# SIGMA FINANCIAL CORPORATION - Held NMS Stocks and Options Order Routing Public Report

Generated on Thu Jan 11 2024 11:59:21 GMT-0500 (Eastern Standard Time)

4th Quarter, 2023

## October 2023

## 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                                    | 72.49  | 1.22   | 23.31  | 2.98  |

| 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)            | 30.31                          | 33.08                   | 33.33                             | 21.24                                     | 40.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 25.85                          | 27.29                   | 11.11                             | 20.21                                     | 44.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 16.80                          | 20.37                   | 44.44                             | 7.25                                      | 4.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 14.70                          | 17.20                   | 11.11                             | 9.84                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US<br>Equities<br>Exchange<br>(EDGX) | 4.07                           | 0.00                    | 0.00                              | 16.06                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 2.62                           | 0.00                    | 0.00                              | 10.36                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 2.23                           | 0.00                    | 0.00                              | 8.81                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Members<br>Exchange<br>(MEMX)                  | 1.57                           | 0.00                    | 0.00                              | 6.22                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 0.79                           | 1.12                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Instinet                                       | 0.39                           | 0.00                    | 0.00                              | 0.00                                      | 12.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

| 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) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| BlockCross<br>(BLKX)                  |                                |                         |                                   |   |                        |   |   |  |  |   |   |  |  |

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).]

Choe EDGX US Equities Exchange (EDGX):

[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).]

Members Exchange (MEMX):

[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).]

Instinet BlockCross (BLKX):

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

## October 2023

#### 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                                    | 85.08  | 3.69   | 7.98   | 3.25  |

|                                       |                                |                         |                                   | i   |                        |   |   |  |  |   |   |  |  |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| 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)   | 31.93                          | 36.98                   | 41.67                             | 3.77                                      | 26.67                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

| Venue -<br>Non-directed<br>Order Flow          | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| VIRTU<br>Americas, LLC<br>(NITE)               | 23.64                          | 26.74                   | 20.83                             | 2.83                                      | 40.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 15.90                          | 18.92                   | 20.83                             | 1.89                                      | 3.33                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 13.04                          | 15.45                   | 12.50                             | 3.77                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 5.03                           | 0.00                    | 4.17                              | 33.96                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US<br>Equities<br>Exchange<br>(EDGX) | 2.45                           | 0.00                    | 0.00                              | 16.98                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 2.45                           | 0.00                    | 0.00                              | 16.98                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 1.22                           | 1.22                    | 0.00                              | 0.94                                      | 3.33                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NYSE Arca<br>(ARCA)                            | 1.09                           | 0.00                    | 0.00                              | 7.55                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Instinet<br>BlockCross<br>(BLKX)               | 1.09                           | 0.00                    | 0.00                              | 0.00                                      | 26.67                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

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).]

Choe EDGX US Equities Exchange (EDGX):

[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).]

Instinet BlockCross (BLKX):

| Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a |          |     |
|--|----------|-----|
|  | .)(   )( | ıV) |

## October 2023

## **Options**

#### Summary

|   | Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|---|--|--|--|---|
| I | 100.00                                    | 13.57  | 7.86   | 73.57  | 5.00  |

#### 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<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)                 | 44.59                          | 50.00                   | 44.44                             | 45.61                                     | 14.29                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Wolverine<br>Execution<br>Services LLC<br>(WEXX) | 27.03                          | 0.00                    | 11.11                             | 34.21                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Dash Financial<br>Technologies<br>LLC (DASH)     | 14.86                          | 5.56                    | 33.33                             | 15.79                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Susquehanna<br>Capital Group<br>(SUSQ)           | 10.14                          | 38.89                   | 11.11                             | 0.88                                      | 85.71                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Morgan Stanley<br>& Company LLC<br>(MSCO)        | 3.38                           | 5.56                    | 0.00                              | 3.51                                      | 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).]

