National Financial Services (NFS), our clearing firm, has prepared this report for UnionBanc Investment Services LLC (UBIS) pursuant to U.S Securities and Exchange Commission Rule 606 which requires broker-dealer firms to make publicly available quarterly reports on their routing practices. This report provides information on the routing of "non-directed orders," which are any orders that the customer has not specifically instructed to be routed to a particular venue for execution. For these non-directed orders, UBIS transmits all customer orders to NFS, and NFS selects the execution venue on behalf of UBIS' customers. UBIS does not direct or Order Route any orders to any venues.

UBIS does not receive payment for order flow. Furthermore, UBIS does not have any material relationships with any of the venues identified below.

The report is divided into the following four sections: (1) Securities listed on the New York Stock Exchange; (2) Securities listed on the NASDAQ Stock Market; (3) Securities listed on NYSE, Amex or Regional Exchanges; and (4) Exchange listed options. For each section, this report identifies the venues most often selected by NFS and sets forth the percentage of various types of orders routed to the venues.

### **UNIONBANC INVESTMENT SERVICES - Held NMS Stocks and Options Order Routing Public Report**

### Generated on Tue Apr 12 2022 01:54:27 GMT-4 EDT

### 1st Quarter, 2022

**Other Orders** 

Marketable

Marketable

Market Orders

January 2022

S&P 500 Stocks
Summary

| Total Non-Directed<br>Orders               | Non-Directed<br>Orders as % of<br>All Orders | Total Market<br>Orders     | as % of Non-<br>Directed<br>Orders | Total<br>Marketable<br>Limit Orders | Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Non-<br>Marketable<br>Limit Orders | Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Other<br>Orders                     | as % of Non-<br>Directed<br>Orders |                     |  |  |   |   |  |                                    |   |                                       |
|--|--|----------------------------|------------------------------------|-------------------------------------|--|--|--|---|------------------------------------|---------------------|--|--|---|---|--|------------------------------------|---|---------------------------------------|
| 1,856                                      | 100.00                                       | 1,446                      | 77.91                              | 160                                 | 8.62   | 218                                      | 11.75  | 32  | 1.72                               |                     |  |  |   |   |  |                                    |   |                                       |
| Venues                                     |  |                            |                                    |                                     |  |  |  |   |                                    |                     |  | Net Payment                            |   | Net Payment   | Net Payment  | Net Payment Paid/                  |   | Net Payment                           |
| Venue - Non-<br>directed Order Flow        |  | Non-Directed<br>Orders (%) | Market Orders                      | Market<br>Orders (%)                | Marketable<br>Limit Orders                         | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders                 | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                       | Other Orders<br>(%) | Net Payment<br>Paid/<br>Received for<br>Market Orders<br>(USD) | Paid/<br>Received for<br>Market Orders | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Paid/ Received for Marketable Limit Orders (cents per hundred shares) | Paid/ Received for Non- Marketable Limit Orders(USD) | Received for<br>Non-<br>Marketable | Net Payment<br>Paid/<br>Received for<br>Other Orders<br>(USD) | Paid/<br>Received for<br>Other Orders |
| Citadel Securities<br>LLC(CDRG)            | 823  | 37.49                      | 650                                | 44.95                               | 89   | 54.60                                    | 59   | 10.69                                     | 25                                 | 73.53               | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| VIRTU Americas,<br>LLC(NITE)               | 494  | 22.51                      | 396                                | 27.39                               | 58   | 35.58                                    | 38   | 6.88                                      | 2                                  | 5.88                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| Jane Street Capital,<br>LLC(JNST)          | 315  | 14.35                      | 283                                | 19.57                               | 8  | 4.91                                     | 24   | 4.35                                      | 0                                  | 0.00                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| NASDAQ Execution<br>Services, LLC(NSDQ)    | 272  | 12.39                      | 0                                  | 0.00                                | 5  | 3.07                                     | 267  | 48.37                                     | 0                                  | 0.00                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| New York Stock Exchange(NYSE)              | 114  | 5.19                       | 0                                  | 0.00                                | 1  | 0.61                                     | 113  | 20.47                                     | 0                                  | 0.00                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| G1 Execution Services, LLC(ETMM)           | 72   | 3.28                       | 66                                 | 4.56                                | 2  | 1.23                                     | 4  | 0.72                                      | 0                                  | 0.00                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| Cboe EDGX US<br>Equities<br>Exchange(EDGX) | 44   | 2.00                       | 0                                  | 0.00                                | 0  | 0.00                                     | 44   | 7.97                                      | 0                                  | 0.00                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| Two Sigma<br>Securities,<br>LLC(SOHO)      | 36   | 1.64                       | 33                                 | 2.28                                | 0  | 0.00                                     | 2  | 0.36                                      | 1                                  | 2.94                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| UBS Securities,<br>LLC(UBSS)               | 23   | 1.05                       | 18                                 | 1.24                                | 0  | 0.00                                     | 1  | 0.18                                      | 4                                  | 11.76               | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |
| Instinet<br>BlockCross(BLKX)               | 2  | 0.09                       | 0                                  | 0.00                                | 0  | 0.00                                     | 0  | 0.00                                      | 2                                  | 5.88                | 0  | 0                                      | 0   | 0   | 0  | 0                                  | 0   | 0                                     |

