | 26.32                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

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|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Exchange (NYSE)                       |                         |                   |                             |                                 |                  |  |   |  |   |  |   |   |  |
| UBS Securities, LLC (UBSS)            | 0.55                    | 0.55              | 0.00                        | 0.00                            | 1.49             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe EDGX US Equities Exchange (EDGX) | 0.27                    | 0.00              | 0.00                        | 12.63                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

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February 2024

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                                 | 53.21                                     | 9.17  | 34.86   | 2.75                                     |

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)           | 53.60                   | 58.73             | 57.14                       | 42.22                           | 100.00           | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Dash Financial Technologies LLC (DASH)  | 18.40                   | 9.52              | 28.57                       | 28.89                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Susquehanna Capital Group (SUSQ)        | 13.60                   | 26.98             | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Wolverine Execution Services LLC (WEXX) | 10.40                   | 1.59              | 0.00                        | 26.67                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Morgan Stanley & Company LLC (MSCO)     | 4.00                    | 3.17              | 14.29                       | 2.22                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

Material Aspects:

Citadel Securities LLC (CDRG):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Dash Financial Technologies LLC (DASH):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Susquehanna Capital Group (SUSQ):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Wolverine Execution Services LLC (WEXX):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Morgan Stanley & Company LLC (MSCO):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

March 2024

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                                 | 97.73                                     | 0.31  | 1.66  | 0.31                                     |

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)   | 34.91                   | 36.74             | 16.67                       | 6.02                            | 20.00            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |



| 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) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| VIRTU Americas, LLC (NITE)            | 23.98                   | 25.27             | 33.33                       | 0.75                            | 40.00            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM)     | 17.83                   | 18.79             | 0.00                        | 3.01                            | 10.00            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Jane Street Capital, LLC (JNST)       | 16.41                   | 17.19             | 50.00                       | 3.01                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NASDAQ Execution Services, LLC (NSDQ) | 2.97                    | 0.04              | 0.00                        | 52.63                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 1.26                    | 0.00              | 0.00                        | 22.56                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)      | 1.05                    | 1.12              | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe EDGX US Equities Exchange (EDGX) | 0.63                    | 0.00              | 0.00                        | 11.28                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| UBS Securities, LLC (UBSS)            | 0.50                    | 0.54              | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| StoneX Financial INC. (INTL)          | 0.29                    | 0.31              | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

#### Material Aspects:

Citadel Securities LLC (CDRG):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NASDAQ Execution Services, LLC (NSDQ):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

New York Stock Exchange (NYSE):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Cboe EDGX US Equities Exchange (EDGX):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

StoneX Financial INC. (INTL):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

March 2024

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                                 | 97.44                                     | 1.34  | 1.06  | 0.17                                     |

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)         | 33.53                   | 35.66             | 40.24                       | 2.03                            | 3.17             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| VIRTU Americas, LLC (NITE)            | 24.43                   | 26.04             | 23.17                       | 1.69                            | 3.17             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM)     | 17.44                   | 18.55             | 20.73                       | 1.36                            | 0.79             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Jane Street Capital, LLC (JNST)       | 16.51                   | 17.68             | 14.63                       | 0.68                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Instinet BlockCross (BLKX)            | 1.81                    | 0.00              | 0.00                        | 0.00                            | 92.06            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NASDAQ Execution Services, LLC (NSDQ) | 1.44                    | 0.00              | 0.00                        | 31.19                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 1.24                    | 0.00              | 1.22                        | 26.44                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)      | 0.88                    | 0.95              | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NYSE Arca (ARCA)                      | 0.61                    | 0.00              | 0.00                        | 13.22                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| UBS Securities, LLC (UBSS)            | 0.59                    | 0.61              | 0.00                        | 0.34                            | 0.79             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

Material Aspects:

Citadel Securities LLC (CDRG):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Instinet BlockCross (BLKX):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NASDAQ Execution Services, LLC (NSDQ):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

New York Stock Exchange (NYSE):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NYSE Arca (ARCA):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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March 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                                    | 45.45  | 16.67  | 28.79  | 9.09  |

Venues

| Venue -<br>Non-directed<br>Order Flow            | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit<br>Orders<br>(%) | Non-<br>Marketable<br>Limit<br>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)                 | 47.76                          | 56.67                   | 27.27                                | 45.00  | 50.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Susquehanna<br>Capital Group<br>(SUSQ)           | 23.88                          | 30.00                   | 45.45                                | 0.00   | 33.33                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Dash Financial<br>Technologies<br>LLC (DASH)     | 14.93                          | 10.00                   | 9.09                                 | 25.00  | 16.67                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Wolverine<br>Execution<br>Services LLC<br>(WEXX) | 8.96                           | 0.00                    | 0.00                                 | 30.00  | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Morgan Stanley<br>& Company LLC<br>(MSCO)        | 4.48                           | 3.33                    | 18.18                                | 0.00   | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

**Material Aspects:**

Citadel Securities LLC (CDRG):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Susquehanna Capital Group (SUSQ):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Dash Financial Technologies LLC (DASH):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Wolverine Execution Services LLC (WEXX):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Morgan Stanley & Company LLC (MSCO):  
[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]