

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

3rd Quarter, 2020

## Order Flow Practices (SEC Rule 607 Disclosure)

Prudential Investment Management Services LLC ("PIMS") routes its orders through National Financial Services LLC ("NFS"), which provides securities clearance services for PIMS and is a member of the New York Stock Exchange and other major stock exchanges. PIMS does not receive payment for order flow.

## Payment for Order Flow Policy:

- NFS receives compensation or other consideration (commonly referred to as "payment for order flow") for directing orders to particular broker-dealers or market centers for execution.
- Payment for order flow may take such forms as financial credits, monetary payments, rebates in the form of a reduction of fees charged, volume discounts, or reciprocal business.
- NFS's payment for order flow and order routing policies are furnished to customers on an annual basis.

## Order Routing Policy:

Absent specific order routing instructions from account holders, NFS transmits orders for execution to various broker-dealers, exchanges and other market centers based on a number of factors. Such factors include: the ability of a market center to execute the orders at or superior to the publicly quoted market; the speed of execution; the availability of efficient, automated transaction processing; liquidity enhancement opportunities; the speed of displaying better-priced limit orders; trading characteristics of the particular securities; and the extent to which different markets may be more suitable for different types of orders or different securities. Some market centers or broker-dealers may execute orders at prices superior to the publicly quoted market.

## July 2020

### S&P 500 Stocks

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 75.44                                     | 3.60  | 17.41   | 3.55                                     |

#### Venues

| Venue - Non-directed Order Flow       | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cent per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cent per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cent per hundred shares) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|--|--|--|--|---|---|
| Citadel Securities LLC (CDRG)         | 40.88                   | 52.06             | 49.35                       | 14.57                           | 48.24            | 0  | 0.0000   | 0  | 0.0000   | 0  | 0.0000  | 0.0000  |
| VIRTU Americas LLC (NITE)             | 28.32                   | 36.06             | 33.77                       | 10.33                           | 31.76            | 0  | 0.0000   | 0  | 0.0000   | 0  | 0.0000  | 0.0000  |
| NASDAQ Execution Services, LLC (NSDQ) | 11.70                   | 0.00              | 3.90                        | 39.60                           | 0.00             | 0  | 0.0000   | 0  | 0.0000   | 0  | 0.0000  | 0.0000  |
| New York Stock Exchange (NYSE)        | 8.27                    | 0.00              | 3.90                        | 27.86                           | 0.00             | 0  | 0.0000   | 0  | 0.0000   | 0  | 0.0000  | 0.0000  |
| JANE STREET CAPITAL, LLC (JNST)       | 3.35                    | 4.58              | 2.60                        | 1.13                            | 0.00             | 0  | 0.0000   | 0  | 0.0000   | 0  | 0.0000  | 0.0000  |



## July 2020

### Non-S&P 500 Stocks

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 65.96                                     | 5.25  | 23.07   | 5.72                                     |

#### Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)   | 37.60                   | 52.30             | 43.72                       | 11.39                           | 41.90            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| VIRTU                           | 25.69                   | 35.06             | 38.60                       | 8.37                            | 25.40            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

| Venue - Non-directed Order Flow       | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Americas LLC (NITE)                   |                         |                   |                             |                                 |                  |  |   |  |   |  |   |   |  |
| NASDAQ Execution Services, LLC (NSDQ) | 11.45                   | 0.00              | 1.86                        | 34.11                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe EDGX US Equities Exchange (EDGX) | 7.88                    | 0.00              | 0.00                        | 23.66                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 3.94                    | 0.00              | 0.47                        | 11.77                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| JANE STREET CAPITAL, LLC (JNST)       | 3.17                    | 4.83              | 5.12                        | 0.76                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM)     | 2.37                    | 3.43              | 6.05                        | 0.44                            | 0.63             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)      | 2.37                    | 3.17              | 2.79                        | 0.69                            | 3.81             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Instinet BlockCross (BLKX)            | 1.78                    | 0.00              | 0.00                        | 0.00                            | 26.98            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NYSE Arca (ARCA)                      | 1.05                    | 0.00              | 0.00                        | 3.15                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

