

# JP Morgan Securities LLC - Held NMS Stocks and Options Order Routing Public Report

Generated on Mon Jul 31 2023 18:03:44 GMT-0400 (Eastern Daylight Time)

2nd Quarter, 2023

April 2023

## S&P 500 Stocks

### Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	66.15	4.81	22.79	6.25

### 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)	23.56	29.12	29.89	7.79	16.73	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JANE STREET CAPITAL, LLC (JNST)	21.02	25.47	27.91	7.77	16.91	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TWO SIGMA SECURITIES, LLC (SOHO)	19.08	27.30	20.75	0.11	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VIRTU Americas LLC (NITE)	15.47	17.71	20.08	7.73	16.34	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	9.01	0.00	0.00	32.51	25.89	-4.1370	-30.0000	0.1918	29.5077	5,669.8835	29.2802	151.6397	2.8957
New York Stock Exchange (NYSE)	6.87	0.40	1.37	22.11	24.13	-164.4769	-2.9933	125.4488	2.9312	3,610.5586	18.9839	94.9537	1.4242
NYSE Arca, Inc. (ARCA)	1.57	0.00	0.00	6.92	0.00	0.0000	0.0000	0.0000	0.0000	1,969.5840	24.8695	0.0000	0.0000
Cboe EDGX Exchange, Inc. (EDGX)	1.33	0.00	0.00	5.84	0.00	0.0000	0.0000	0.0160	16.0000	939.0414	15.8252	0.0000	0.0000
Cboe BZX Exchange, Inc. (BATS)	1.16	0.00	0.00	5.11	0.00	-0.2160	-30.0000	0.1250	3.1250	1,039.7155	22.8425	0.0000	0.0000
Investors Exchange LLC (IEXG)	0.93	0.00	0.00	4.11	0.00	0.0000	0.0000	0.0000	0.0000	-1.2481	-0.0417	0.0000	0.0000

Material Aspects:

Citadel Securities LLC (CDRG):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0005 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

JANE STREET CAPITAL, LLC (JNST):  
Firm not charged.

TWO SIGMA SECURITIES, LLC (SOHO):  
Firm not charged.

VIRTU Americas LLC (NITE):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0010 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

The Nasdaq Stock Market (NSDQ):  
Firm qualified for (1) the rebate provided for adding over 0.60% of the total consolidated volume and removing over 0.80% of the total consolidated volume and executing ADV of 350,000 or more shares through Midpoint Extended Life Orders during the month (\$0.0029 per share for displayed adding liquidity), (2) Closing Cross Tier B (a fee of \$0.0011 per share for orders participating in the Closing Cross), (3) the rebate provided for adding over 0.03% of the total consolidated volume of non-displayed liquidity, including midpoint orders, for Tape A/B securities (\$0.0010 per share) and Tape C securities (\$0.0005 per share) for non-displayed adding liquidity, (4) the rebate provided for executing ADV of at least 3 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 100% or more versus the volume of such executed orders in June 2021 (\$0.00005) for adding displayed liquidity, (5) the rebate provided for adding a minimum of 15 million shares of midpoint liquidity per day and increasing midpoint adding ADV by 30% or more versus May 2021 midpoint adding ADV (\$0.0002 per share) for adding midpoint non-displayed liquidity, (6) the rebate provided for adding greater than 5 million shares of midpoint liquidity and 8 million shares of non-displayed liquidity (\$0.0025 per share for adding midpoint non-displayed liquidity) and (7) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <http://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

New York Stock Exchange (NYSE):  
Firm qualified for Providing Tier 2 (a rebate of \$0.0020 per share for adding displayed liquidity in Tape A securities), MOC/LOC Tier 1 (a fee of \$0.0007 per share for Market-On-Close and Limit-On-Close orders), NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close (a reduced fee of \$0.0008 per share for d-Orders last modified in the last 3 minutes before the scheduled close of trading), Remove Tier 1 for Tape A securities (a fee of \$0.0028 per share for removing liquidity) and Tape B and Tape C securities (a fee of \$0.00285 per share for removing liquidity), Midpoint Liquidity Tier 3 for adding at least .0075% of consolidated ADV through the midpoint for tapes A, B, and C securities combined (a rebate of \$0.0020 per share for adding midpoint non-displayed liquidity), Non-Displayed Step-up Tier 3 for adding at least 0.02% and less than 0.04% of ADV in non-displayed limit orders and mid-point liquidity orders in all securities consolidated ADV combined (a rebate of \$0.0005 per share for adding non-displayed liquidity), and Routing Tier 1 for adding average daily volume in Tapes A, B and C combined that is at least 0.20% of Tapes A, B and C consolidated average daily volume combined (a fee of \$0.0030 per share for orders routed). The venue provided a fee cap of \$35,000 for the month for opening executions. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.nyse.com/markets/nyse/trading-info/fees>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