#### January 2022

## Non-S&P 500 Stocks Summary

| Total Non-Directed<br>Orders                           | Non-Directed<br>Orders as % of<br>All Orders | Total Market               | Market Orders<br>as % of Non-<br>Directed<br>Orders | Total<br>Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Non-<br>Marketable<br>Limit Orders | Non-<br>Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |   |   |   |   |  |   |  |
|--|--|----------------------------|---|-------------------------------------|--|--|--|---|--|---------------------|--|---|---|---|---|--|---|--|
| 2,715  | 100.00                                       | 2,194                      | 80.81   | 137                                 | 5.05   | 352                                      | 12.97  | 32  | 1.18   |                     |  |   |   |   |   |  |   |  |
| Venues   |  |                            |   |                                     |  |  |  |   |  |                     |  |   |   |   |   |  |   |  |
| Venue - Non-<br>directed Order Flow                    |  | Non-Directed<br>Orders (%) | Market Orders                                       | Market<br>Orders (%)                | Marketable<br>Limit Orders                                       | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders                                       | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | Net Payment Paid/ Received for Market Orders (USD) | Net Payment Paid/ Received for Market Orders (cents per hundred shares) | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(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<br>LLC(CDRG)                        | 1,147  | 37.04                      | 985   | 44.96                               | 63   | 45.32                                    | 79   | 11.84                                     | 20   | 20.00               | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| VIRTU Americas,<br>LLC(NITE)                           | 695  | 22.44                      | 606   | 27.66                               | 43   | 30.94                                    | 35   | 5.25                                      | 11   | 11.00               | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Jane Street Capital,<br>LLC(JNST)                      | 485  | 15.66                      | 436   | 19.90                               | 18   | 12.95                                    | 31   | 4.65                                      | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| NASDAQ Execution Services, LLC(NSDQ)                   | 227  | 7.33                       | 0   | 0.00                                | 3  | 2.16                                     | 224  | 33.58                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| G1 Execution<br>Services,<br>LLC(ETMM)<br>Cboe EDGX US | 121  | 3.91                       | 105   | 4.79                                | 6  | 4.32                                     | 10   | 1.50                                      | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Equities Exchange(EDGX)                                | 110  | 3.55                       | 0   | 0.00                                | 0  | 0.00                                     | 110  | 16.49                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| New York Stock<br>Exchange(NYSE)                       | 77   | 2.49                       | 0   | 0.00                                | 2  | 1.44                                     | 75   | 11.24                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| NYSE Arca(ARCA)  | 75   | 2.42                       | 0   | 0.00                                | 0  | 0.00                                     | 75   | 11.24                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Instinet<br>BlockCross(BLKX)<br>Two Sigma              | 68   | 2.20                       | 0   | 0.00                                | 0  | 0.00                                     | 0  | 0.00                                      | 68   | 68.00               | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Securities,<br>LLC(SOHO)                               | 40   | 1.29                       | 37  | 1.69                                | 1  | 0.72                                     | 2  | 0.30                                      | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |

### January 2022

# Option Contracts Summary

LLC(MSCO)

| •  |  |                            |   |                                     |  |  |  |   |  |                     |  |   |   |   |   |  |   |  |  |
|--|--|----------------------------|---|-------------------------------------|--|--|--|---|--|---------------------|--|---|---|---|---|--|---|--|--|
| Total Non-Directed<br>Orders                       | Non-Directed<br>Orders as % of<br>All Orders | Total Market<br>Orders     | Market Orders<br>as % of Non-<br>Directed<br>Orders | Total<br>Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Non-<br>Marketable<br>Limit Orders | Non-<br>Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |   |   |   |   |  |   |  |  |
| 69   | 100.00                                       | 30                         | 43.48   | 3                                   | 4.35   | 36                                       | 52.17  | 0   | 0.00   |                     |  |   |   |   |   |  |   |  |  |
| Venues   |  |                            |   |                                     |  |  |  |   |  |                     |  |   |   |   |   |  |   |  |  |
| Venue - Non-<br>directed Order Flow                |  | Non-Directed<br>Orders (%) | Market Orders                                       | Market<br>Orders (%)                | Marketable<br>Limit Orders                                       | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders                                       | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | Net Payment Paid/ Received for Market Orders (USD) | Net Payment Paid/ Received for Market Orders (cents per hundred shares) | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(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<br>LLC(CDRG)                    | 33   | 40.24                      | 16  | 53.33                               | 2  | 66.67                                    | 15   | 30.61                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |  |
| Susquehanna<br>Capital<br>Group(SUSQ)<br>Wolverine | 18   | 21.95                      | 10  | 33.33                               | 0  | 0.00                                     | 8  | 16.33                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |  |
| Execution Services  LLC(WEXX)  Dash Financial      | 15   | 18.29                      | 0   | 0.00                                | 0  | 0.00                                     | 15   | 30.61                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |  |
| Technologies<br>LLC(DASH)                          | 11   | 13.41                      | 1   | 3.33                                | 1  | 33.33                                    | 9  | 18.37                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |  |
| Morgan Stanley & Company                           | 5  | 6.10                       | 3   | 10.00                               | 0  | 0.00                                     | 2  | 4.08                                      | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |  |

### February 2022

## S&P 500 Stocks Summary

| Total Non-Directed<br>Orders          | Non-Directed<br>Orders as % of<br>All Orders | Total Market<br>Orders     | Market Orders<br>as % of Non-<br>Directed<br>Orders | Total<br>Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Non-<br>Marketable<br>Limit Orders | Non-<br>Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |                            |   |   |   |  |   |  |
|---------------------------------------|--|----------------------------|---|-------------------------------------|--|--|--|---|--|---------------------|--|----------------------------|---|---|---|--|---|--|
| 1,599                                 | 100.00                                       | 1,293                      | 80.86   | 107                                 | 6.69   | 173                                      | 10.82  | 26  | 1.63   |                     |  |                            |   |   |   |  |   |  |
| Venues                                |  |                            |   |                                     |  |  |  |   |  |                     |  |                            |   |   |   |  |   |  |
| Venue - Non-<br>directed Order Flow   | Non-Directed<br>Orders                       | Non-Directed<br>Orders (%) | Market Orders                                       | Market<br>Orders (%)                | Marketable<br>Limit Orders                                       | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders                                       | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | Net Payment<br>Paid/<br>Received for<br>Market Orders<br>(USD) | Received for Market Orders | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(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<br>LLC(CDRG)       | 591  | 33.02                      | 504   | 38.95                               | 48   | 43.64                                    | 28   | 7.78                                      | 11   | 42.31               | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| VIRTU Americas,<br>LLC(NITE)          | 469  | 26.20                      | 367   | 28.36                               | 50   | 45.45                                    | 37   | 10.28                                     | 15   | 57.69               | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| Jane Street Capital,<br>LLC(JNST)     | 333  | 18.60                      | 308   | 23.80                               | 9  | 8.18                                     | 16   | 4.44                                      | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| NASDAQ Execution Services, LLC(NSDQ)  | 136  | 7.60                       | 0   | 0.00                                | 1  | 0.91                                     | 135  | 37.50                                     | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| New York Stock<br>Exchange(NYSE)      | 85   | 4.75                       | 0   | 0.00                                | 1  | 0.91                                     | 84   | 23.33                                     | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| G1 Execution Services, LLC(ETMM)      | 83   | 4.64                       | 75  | 5.80                                | 1  | 0.91                                     | 7  | 1.94                                      | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| Cboe EDGX US Equities Exchange(EDGX)  | 47   | 2.63                       | 0   | 0.00                                | 0  | 0.00                                     | 47   | 13.06                                     | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| Two Sigma<br>Securities,<br>LLC(SOHO) | 21   | 1.17                       | 21  | 1.62                                | 0  | 0.00                                     | 0  | 0.00                                      | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| UBS Securities,<br>LLC(UBSS)          | 19   | 1.06                       | 19  | 1.47                                | 0  | 0.00                                     | 0  | 0.00                                      | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |
| Members Exchange(MEMX)                | 6  | 0.34                       | 0   | 0.00                                | 0  | 0.00                                     | 6  | 1.67                                      | 0  | 0.00                | 0  | 0                          | 0   | 0   | 0   | 0  | 0   | 0  |