Wolverine Execution Services LLC (WEXX): [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).]

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

## November 2023

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                                    | 68.75  | 2.79   | 23.01  | 5.45  |

#### 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)            | 28.99                          | 31.33                   | 28.57                             | 16.67                                     | 60.98                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 25.42                          | 28.05                   | 23.81                             | 16.67                                     | 36.59                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 17.50                          | 21.28                   | 9.52                              | 11.76                                     | 2.44                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 14.94                          | 18.18                   | 33.33                             | 7.84                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US<br>Equities<br>Exchange<br>(EDGX) | 5.24                           | 0.00                    | 0.00                              | 20.10                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 4.60                           | 0.00                    | 0.00                              | 17.65                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Members<br>Exchange<br>(MEMX)                  | 1.15                           | 0.00                    | 0.00                              | 4.41                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 0.89                           | 0.00                    | 0.00                              | 3.43                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 0.89                           | 0.97                    | 4.76                              | 0.49                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS<br>Securities, LLC<br>(UBSS)               | 0.26                           | 0.19                    | 0.00                              | 0.49                                      | 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).]

Choe EDGX US Equities Exchange (EDGX):

[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).]

Members Exchange (MEMX):

[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).]

UBS Securities, LLC (UBSS):

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

## November 2023

### 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                                    | 91.44  | 1.95   | 2.97   | 3.64  |

| 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)            | 33.33                          | 35.13                   | 26.09                             | 7.79                                      | 37.25                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 23.66                          | 23.73                   | 39.13                             | 5.19                                      | 43.14                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 19.35                          | 21.22                   | 26.09                             | 1.30                                      | 3.92                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 15.61                          | 17.42                   | 4.35                              | 3.90                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 2.68                           | 0.00                    | 0.00                              | 42.86                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 1.46                           | 1.48                    | 4.35                              | 1.30                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 1.22                           | 0.00                    | 0.00                              | 19.48                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US                                   | 0.81                           | 0.00                    | 0.00                              | 12.99                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

| 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) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Equities<br>Exchange<br>(EDGX)        |                                |                         |                                   |   |                        |   |   |  |  |   |   |  |  |
| Instinet<br>BlockCross<br>(BLKX)      | 0.65                           | 0.00                    | 0.00                              | 0.00                                      | 15.69                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS Securities,<br>LLC (UBSS)         | 0.57                           | 0.65                    | 0.00                              | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

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).]

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).]

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

Choe EDGX US Equities Exchange (EDGX):

[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).]

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

## November 2023

## **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                                    | 18.44  | 9.22   | 70.92  | 1.42  |

| Venue -<br>Non-directed<br>Order Flow            | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received<br>for Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Citadel Securities<br>LLC (CDRG)                 | 50.00                          | 42.31                   | 80.00                             | 50.00                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Wolverine<br>Execution<br>Services LLC<br>(WEXX) | 19.05                          | 3.85                    | 0.00                              | 23.85                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Susquehanna<br>Capital Group<br>(SUSQ)           | 14.88                          | 50.00                   | 20.00                             | 6.15                                      | 100.00                 | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Dash Financial<br>Technologies<br>LLC (DASH)     | 14.29                          | 3.85                    | 0.00                              | 17.69                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Morgan Stanley<br>& Company LLC<br>(MSCO)        | 1.79                           | 0.00                    | 0.00                              | 2.31                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

Citadel Securities LLC (CDRG):
[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).]

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).]