NYSE Arca, Inc. (ARCA):  
Firm qualified for Tier 4 for adding .20% of consolidated ADV (a rebate of \$0.0025 for Tape A and Tape C securities and \$0.0022 for Tape B securities for adding displayed liquidity) Mid-Point Liquidity Step-up Tier 2 for executing ADV of at least 1 million shares through midpoint versus the volume of such orders in May 2019 (a rebate of \$0.0025 per share for adding midpoint liquidity), and Limit Non-Display Order Step Up Tier 4 for increasing ADV by .02% of limit non-displayed and mid-point liquidity orders combined over July 2020 (a rebate of \$0.0004 per share for adding non-displayed liquidity). The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE\\_Arca\\_Marketplace\\_Fees.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe EDGX Exchange, Inc. (EDGX):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/edgx/](https://markets.cboe.com/us/equities/membership/fee_schedule/edgx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe BZX Exchange, Inc. (BATS):  
Firm qualified for Add/Remove Volume Tier 2 for having average daily added volume as a percentage of total consolidated volume of at least 0.20% or average added daily volume of at least 20,000,000 (an incremental rebate of \$0.0007 per share for adding displayed liquidity). The Firm achieved the aforementioned tier based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/bzx/](https://markets.cboe.com/us/equities/membership/fee_schedule/bzx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Investors Exchange LLC (IEXG):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.iexexchange.io/resources/trading/fee-schedule>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

April 2023

Non-S&P 500 Stocks  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	62.60	7.41	22.61	7.37

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)
JANE STREET CAPITAL, LLC (JNST)	32.22	41.58	39.98	8.49	17.40	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	22.50	27.32	29.86	8.35	17.58	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VIRTU Americas LLC (NITE)	18.34	21.48	22.40	8.30	18.41	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	9.25	0.15	0.29	33.42	21.62	-156.4384	-10.5692	-23.6589	-8.0202	19,673.2524	17.8677	538.5612	1.3531
New York Stock Exchange (NYSE)	5.13	0.03	0.07	18.12	13.72	-26.4866	-6.8126	-14.1782	-7.5941	8,017.9845	17.1601	458.2140	3.5088
UBS SECURITIES LLC (UBSS)	3.25	4.79	3.30	0.03	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NYSE Arca, Inc. (ARCA)	3.21	0.03	0.04	10.78	10.21	-39.2818	-13.8903	-20.6462	-20.8400	6,192.3322	16.2726	-617.3419	-10.4345
TWO SIGMA SECURITIES, LLC (SOHO)	3.20	4.62	4.05	0.03	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Cboe BZX Exchange, Inc. (BATS)	1.46	0.00	0.00	6.12	1.06	-2.1058	-13.7544	-2.0327	-19.6776	3,689.1124	17.1147	-28.9015	-5.2612
Cboe EDGX Exchange, Inc. (EDGX)	1.44	0.00	0.01	6.36	0.00	-0.0346	-21.6250	-4.5711	-9.0463	2,824.0641	10.8505	0.0000	0.0000

#### Material Aspects:

JANE STREET CAPITAL, LLC (JNST):  
Firm not charged.

Citadel Securities LLC (CDRG):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0005 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

VIRTU Americas LLC (NITE):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0010 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

The Nasdaq Stock Market (NSDQ):  
Firm qualified for (1) the rebate provided for adding over 0.60% of the total consolidated volume and removing over 0.80% of the total consolidated volume and executing ADV of 350,000 or more shares through Midpoint Extended Life Orders during the month (\$0.0029 per share for displayed adding liquidity), (2) Closing Cross Tier B (a fee of \$0.0011 per share for orders participating in the Closing Cross), (3) the rebate provided for adding over 0.03% of the total consolidated volume of non-displayed liquidity, including midpoint orders, for Tape A/B securities (\$0.0010 per share) and Tape C securities (\$0.0005 per share) for non-displayed adding liquidity, (4) the rebate provided for executing ADV of at least 3 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 100% or more versus the volume of such executed orders in June 2021 (\$0.00005) for adding displayed liquidity, (5) the rebate provided for adding a minimum of 15 million shares of midpoint liquidity per day and increasing midpoint adding ADV by 30% or more versus May 2021 midpoint adding ADV (\$0.0002 per share) for adding midpoint non-displayed liquidity, (6) the rebate provided for adding greater than 5 million shares of midpoint liquidity and 8 million shares of non-displayed liquidity (\$0.0025 per share for adding midpoint non-displayed liquidity) and (7) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <http://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

New York Stock Exchange (NYSE):

[illegible]