### February 2022

### Non-S&P 500 Stocks

Summary

| Total Non-Directed<br>Orders                  | Non-Directed<br>Orders as % of<br>All Orders | Total Market<br>Orders     | Market Orders<br>as % of Non-<br>Directed<br>Orders | Total<br>Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Non-<br>Marketable<br>Limit Orders | Non-<br>Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |                               |   |   |   |  |  |  |
|---|--|----------------------------|---|-------------------------------------|--|--|--|---|--|---------------------|--|-------------------------------|---|---|---|--|--|--|
| 2,125   | 100.00                                       | 1,724                      | 81.13   | 95                                  | 4.47   | 279                                      | 13.13  | 27  | 1.27   |                     |  |                               |   |   |   |  |  |  |
| Venues  |  |                            |   |                                     |  |  |  |   |  |                     |  |                               |   |   |   |  |  |  |
| Venue - Non-<br>directed Order Flow           | Non-Directed<br>Orders                       | Non-Directed<br>Orders (%) | Market Orders                                       | Market<br>Orders (%)                | Marketable<br>Limit Orders                                       | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders                                       | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | Net Payment Paid/ Received for Market Orders (USD) | Received for<br>Market Orders | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(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<br>Paid/<br>Received for<br>Other<br>Orders(USD) | Net Payment Paid/ Received for Other Orders (cents per hundred shares) |
| Citadel Securities<br>LLC(CDRG)               | 847  | 34.70                      | 760   | 44.11                               | 44   | 43.56                                    | 29   | 5.21                                      | 14   | 23.33               | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| VIRTU Americas,<br>LLC(NITE)                  | 483  | 19.79                      | 432   | 25.07                               | 26   | 25.74                                    | 13   | 2.33                                      | 12   | 20.00               | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| Jane Street Capital,<br>LLC(JNST)             | 399  | 16.35                      | 362   | 21.01                               | 16   | 15.84                                    | 21   | 3.77                                      | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| NASDAQ Execution Services, LLC(NSDQ)          | 151  | 6.19                       | 0   | 0.00                                | 4  | 3.96                                     | 147  | 26.39                                     | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| G1 Execution Services, LLC(ETMM) Cboe EDGX US | 139  | 5.69                       | 125   | 7.25                                | 4  | 3.96                                     | 10   | 1.80                                      | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| Equities Exchange(EDGX)                       | 121  | 4.96                       | 0   | 0.00                                | 0  | 0.00                                     | 121  | 21.72                                     | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| NYSE Arca(ARCA)                               | 110  | 4.51                       | 0   | 0.00                                | 2  | 1.98                                     | 108  | 19.39                                     | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| New York Stock<br>Exchange(NYSE)              | 78   | 3.20                       | 0   | 0.00                                | 2  | 1.98                                     | 76   | 13.64                                     | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| Instinet<br>BlockCross(BLKX)                  | 33   | 1.35                       | 0   | 0.00                                | 0  | 0.00                                     | 0  | 0.00                                      | 33   | 55.00               | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |
| Two Sigma Securities, LLC(SOHO)               | 30   | 1.23                       | 25  | 1.45                                | 1  | 0.99                                     | 4  | 0.72                                      | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0  | 0  |