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

## December 2023

### 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                                    | 77.08  | 1.39   | 21.41  | 0.12  |

| 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)   | 30.59                          | 37.09                   | 25.00                             | 13.22                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

| 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) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| G1 Execution<br>Services, LLC<br>(ETMM)        | 18.44                          | 21.47                   | 33.33                             | 9.09                                      | 50.00                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 18.33                          | 21.32                   | 16.67                             | 10.33                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 15.51                          | 18.47                   | 25.00                             | 7.02                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US<br>Equities<br>Exchange<br>(EDGX) | 5.21                           | 0.00                    | 0.00                              | 19.83                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 4.66                           | 0.00                    | 0.00                              | 17.77                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 4.23                           | 0.00                    | 0.00                              | 16.12                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Members<br>Exchange<br>(MEMX)                  | 1.52                           | 0.00                    | 0.00                              | 5.79                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Two Sigma<br>Securities, LLC<br>(SOHO)         | 0.98                           | 1.20                    | 0.00                              | 0.41                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| UBS<br>Securities, LLC<br>(UBSS)               | 0.43                           | 0.45                    | 0.00                              | 0.41                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

Citadel Securities LLC (CDRG):

[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).]

VIRTU Americas, LLC (NITE):

[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).]

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).]

New York Stock Exchange (NYSE):

[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).]

Members Exchange (MEMX): [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).]

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

## December 2023

## Non-S&P 500 Stocks

Summary

| Non-Directed Orders 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                                 | 88.41  | 4.38   | 6.84   | 0.36  |

#### 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)            | 28.72                          | 31.58                   | 45.83                             | 6.77                                      | 3.70                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| VIRTU<br>Americas, LLC<br>(NITE)               | 23.19                          | 25.59                   | 18.75                             | 9.77                                      | 11.11                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| G1 Execution<br>Services, LLC<br>(ETMM)        | 21.67                          | 24.46                   | 18.75                             | 6.77                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Jane Street<br>Capital, LLC<br>(JNST)          | 15.38                          | 17.23                   | 16.67                             | 4.51                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Cboe EDGX US<br>Equities<br>Exchange<br>(EDGX) | 2.55                           | 0.00                    | 0.00                              | 22.56                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| New York<br>Stock<br>Exchange<br>(NYSE)        | 2.21                           | 0.00                    | 0.00                              | 19.55                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Instinet<br>BlockCross<br>(BLKX)               | 1.95                           | 0.00                    | 0.00                              | 0.00                                      | 85.19                  | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NASDAQ<br>Execution<br>Services, LLC<br>(NSDQ) | 1.44                           | 0.00                    | 0.00                              | 12.78                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| NYSE Arca<br>(ARCA)                            | 1.02                           | 0.00                    | 0.00                              | 9.02                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Members<br>Exchange<br>(MEMX)                  | 0.93                           | 0.00                    | 0.00                              | 8.27                                      | 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).]

Choe EDGX US Equities Exchange (EDGX):

[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).]

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).]

NYSE Arca (ARCA):

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

Members Exchange (MEMX):

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

## December 2023

### **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                                    | 15.23  | 8.61   | 75.50  | 0.66  |

| Venue -<br>Non-directed<br>Order Flow            | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received<br>for Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Citadel Securities<br>LLC (CDRG)                 | 43.01                          | 60.87                   | 45.45                             | 39.87                                     | 100.00                 | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Wolverine<br>Execution<br>Services LLC<br>(WEXX) | 32.64                          | 0.00                    | 18.18                             | 38.61                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Dash Financial<br>Technologies<br>LLC (DASH)     | 18.13                          | 8.70                    | 18.18                             | 19.62                                     | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Morgan Stanley<br>& Company LLC<br>(MSCO)        | 3.11                           | 13.04                   | 0.00                              | 1.90                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |
| Susquehanna<br>Capital Group                     | 3.11                           | 17.39                   | 18.18                             | 0.00                                      | 0.00                   | 0   | 0.0000  | 0  | 0.0000   | 0   | 0.0000  | 0  | 0.0000   |

| Venue -<br>Non-directed<br>Order Flow | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received<br>for Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| (SUSQ)                                |                                |                         |                                   |   |                        |   |   |  |  |   |   |  |  |

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).]

Wolverine Execution Services LLC (WEXX): [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).]

Morgan Stanley & Company LLC (MSCO): [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).]