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)
Nasdaq PHLX LLC (XPHO)	13.37	0.00	0.00	0.00	37.79	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-108,992.2784	-27.3427
Cboe Exchange, Inc. (CBOE)	4.20	0.00	0.00	0.00	11.87	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-69,512.6721	-41.5947
Nasdaq Options Market (XNDQ)	1.43	0.00	0.00	0.00	4.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-47,098.9151	-87.3077
NYSE Arca Options (ARCO)	1.06	0.00	0.00	0.00	3.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-18,473.1930	-24.0124
Cboe BZX Exchange, Inc. (BATO)	0.82	0.00	0.00	0.00	2.31	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-36,093.6800	-51.7992
BOX OPTIONS EXCHANGE (XBOX)	0.63	0.00	0.00	0.00	1.79	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	10,531.1268	28.8153

### Material Aspects:

Dash Financial Technologies LLC (DFIN):

Firm not charged for orders routed by the Wealth Management or Corporate and Investment Bank division and cleared by Dash Financial Technologies LLC. However, Firm charged commission plus exchange, regulatory, market data, and clearing fees, less exchange rebates where applicable, for orders routed by the Corporate and Investment Bank and cleared by the Firm following execution, Firm is charged \$.05/contract for 0-500,000 contracts, \$.04/contract for 500,001-1 million contracts, and \$.03/contract for greater than 1 million contracts. Firm qualified for the \$.03/contract discounted tier. Dash Financial Technologies LLC's most recent report pursuant to SEC Rule 606(a) is available at: <http://dash-website-static.s3-website-us-east-1.amazonaws.com/static/606.html>

Citadel Securities LLC (CDRG):

Firm not charged. Citadel Securities LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.citadelsecurities.com/rule-605-606-statements/>

GLOBAL EXECUTION BROKERS, LP (GEBB):

Firm not charged.

Wolverine Execution Services, LLC (WEXX):

Firm not charged. Wolverine Execution Services, LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.tradewex.com/Home/Rule606>.

Nasdaq PHLX LLC (XPHO):

Firm did not qualify for tiered pricing. Firm received marketing fees from preferenced market makers pursuant to marketing fee program sponsored by exchange. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-options-7>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe Exchange, Inc. (CBOE):

Firm did not qualify for tiered pricing with respect to customer order flow. Firm received marketing fees from preferenced market makers pursuant to marketing fee program sponsored by exchange. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://cdn.cboe.com/resources/membership/Cboe\\_FeeSchedule.pdf](https://cdn.cboe.com/resources/membership/Cboe_FeeSchedule.pdf). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Nasdaq Options Market (XNDQ):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-options-7>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

NYSE Arca Options (ARCO):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.nyse.com/markets/arca-options/trading-info#fees>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe BZX Exchange, Inc. (BATO):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/options/membership/fee\\_schedule/bzx/](https://markets.cboe.com/us/options/membership/fee_schedule/bzx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

BOX OPTIONS EXCHANGE (XBOX):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://boxexchange.com/assets/BOX-Fee-Schedule-as-of-July-3-2023.pdf>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

## May 2023

## S&P 500 Stocks

### Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	65.94	4.74	23.01	6.31

### Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
JANE STREET CAPITAL, LLC (JNST)	22.17	26.92	29.62	8.44	16.03	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	22.00	26.84	27.91	8.54	16.11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TWO SIGMA SECURITIES, LLC (SOHO)	19.67	28.26	21.64	0.13	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VIRTU Americas LLC (NITE)	15.65	17.79	20.59	8.36	16.16	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	8.92	0.00	0.01	31.43	26.97	-0.4530	-30.0000	-2.5020	-30.0000	6,590.0798	30.1354	306.4476	4.1737
New York Stock Exchange (NYSE)	6.66	0.19	0.23	21.58	24.73	-7.7484	-3.7508	-0.1080	-1.9424	2,922.7025	19.8927	168.9072	2.0219
NYSE Arca, Inc. (ARCA)	1.59	0.00	0.00	6.93	0.00	-0.4260	-30.0000	-0.0300	-30.0000	1,863.8060	24.4850	-0.0090	-30.0000
Cboe EDGX Exchange, Inc. (EDGX)	1.33	0.00	0.00	5.80	0.00	-0.1830	-30.0000	-0.3600	-30.0000	981.0772	15.7838	0.0000	0.0000
Cboe BZX Exchange, Inc. (BATS)	1.11	0.00	0.00	4.86	0.00	-0.0120	-30.0000	0.0000	0.0000	1,297.1823	26.8671	0.0000	0.0000
Investors Exchange LLC (IEXG)	0.90	0.00	0.00	3.93	0.00	0.0000	0.0000	0.0000	0.0000	-3.4890	-0.0901	0.0000	0.0000

### Material Aspects:

JANE STREET CAPITAL, LLC (JNST):  
Firm not charged.

Citadel Securities LLC (CDRG):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0005 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

TWO SIGMA SECURITIES, LLC (SOHO):  
Firm not charged.