### February 2022

## Option Contracts Summary

| Total Non-Directed                                    | Non-Directed<br>Orders as % of<br>All Orders<br>100.00 |                            | Market Orders<br>as % of Non-<br>Directed<br>Orders | Total                | Marketable Limit Orders as % of Non- Directed Orders  0.00 | Total Non-<br>Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders<br>22.86 | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |   |   |   |   |  |   |  |
|---|--|----------------------------|---|----------------------|--|--|---|---|--|---------------------|--|---|---|---|---|--|---|--|
| 33  | 100.00   | 21                         | 77.14   | U                    | 0.00   | O  | 22.00   | U   | 0.00   |                     |  |   |   |   |   |  |   |  |
| Venues  |  |                            |   |                      |  |  |   |   |  |                     |  |   |   |   |   |  |   |  |
| Venue - Non-<br>directed Order Flow                   | Non-Directed<br>Orders                                 | Non-Directed<br>Orders (%) | Market Orders                                       | Market<br>Orders (%) | Marketable<br>Limit Orders                                 | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders  | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | Net Payment Paid/ Received for Market Orders (USD) | Net Payment Paid/ Received for Market Orders (cents per hundred shares) | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(USD) | Net Payment Paid/ Received for Marketable Limit Orders (cents per hundred shares) | Net Payment<br>Paid/<br>Received for<br>Non-<br>Marketable<br>Limit Orders<br>(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<br>LLC(CDRG)                       | 33   | 47.14                      | 14  | 51.85                | 0  | 0.00                                     | 19  | 44.19                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Susquehanna   |  |                            |   |                      |  |  |   |   |  |                     |  |   |   |   |   |  |   |  |
| Capital   | 17   | 24.29                      | 6   | 22.22                | 0  | 0.00                                     | 11  | 25.58                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Group(SUSQ) Dash Financial                            |  |                            |   |                      |  |  |   |   |  |                     |  |   |   |   |   |  |   |  |
| Technologies<br>LLC(DASH)                             | 11   | 15.71                      | 4   | 14.81                | 0  | 0.00                                     | 7   | 16.28                                     | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Morgan Stanley &<br>Company<br>LLC(MSCO)<br>Wolverine | 7  | 10.00                      | 3   | 11.11                | 0  | 0.00                                     | 4   | 9.30                                      | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |
| Execution Services<br>LLC(WEXX)                       | 2  | 2.86                       | 0   | 0.00                 | 0  | 0.00                                     | 2   | 4.65                                      | 0  | 0.00                | 0  | 0   | 0   | 0   | 0   | 0  | 0   | 0  |

Non-

Marketable

### **March 2022**

## S&P 500 Stocks Summary

| Orders   | Non-Directed<br>Orders as % of<br>All Orders | Total Market<br>Orders     | Market Orders<br>as % of Non-<br>Directed<br>Orders | Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Non-<br>Marketable<br>Limit Orders | Non-<br>Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |   |  |   |   |  |   |  |
|--|--|----------------------------|---|----------------------------|--|--|--|---|--|---------------------|--|---|--|---|---|--|---|--|
| 2,150  | 100.00                                       | 1,842                      | 85.67   | 96                         | 4.47   | 184                                      | 8.56   | 28  | 1.30   |                     |  |   |  |   |   |  |   |  |
| Venues   |  |                            |   |                            |  |  |  |   |  |                     |  |   |  |   |   |  |   |  |
| Venue - Non-<br>directed Order Flow              | Non-Directed<br>Orders                       | Non-Directed<br>Orders (%) | Market Orders                                       | Market<br>Orders (%)       | Marketable<br>Limit Orders                                       | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders                                       | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | 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<br>Paid/<br>Received for<br>Other Orders<br>(USD) | Net Payment Paid/ Received for Other Orders (cents per hundred shares) |
| Citadel Securities<br>LLC(CDRG)                  | 837  | 34.19                      | 742   | 40.28                      | 51   | 53.13                                    | 33   | 6.86                                      | 11   | 37.93               | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| VIRTU Americas,<br>LLC(NITE)                     | 491  | 20.06                      | 409   | 22.20                      | 37   | 38.54                                    | 30   | 6.24                                      | 15   | 51.72               | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| Jane Street Capital,<br>LLC(JNST)                | 433  | 17.69                      | 416   | 22.58                      | 3  | 3.13                                     | 14   | 2.91                                      | 0  | 0.00                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| NASDAQ Execution Services, LLC(NSDQ)             | 245  | 10.01                      | 0   | 0.00                       | 5  | 5.21                                     | 240  | 49.90                                     | 0  | 0.00                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| G1 Execution<br>Services,<br>LLC(ETMM)           | 234  | 9.56                       | 226   | 12.27                      | 0  | 0.00                                     | 7  | 1.46                                      | 1  | 3.45                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| New York Stock<br>Exchange(NYSE)<br>Cboe EDGX US | 99   | 4.04                       | 0   | 0.00                       | 0  | 0.00                                     | 99   | 20.58                                     | 0  | 0.00                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| Equities Exchange(EDGX)                          | 37   | 1.51                       | 0   | 0.00                       | 0  | 0.00                                     | 37   | 7.69                                      | 0  | 0.00                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| Two Sigma<br>Securities,<br>LLC(SOHO)            | 32   | 1.31                       | 30  | 1.63                       | 0  | 0.00                                     | 2  | 0.42                                      | 0  | 0.00                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| UBS Securities,<br>LLC(UBSS)                     | 21   | 0.86                       | 19  | 1.03                       | 0  | 0.00                                     | 1  | 0.21                                      | 1  | 3.45                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |
| Members Exchange(MEMX)                           | 18   | 0.74                       | 0   | 0.00                       | 0  | 0.00                                     | 18   | 3.74                                      | 0  | 0.00                | 0  | 0   | 0  | 0   | 0   | 0  | 0   | 0  |