## July 2020

### Options

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 53.33                                     | 4.00  | 42.67   | 0.00                                     |

#### Venues

| Venue - Non-directed Order Flow         | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)           | 37.33                   | 25.00             | 66.67                       | 50.00                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Susquehanna Capital Group (SUSQ)        | 22.67                   | 40.00             | 0.00                        | 3.13                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Dash Financial Technologies LLC (DASH)  | 14.67                   | 12.50             | 0.00                        | 18.75                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Wolverine Execution Services LLC (WEXX) | 14.67                   | 5.00              | 33.33                       | 25.00                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Citigroup Global Markets, Inc. (KEXP)   | 6.67                    | 10.00             | 0.00                        | 3.13                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Morgan Stanley & Company LLC (MSCO)     | 4.00                    | 7.50              | 0.00                        | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

## August 2020

### S&P 500 Stocks

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 75.29                                     | 2.96  | 17.66   | 4.09                                     |

#### Venues

| Venue - Non-directed Order Flow       | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)         | 39.03                   | 51.69             | 58.73                       | 11.92                           | 35.29            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| VIRTU Americas LLC (NITE)             | 27.33                   | 36.27             | 30.16                       | 7.95                            | 33.33            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NASDAQ Execution Services, LLC (NSDQ) | 12.17                   | 0.00              | 0.00                        | 39.74                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 8.36                    | 0.00              | 1.59                        | 27.18                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| JANE STREET CAPITAL, LLC (JNST)       | 2.87                    | 4.24              | 3.17                        | 0.38                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM)     | 2.75                    | 3.62              | 3.17                        | 1.28                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)      | 2.71                    | 3.43              | 3.17                        | 0.26                            | 9.80             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe BZX U.S (BATS)                   | 2.20                    | 0.00              | 0.00                        | 7.18                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe EDGX US Equities Exchange (EDGX) | 1.18                    | 0.00              | 0.00                        | 3.85                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| UBS Securities, LLC (UBSS)            | 0.82                    | 0.75              | 0.00                        | 0.26                            | 6.86             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

## August 2020

### Non-S&P 500 Stocks

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 68.92                                     | 5.39  | 21.51   | 4.18                                     |

#### Venues

| Venue - Non-directed Order Flow       | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)         | 37.53                   | 51.96             | 51.64                       | 8.78                            | 37.83            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| VIRTU Americas LLC (NITE)             | 25.99                   | 36.20             | 33.80                       | 7.03                            | 20.22            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NASDAQ Execution Services, LLC (NSDQ) | 10.35                   | 0.00              | 1.41                        | 32.64                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe EDGX US Equities Exchange (EDGX) | 7.28                    | 0.00              | 0.00                        | 23.11                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 3.66                    | 0.00              | 0.47                        | 11.55                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NYSE Arca (ARCA)                      | 3.26                    | 0.00              | 0.47                        | 10.27                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

| Venue - Non-directed Order Flow   | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|-----------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| JANE STREET CAPITAL, LLC (JNST)   | 3.24                    | 4.68              | 7.04                        | 0.61                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM) | 2.43                    | 3.69              | 3.29                        | 0.41                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Instinet BlockCross (BLXX)        | 2.15                    | 0.00              | 0.00                        | 0.00                            | 37.83            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)  | 1.90                    | 2.63              | 1.41                        | 0.54                            | 2.25             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

## August 2020

### Options

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 15.94                                     | 13.04   | 71.01   | 0.00                                     |

| Venue - Non-directed Order Flow         | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)           | 47.14                   | 54.55             | 50.00                       | 44.90                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Wolverine Execution Services LLC (WEXX) | 28.57                   | 0.00              | 0.00                        | 40.82                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Dash Financial Technologies LLC (DASH)  | 12.86                   | 9.09              | 20.00                       | 12.24                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Susquehanna Capital Group (SUSQ)        | 7.14                    | 27.27             | 20.00                       | 0.00                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Morgan Stanley & Company LLC (MSCO)     | 4.29                    | 9.09              | 10.00                       | 2.04                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