VIRTU Americas LLC (NITE):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0010 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

The Nasdaq Stock Market (NSDQ):

[illegible]

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)
The Nasdaq Stock Market (NSDQ)	9.22	0.18	0.41	31.95	21.87	-274.0031	-9.9550	-73.1369	-8.3203	32,279.0775	22.5876	804.3469	1.8467
New York Stock Exchange (NYSE)	5.21	0.08	0.20	17.22	15.24	-120.4580	-5.3804	2.8656	0.7646	12,390.4760	17.9110	587.9190	2.8249
TWO SIGMA SECURITIES, LLC (SOHO)	3.43	5.05	4.02	0.03	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NYSE Arca, Inc. (ARCA)	3.16	0.03	0.05	10.28	9.98	-45.0058	-29.0604	-5.5500	-13.8163	9,857.2389	19.2883	-655.6752	-9.5772
Cboe BZX Exchange, Inc. (BATS)	1.48	0.00	0.00	5.91	1.32	-9.5641	-20.4012	-0.1500	-30.0000	6,813.0303	21.2587	-34.4785	-2.5813
Cboe EDGX Exchange, Inc. (EDGX)	1.40	0.00	0.00	5.98	0.00	-3.4404	-29.8905	-1.2639	-25.2780	3,975.6383	12.4167	0.0000	0.0000
Investors Exchange LLC (IEXG)	0.88	0.00	0.00	3.75	0.00	-0.0224	-11.2000	-4.7871	-23.9715	-14.9608	-0.0672	0.0000	0.0000

#### Material Aspects:

JANE STREET CAPITAL, LLC (JNST):  
Firm not charged.

Citadel Securities LLC (CDRG):

Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0005 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

VIRTU Americas LLC (NITE):

Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0010 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

The Nasdaq Stock Market (NSDQ):

Firm qualified for (1) the rebate provided for adding over 0.60% of the total consolidated volume and removing over 0.80% of the total consolidated volume and executing ADV of 350,000 or more shares through Midpoint Extended Life Orders during the month (\$0.0029 per share for displayed adding liquidity), (2) Closing Cross Tier B (a fee of \$0.0011 per share for orders participating in the Closing Cross), (3) the rebate provided for adding over 0.03% of the total consolidated volume of non-displayed liquidity, including midpoint orders, for Tape A/B securities (\$0.0010 per share) and Tape C securities (\$0.0005 per share) for non-displayed adding liquidity, (4) the rebate provided for executing ADV of at least 3 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 100% or more versus the volume of such executed orders in June 2021 (\$0.00005 per share for adding displayed liquidity), (5) the rebate for achieving QMM Tier 1 incentive (\$0.0001 per share for adding displayed liquidity), (6) the rebate provided for adding a minimum of 15 million shares of midpoint liquidity per day and increasing midpoint adding ADV by 30% or more versus May 2021 midpoint adding ADV (\$0.0002 per share) for adding midpoint non-displayed liquidity, (7) the rebate provided for adding greater than 5 million shares of midpoint liquidity and 8 million shares of non-displayed liquidity (\$0.0025 per share for adding midpoint non-displayed liquidity) and (8) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <http://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

New York Stock Exchange (NYSE):

Firm qualified for Providing Tier 2 (a rebate of \$0.0020 per share for adding displayed liquidity in Tape A securities), Tape C Add Tier 2 (a rebate of \$0.0023 per share for adding displayed liquidity in Tape C securities), MOC/LOC Tier 1 (a fee of \$0.0007 per share for Market-On-Close and Limit-On-close orders), NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close (a reduced fee of \$0.0008 per share for d-Orders last modified in the last 3 minutes before the scheduled close of trading), Remove Tier 1 for Tape A securities (a fee of \$0.0028 per share for removing liquidity) and Tape B and Tape C securities (a fee of \$0.00285 per share for removing liquidity), Midpoint Liquidity Tier 3 for adding at least .0075% of consolidated ADV through the midpoint for Tapes A, B, and C securities combined (a rebate of \$0.0020 per share for adding midpoint non-displayed liquidity), Non-Displayed Step-up Tier 3 for adding at least 0.02% and less than 0.04% of ADV in non-displayed limit orders and mid-point liquidity orders in all securities consolidated ADV combined (a rebate of \$0.0005 per share for adding non-displayed liquidity), and Routing Tier 1 for adding average daily volume in Tapes A, B and C combined that is at least 0.20% of Tapes A, B and C consolidated average daily volume combined (a fee of \$0.0030 per share for orders routed). The venue provided a fee cap of \$35,000 for the month for opening executions. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.nyse.com/markets/nyse/trading-info/fees>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

TWO SIGMA SECURITIES, LLC (SOHO):

Firm not charged.