#### **March 2022**

#### Non-S&P 500 Stocks

Summary

LLC(MSCO)

| Total Non-Directed Orders  2,674               | Non-Directed<br>Orders as % of<br>All Orders | Total Market<br>Orders<br>2,143 | Market Orders<br>as % of Non-<br>Directed<br>Orders | Total<br>Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders | Total Non-<br>Marketable<br>Limit Orders | Non-<br>Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders<br>14.92 | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |                               |   |   |   |  |   |  |
|--|--|---------------------------------|---|-------------------------------------|--|--|---|---|--|---------------------|--|-------------------------------|---|---|---|--|---|--|
| Venues   |  | , -                             |   |                                     |  |  |   |   |  |                     |  |                               |   | Net Payment   |   | Net Payment  |   |  |
| Venue - Non-<br>directed Order Flow            | Non-Directed<br>Orders                       | Non-Directed<br>Orders (%)      | Market Orders                                       | Market<br>Orders (%)                | Marketable<br>Limit Orders                                       | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders  | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | Net Payment<br>Paid/<br>Received for<br>Market Orders<br>(USD) | Received for<br>Market Orders | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(USD) | Paid/ Received for Marketable Limit Orders (cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders (USD) | Paid/ Received for Non- Marketable Limit Orders (cents per hundred shares) | Net Payment<br>Paid/<br>Received for<br>Other Orders<br>(USD) | Net Payment Paid/ Received for Other Orders (cents per hundred shares) |
| Citadel Securities<br>LLC(CDRG)                | 973  | 19.11                           | 832   | 38.82                               | 32   | 34.04                                    | 78  | 7.11                                      | 31   | 1.76                | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| VIRTU Americas,<br>LLC(NITE)                   | 576  | 11.31                           | 494   | 23.05                               | 17   | 18.09                                    | 45  | 4.10                                      | 20   | 1.14                | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| Jane Street Capital,<br>LLC(JNST)              | 575  | 11.29                           | 517   | 24.13                               | 18   | 19.15                                    | 40  | 3.65                                      | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| Goldman, Sachs &<br>Co.(GSCO)                  | 444  | 8.72                            | 0   | 0.00                                | 0  | 0.00                                     | 0   | 0.00                                      | 444  | 25.26               | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| G1 Execution<br>Services,<br>LLC(ETMM)         | 254  | 4.99                            | 223   | 10.41                               | 7  | 7.45                                     | 24  | 2.19                                      | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| NASDAQ Execution Services, LLC(NSDQ)           | 223  | 4.38                            | 0   | 0.00                                | 1  | 1.06                                     | 182   | 16.59                                     | 40   | 2.28                | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| INTELLIGENT CROSS<br>LLC(INCR)<br>Cboe EDGX US | 217  | 4.26                            | 0   | 0.00                                | 0  | 0.00                                     | 0   | 0.00                                      | 217  | 12.34               | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| Equities Exchange(EDGX)                        | 213  | 4.18                            | 0   | 0.00                                | 0  | 0.00                                     | 213   | 19.42                                     | 0  | 0.00                | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| NYSE Arca(ARCA)                                | 193  | 3.79                            | 0   | 0.00                                | 2  | 2.13                                     | 178   | 16.23                                     | 13   | 0.74                | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |
| Morgan Stanley & Company                       | 188  | 3.69                            | 0   | 0.00                                | 2  | 2.13                                     | 0   | 0.00                                      | 186  | 10.58               | 0  | 0                             | 0   | 0   | 0   | 0  | 0   | 0  |