## September 2020

### S&P 500 Stocks

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 72.11                                     | 3.17  | 19.87   | 4.85                                     |

#### Venues

| Venue - Non-directed Order Flow | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)   | 42.71                   | 57.63             | 59.68                       | 13.72                           | 55.14            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

| Venue - Non-directed Order Flow       | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| VIRTU Americas LLC (NITE)             | 21.34                   | 29.33             | 22.58                       | 7.18                            | 22.43            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NASDAQ Execution Services, LLC (NSDQ) | 16.35                   | 0.00              | 4.84                        | 47.95                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 7.76                    | 0.00              | 1.61                        | 22.82                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| JANE STREET CAPITAL, LLC (JNST)       | 3.95                    | 5.75              | 4.84                        | 1.28                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM)     | 3.38                    | 4.57              | 4.84                        | 1.54                            | 0.93             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)      | 1.65                    | 2.14              | 1.61                        | 0.51                            | 3.74             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe EDGX US Equities Exchange (EDGX) | 1.56                    | 0.00              | 0.00                        | 4.62                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| UBS Securities, LLC (UBSS)            | 0.78                    | 0.59              | 0.00                        | 0.38                            | 6.54             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Instinet BlockCross (BLXX)            | 0.52                    | 0.00              | 0.00                        | 0.00                            | 11.21            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |



## September 2020

### Non-S&P 500 Stocks

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 63.96                                     | 7.01  | 26.05   | 2.99                                     |

#### Venues

| Venue - Non-directed Order Flow       | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---------------------------------------|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)         | 38.86                   | 55.31             | 52.23                       | 12.73                           | 46.63            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| VIRTU Americas LLC (NITE)             | 21.64                   | 31.69             | 30.36                       | 6.71                            | 15.34            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NASDAQ Execution Services, LLC (NSDQ) | 12.96                   | 0.00              | 1.62                        | 34.39                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Cboe EDGX US Equities Exchange (EDGX) | 7.73                    | 0.00              | 0.00                        | 20.65                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| New York Stock Exchange (NYSE)        | 4.67                    | 0.00              | 1.21                        | 12.29                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| NYSE Arca (ARCA)                      | 3.53                    | 0.00              | 1.21                        | 9.25                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| JANE STREET CAPITAL, LLC (JNST)       | 3.44                    | 4.84              | 4.86                        | 1.58                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| G1 Execution Services, LLC (ETMM)     | 3.41                    | 5.06              | 6.07                        | 0.89                            | 1.23             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Two Sigma Securities, LLC (SOHO)      | 1.73                    | 2.47              | 2.43                        | 0.57                            | 1.84             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Instinet BlockCross (BLKX)            | 1.28                    | 0.00              | 0.00                        | 0.00                            | 33.13            | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |

## September 2020

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### Options

#### Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non-Directed Orders | Non-Marketable Limit Orders as % of Non-Directed Orders | Other Orders as % of Non-Directed Orders |
|--|---|---|---|--|
| 100.00                                 | 4.49                                      | 11.24   | 84.27   | 0.00                                     |

#### Venues

| Venue - Non-directed Order Flow         | Non-Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non-Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/Received for Market Orders(cents per hundred shares) | Net Payment Paid/Received for Marketable Limit Orders(USD) | Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|---|-------------------------|-------------------|-----------------------------|---------------------------------|------------------|--|---|--|---|--|---|---|--|
| Citadel Securities LLC (CDRG)           | 50.57                   | 25.00             | 50.00                       | 52.05                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Wolverine Execution Services LLC (WEXX) | 26.44                   | 0.00              | 0.00                        | 31.51                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Dash Financial Technologies LLC (DASH)  | 17.24                   | 50.00             | 20.00                       | 15.07                           | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |
| Susquehanna Capital Group (SUSQ)        | 5.75                    | 25.00             | 30.00                       | 1.37                            | 0.00             | 0  | 0.0000  | 0  | 0.0000  | 0  | 0.0000  | 0   | 0.0000   |