NYSE Arca, Inc. (ARCA):



Firm qualified for Tier 4 for adding .20% of consolidated ADV (a rebate of \$0.0025 for Tape A and Tape C securities and \$0.0022 for Tape B securities for adding displayed liquidity), Mid-Point Liquidity Step-up Tier 2 for executing ADV of at least 1 million shares through midpoint versus the volume of such orders in May 2019 (a rebate of \$0.0025 per share for adding midpoint liquidity), and Limit Non-Display Order Step Up Tier 4 for increasing ADV by .02% of limit non-displayed and mid-point liquidity orders combined over July 2020 (a rebate of \$0.0004 per share for adding non-displayed liquidity). The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE\\_Arca\\_Marketplace\\_Fees.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe BZX Exchange, Inc. (BATS):  
Firm qualified for Add/Remove Volume Tier 3 for having average daily added volume as a percentage of total consolidated volume of at least 0.25% or average added daily volume of at least 25,000,000 (an incremental rebate of \$0.0011 per share for adding displayed liquidity). The Firm achieved the aforementioned tier based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/bzx/](https://markets.cboe.com/us/equities/membership/fee_schedule/bzx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe EDGX Exchange, Inc. (EDGX):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/edgx/](https://markets.cboe.com/us/equities/membership/fee_schedule/edgx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Investors Exchange LLC (IEXG):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.iexexchange.io/resources/trading/fee-schedule>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

May 2023

Options Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
98.55	13.07	15.11	40.25	31.57

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)
Dash Financial Technologies LLC (DFIN)	26.00	24.53	22.14	22.92	32.31	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-6,025.2300	-2.1669
Citadel Securities LLC (CDRG)	19.61	26.51	27.42	27.02	3.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
GLOBAL EXECUTION BROKERS, LP (GEBB)	19.41	24.63	25.99	28.04	3.13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wolverine Execution Services, LLC (WEXX)	16.37	24.33	24.45	22.02	2.01	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nasdaq PHLX LLC (XPHO)	10.39	0.00	0.00	0.00	32.98	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-141,777.2800	-29.1251
Cboe Exchange, Inc. (CBOE)	3.87	0.00	0.00	0.00	12.28	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-63,112.7712	-36.1649
Nasdaq Options Market (XNDQ)	1.59	0.00	0.00	0.00	5.04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-49,838.0364	-79.3178
NYSE Arca Options (ARCO)	1.18	0.00	0.00	0.00	3.75	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-19,179.9730	-19.8136

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)
Cboe BZX Exchange, Inc. (BATO)	0.90	0.00	0.00	0.00	2.86	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-35,570.8200	-52.5186
BOX OPTIONS EXCHANGE (XBOX)	0.68	0.00	0.00	0.00	2.18	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	9,408.2989	24.2089

Material Aspects:

Dash Financial Technologies LLC (DFIN):  
Firm not charged for orders routed by the Wealth Management or Corporate and Investment Bank division and cleared by Dash Financial Technologies LLC. However, Firm charged commission plus exchange, regulatory, market data, and clearing fees, less exchange rebates where applicable, for orders routed by the Corporate and Investment Bank and cleared by the Firm following execution, Firm is charged \$.05/contract for 0-500,000 contracts, \$.04/contract for 500,001-1 million contracts, and \$.03/contract for greater than 1 million contracts. Firm qualified for the \$.03/contract discounted tier. Dash Financial Technologies LLC's most recent report pursuant to SEC Rule 606(a) is available at: <http://dash-website-static.s3-website-us-east-1.amazonaws.com/static/606.html>

Citadel Securities LLC (CDRG):  
Firm not charged. Citadel Securities LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.citadelsecurities.com/rule-605-606-statements/>

GLOBAL EXECUTION BROKERS, LP (GEBB):  
Firm not charged.

Wolverine Execution Services, LLC (WEXX):  
Firm not charged. Wolverine Execution Services, LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.tradewex.com/Home/Rule606>.

Nasdaq PHLX LLC (XPHO):  
Firm did not qualify for tiered pricing. Firm received marketing fees from preferenced market makers pursuant to marketing fee program sponsored by exchange. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-options-7>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe Exchange, Inc. (CBOE):  
Firm did not qualify for tiered pricing with respect to customer order flow. Firm received marketing fees from preferenced market makers pursuant to marketing fee program sponsored by exchange. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://cdn.cboe.com/resources/membership/Cboe\\_FeeSchedule.pdf](https://cdn.cboe.com/resources/membership/Cboe_FeeSchedule.pdf). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Nasdaq Options Market (XNDQ):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-options-7>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

NYSE Arca Options (ARCO):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.nyse.com/markets/arca-options/trading-info#fees>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe BZX Exchange, Inc. (BATO):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/options/membership/fee\\_schedule/bzx/](https://markets.cboe.com/us/options/membership/fee_schedule/bzx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

BOX OPTIONS EXCHANGE (XBOX):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://boxexchange.com/assets/BOX-Fee-Schedule-as-of-July-3-2023.pdf>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

June 2023

S&P 500 Stocks  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	65.88	4.72	22.81	6.60