#### **March 2022**

## Option Contracts Summary

| Total Non-Directed<br>Orders<br>79          | Non-Directed<br>Orders as % of<br>All Orders | Total Market<br>Orders<br>11 | Market Orders<br>as % of Non-<br>Directed<br>Orders | Total<br>Marketable<br>Limit Orders | Marketable<br>Limit Orders<br>as % of Non-<br>Directed<br>Orders<br>5.06 | Total Non-<br>Marketable<br>Limit Orders | Non- Marketable Limit Orders as % of Non- Directed Orders 81.01 | Total Other<br>Orders                     | Other Orders<br>as % of Non-<br>Directed<br>Orders |                     |  |                               |   |  |   |  |   |  |
|---|--|------------------------------|---|-------------------------------------|--|--|---|---|--|---------------------|--|-------------------------------|---|--|---|--|---|--|
| Venues                                      |  |                              |   |                                     |  |  |   |   |  |                     |  |                               |   |  |   |  |   |  |
| Venue - Non-<br>directed Order Flow         |  | Non-Directed<br>Orders (%)   | Market Orders                                       | Market<br>Orders (%)                | Marketable<br>Limit Orders   | Marketable<br>Limit Orders<br>(%)        | Non-<br>Marketable<br>Limit Orders                              | Non-<br>Marketable<br>Limit Orders<br>(%) | Other Orders                                       | Other Orders<br>(%) | Net Payment<br>Paid/<br>Received for<br>Market Orders<br>(USD) | Received for<br>Market Orders | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(USD) | Net Payment<br>Paid/<br>Received for<br>Marketable<br>Limit Orders<br>(cents per<br>hundred<br>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<br>Paid/<br>Received for<br>Other Orders<br>(USD) | Net Payment Paid/ Received for Other Orders (cents per hundred shares) |
| Citadel Securities<br>LLC(CDRG)             | 43   | 43.00                        | 9   | 81.82                               | 0  | 0.00                                     | 34  | 40.00                                     | 0  | 0.00                | 0  | 0                             | 0   | 0  | 0   | 0  | 0   | 0  |
| Wolverine                                   |  |                              |   |                                     |  |  |   |   |  |                     |  |                               |   |  |   |  |   |  |
| Execution Services LLC(WEXX)                | 20   | 20.00                        | 0   | 0.00                                | 0  | 0.00                                     | 20  | 23.53                                     | 0  | 0.00                | 0  | 0                             | 0   | 0  | 0   | 0  | 0   | 0  |
| Dash Financial<br>Technologies<br>LLC(DASH) | 19   | 19.00                        | 1   | 9.09                                | 1  | 25.00                                    | 17  | 20.00                                     | 0  | 0.00                | 0  | 0                             | 0   | 0  | 0   | 0  | 0   | 0  |
| Susquehanna<br>Capital<br>Group(SUSQ)       | 17   | 17.00                        | 1   | 9.09                                | 3  | 75.00                                    | 13  | 15.29                                     | 0  | 0.00                | 0  | 0                             | 0   | 0  | 0   | 0  | 0   | 0  |
| Morgan Stanley &<br>Company<br>LLC(MSCO)    | 1  | 1.00                         | 0   | 0.00                                | 0  | 0.00                                     | 1   | 1.18                                      | 0  | 0.00                | 0  | 0                             | 0   | 0  | 0   | 0  | 0   | 0  |

Non-