## 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)
TWO SIGMA SECURITIES, LLC (SOHO)	25.56	36.67	28.64	0.18	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JANE STREET CAPITAL, LLC (JNST)	22.61	27.82	29.78	7.85	16.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	19.97	24.03	26.40	7.97	16.30	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VIRTU Americas LLC (NITE)	11.06	11.39	15.02	7.70	16.56	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	9.49	0.01	0.01	33.36	28.50	-23.1660	-29.9535	2.0334	27.2574	6,947.2627	30.1522	210.7017	2.6715
New York Stock Exchange (NYSE)	6.25	0.08	0.14	20.74	22.17	-88.9039	-12.6363	-0.8792	-1.8165	3,454.8936	19.4205	818.3582	7.5922
NYSE Arca, Inc. (ARCA)	1.62	0.00	0.00	7.12	0.00	-8.4894	-30.0085	0.0000	0.0000	1,623.6611	24.6682	0.0000	0.0000
Cboe EDGX Exchange, Inc. (EDGX)	1.34	0.00	0.01	5.86	0.00	-4.0996	-30.2554	0.0187	6.2333	900.8496	14.8701	0.0000	0.0000
Cboe BZX Exchange, Inc. (BATS)	1.18	0.00	0.00	5.19	0.00	-33.0673	-29.7127	0.1237	26.8913	1,385.4209	26.5778	-0.0105	-7.5000
Investors Exchange LLC (IEXG)	0.92	0.00	0.00	4.03	0.00	-0.9482	-21.8984	-0.1740	-29.0000	-1.3206	-0.0326	0.0000	0.0000

### Material Aspects:

TWO SIGMA SECURITIES, LLC (SOHO):  
Firm not charged.

JANE STREET CAPITAL, LLC (JNST):  
Firm not charged.

Citadel Securities LLC (CDRG):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0005 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

VIRTU Americas LLC (NITE):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0010 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

The Nasdaq Stock Market (NSDQ):  
Firm qualified for (1) the rebate provided for adding over 0.60% of the total consolidated volume and removing over .80% of the total consolidated volume and executing ADV of 350,000 or more shares through Midpoint Extended Life Orders during the month (\$0.0029 per share) for adding displayed liquidity, (2) Closing Cross Tier B (a fee of \$0.0011 per share) for orders executing in the Closing Cross, (3) the rebate provided for adding over 0.03% of the total consolidated volume of non-displayed liquidity, including midpoint orders, for Tape A/B securities (\$0.0010 per share) and Tape C securities (\$0.0005 per share) for adding non-displayed liquidity, (4) the rebate provided for executing ADV of at least 3 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 100% or more versus the volume of such executed orders in June 2021 (\$0.00005 per share) for adding displayed liquidity, (5) the rebate for achieving QMM Tier 1 incentive (\$0.0001 per share for adding displayed liquidity), (6) the rebate provided for adding greater than 5 million shares of midpoint liquidity and 8 million shares of non-displayed liquidity (\$0.0025 per share for adding midpoint non-displayed liquidity) , and (7) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <http://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

New York Stock Exchange (NYSE):

Firm qualified for Providing Tier 2 (a rebate of \$0.0020 per share for adding displayed liquidity in Tape A securities), MOC/LOC Tier 1 (a fee of \$0.0007 per share for Market-On-Close and Limit-On-Close orders), NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close (a reduced fee of \$0.0008 per share for d-Orders last modified in the last 3 minutes before the scheduled close of trading), Remove Tier 1 for Tape A securities (a fee of \$0.0028 per share for removing liquidity) and Tape B and Tape C securities (a fee of \$0.00285 per share for removing liquidity), and Routing Tier 1 for adding average daily volume in Tapes A, B and C combined that is at least 0.20% of Tapes A, B and C consolidated average daily volume combined (a fee of \$0.0030 per share for orders routed). The venue provided a fee cap of \$35,000 for the month for opening executions. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.nyse.com/markets/nyse/trading-info/fees>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

NYSE Arca, Inc. (ARCA):  
Firm qualified for Tier 4 for adding .20% of consolidated ADV (a rebate of \$0.0025 for Tape A and Tape C securities and \$0.0022 for Tape B securities for adding displayed liquidity) and Limit Non-Display Order Step Up Tier 4 for increasing ADV by .02% of limit non-displayed and mid-point liquidity orders combined over July 2020 (a rebate of \$0.0004 per share for adding non-displayed liquidity). The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE\\_Arca\\_Marketplace\\_Fees.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe EDGX Exchange, Inc. (EDGX):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/edgx/](https://markets.cboe.com/us/equities/membership/fee_schedule/edgx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe BZX Exchange, Inc. (BATS):  
Firm qualified for Add/Remove Volume Tier 3 for having average daily added volume as a percentage of total consolidated volume of at least 0.25% or average added daily volume of at least 25,000,000 (an incremental rebate of \$0.0011 per share for adding displayed liquidity). The Firm achieved the aforementioned tier based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/bzx/](https://markets.cboe.com/us/equities/membership/fee_schedule/bzx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Investors Exchange LLC (IEXG):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.iexexchange.io/resources/trading/fee-schedule>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

-----

## June 2023

### Non-S&P 500 Stocks Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	61.76	7.14	23.61	7.50

### 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)
JANE STREET CAPITAL, LLC (JNST)	30.00	39.00	37.78	8.29	17.08	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VIRTU Americas LLC (NITE)	26.91	34.47	32.37	8.33	17.58	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	15.09	16.54	22.73	8.28	17.33	-0.5960	-0.0001	-0.8500	-0.0003	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	9.37	0.14	0.28	32.12	22.49	-312.8759	-18.1992	-66.6300	-12.5063	34,256.8378	20.4793	1,747.1493	3.0928
TWO SIGMA SECURITIES, LLC (SOHO)	6.48	9.71	6.59	0.06	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
New York Stock Exchange (NYSE)	5.26	0.10	0.13	17.29	14.75	-199.3356	-5.5833	25.9752	3.1955	11,534.5617	17.6726	718.7631	3.0825

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)
NYSE Arca, Inc. (ARCA)	3.13	0.04	0.09	10.06	9.69	-64.3356	-27.1688	-11.7320	-21.2344	9,730.2811	17.9370	-787.6951	-9.3473
Cboe BZX Exchange, Inc. (BATS)	1.46	0.00	0.01	5.85	1.08	-10.2088	-30.4195	-1.6133	-12.3341	6,538.8281	21.1452	-56.8406	-6.1855
Cboe EDGX Exchange, Inc. (EDGX)	1.42	0.00	0.01	6.00	0.00	-42.1204	-29.7313	-0.1586	-26.8814	4,880.3831	11.3670	0.0000	0.0000
Investors Exchange LLC (IEXG)	0.88	0.00	0.01	3.72	0.00	-57.8315	-18.2290	-1.4511	-5.5343	-9.3632	-0.0346	0.0000	0.0000

### Material Aspects:

JANE STREET CAPITAL, LLC (JNST):  
Firm not charged.

VIRTU Americas LLC (NITE):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0010 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

Citadel Securities LLC (CDRG):  
Firm not charged for orders routed by the Wealth Management division or the Corporate and Investment Bank division, except as noted below. Firm charged a fee of \$0.0005 per share executed for any orders routed by the Wealth Management division on behalf of its clients for handling by the broker's algorithms.

The Nasdaq Stock Market (NSDQ):  
Firm qualified for (1) the rebate provided for adding over 0.60% of the total consolidated volume and removing over .80% of the total consolidated volume and executing ADV of 350,000 or more shares through Midpoint Extended Life Orders during the month (\$0.0029 per share) for adding displayed liquidity, (2) Closing Cross Tier B (a fee of \$0.0011 per share) for orders executing in the Closing Cross, (3) the rebate provided for adding over 0.03% of the total consolidated volume of non-displayed liquidity, including midpoint orders, for Tape A/B securities (\$0.0010 per share) and Tape C securities (\$0.0005 per share) for adding non-displayed liquidity, (4) the rebate provided for executing ADV of at least 3 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 100% or more versus the volume of such executed orders in June 2021 (\$0.00005 per share) for adding displayed liquidity, (5) the rebate for achieving QMM Tier 1 incentive (\$0.0001 per share for adding displayed liquidity), (6) the rebate provided for adding greater than 5 million shares of midpoint liquidity and 8 million shares of non-displayed liquidity (\$0.0025 per share for adding midpoint non-displayed liquidity) , and (7) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <http://www.nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

TWO SIGMA SECURITIES, LLC (SOHO):  
Firm not charged.

New York Stock Exchange (NYSE):  
Firm qualified for Providing Tier 2 (a rebate of \$0.0020 per share for adding displayed liquidity in Tape A securities), MOC/LOC Tier 1 (a fee of \$0.0007 per share for Market-On-Close and Limit-On-Close orders), NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close (a reduced fee of \$0.0008 per share for d-Orders last modified in the last 3 minutes before the scheduled close of trading), Remove Tier 1 for Tape A securities (a fee of \$0.0028 per share for removing liquidity) and Tape B and Tape C securities (a fee of \$0.00285 per share for removing liquidity), and Routing Tier 1 for adding average daily volume in Tapes A, B and C combined that is at least 0.20% of Tapes A, B and C consolidated average daily volume combined (a fee of \$0.0030 per share for orders routed). The venue provided a fee cap of \$35,000 for the month for opening executions. The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.nyse.com/markets/nyse/trading-info/fees>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

NYSE Arca, Inc. (ARCA):  
Firm qualified for Tier 4 for adding .20% of consolidated ADV (a rebate of \$0.0025 for Tape A and Tape C securities and \$0.0022 for Tape B securities for adding displayed liquidity) and Limit Non-Display Order Step Up Tier 4 for increasing ADV by .02% of limit non-displayed and mid-point liquidity orders combined over July 2020 (a rebate of \$0.0004 per share for adding non-displayed liquidity). The Firm achieved the aforementioned tiers based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE\\_Arca\\_Marketplace\\_Fees.pdf](https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe BZX Exchange, Inc. (BATS):  
Firm qualified for Add/Remove Volume Tier 3 for having average daily added volume as a percentage of total consolidated volume of at least 0.25% or average added daily volume of at least 25,000,000 (an incremental rebate of \$0.0011 per share for adding displayed liquidity). The Firm achieved the aforementioned tier based on its aggregated order flow for the month, i.e., not limited to the held, non-directed order flow that is the subject of this report. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/bzx/](https://markets.cboe.com/us/equities/membership/fee_schedule/bzx/) . Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe EDGX Exchange, Inc. (EDGX):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/equities/membership/fee\\_schedule/edgx/](https://markets.cboe.com/us/equities/membership/fee_schedule/edgx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Investors Exchange LLC (IEXG):  
Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.iexexchange.io/resources/trading/fee-schedule>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

June 2023

Options  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
99.09	9.19	10.14	27.01	53.67

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)
Dash Financial Technologies LLC (DFIN)	15.97	25.48	22.23	23.45	9.31	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-7,215.5400	-1.2668
GLOBAL EXECUTION BROKERS, LP (GEBB)	15.41	30.03	30.58	32.48	1.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nasdaq PHLX LLC (XPHO)	13.18	0.00	0.00	0.00	24.63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-131,347.7392	-29.9326
Wolverine Execution Services, LLC (WEXX)	12.03	27.05	26.96	23.49	0.88	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nasdaq GEMX (GMNI)	10.71	0.00	0.00	0.00	19.95	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-8,183.2744	-41.7770
Citadel Securities LLC (CDRG)	9.85	17.44	20.23	20.58	1.19	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nasdaq Options Market (XNDQ)	8.51	0.00	0.00	0.00	15.85	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-51,062.9282	-80.5583
Cboe Exchange, Inc. (CBOE)	4.94	0.00	0.00	0.00	9.20	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-104,524.7365	-48.7827
Nasdaq ISE, LLC (XISX)	4.75	0.00	0.00	0.00	8.85	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-8,199.8266	-13.0708
Cboe BZX Exchange, Inc. (BATO)	4.65	0.00	0.00	0.00	8.66	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-31,955.2900	-49.5346

Material Aspects:

Dash Financial Technologies LLC (DFIN):  
Firm not charged for orders routed by the Wealth Management or Corporate and Investment Bank division and cleared by Dash Financial Technologies LLC. However, Firm charged commission plus exchange, regulatory, market data, and clearing fees, less exchange rebates where applicable, for orders routed by the Corporate and Investment Bank and cleared by the Firm following execution, Firm is charged \$.05/contract for 0-500,000 contracts, \$.04/contract for 500,001-1 million contracts, and \$.03/contract for greater than 1 million contracts. Firm qualified for the \$.03/contract discounted tier. Dash Financial Technologies LLC's most recent report pursuant to SEC Rule 606(a) is available at: <http://dash-website-static.s3-website-us-east-1.amazonaws.com/static/606.html>

GLOBAL EXECUTION BROKERS, LP (GEBB):  
Firm not charged.

Nasdaq PHLX LLC (XPHO):

Firm did not qualify for tiered pricing. Firm received marketing fees from preferenced market makers pursuant to marketing fee program sponsored by exchange. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-options-7>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Wolverine Execution Services, LLC (WEXX):

Firm not charged. Wolverine Execution Services, LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.tradewex.com/Home/Rule606>.

Nasdaq GEMX (GMNI):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/gemx/rules/GEMX%20Options%207>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Citadel Securities LLC (CDRG):

Firm not charged. Citadel Securities LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.citadelsecurities.com/rule-605-606-statements/>

Nasdaq Options Market (XNDQ):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-options-7>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe Exchange, Inc. (CBOE):

Firm did not qualify for tiered pricing with respect to customer order flow. Firm received marketing fees from preferenced market makers pursuant to marketing fee program sponsored by exchange. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://cdn.cboe.com/resources/membership/Cboe\\_FeeSchedule.pdf](https://cdn.cboe.com/resources/membership/Cboe_FeeSchedule.pdf). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Nasdaq ISE, LLC (XISX):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://listingcenter.nasdaq.com/rulebook/ise/rules/ISE%20Options%207>. Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.

Cboe BZX Exchange, Inc. (BATO):

Firm did not qualify for tiered pricing. A description of the current fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: [https://markets.cboe.com/us/options/membership/fee\\_schedule/bzx/](https://markets.cboe.com/us/options/membership/fee_schedule/bzx/). Please note the exchange's publicly available Fees Schedule URL link and applicable rates may change without notice.