

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

Generated on Thu Jul 28 2022 15:01:21 GMT-0400 (Eastern Daylight Time)

2nd Quarter, 2022

April 2022

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	62.33	4.62	26.81	6.24

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)	36.17	49.63	44.59	7.88	16.62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Virtu Americas LLC (NITE)	18.79	23.38	24.18	7.65	16.93	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	14.63	17.07	19.96	7.62	16.41	-62.9575	-0.0910	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	11.92	0.00	0.84	38.44	25.47	-0.4020	-30.0000	-478.5870	-30.0000	7,251.8271	30.9627	212.6251	3.1860
New York Stock Exchange LLC (NYSE)	5.24	0.06	0.85	13.52	24.56	-8.4090	-3.1880	-1,059.3366	-27.7539	2,502.8540	19.5910	211.4210	1.7089
UBS Securities LLC (UBSS)	3.32	5.00	4.27	0.02	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Two Sigma Securities, LLC (SOHO)	3.22	4.86	3.82	0.06	0.01	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Cboe EDGX Exchange, Inc. (EDGX)	2.52	0.00	0.70	9.28	0.00	0.0000	0.0000	-685.7084	-29.9998	1,290.0822	15.6735	0.0000	0.0000
MIAX Pearl Equities (EPRL)	2.52	0.00	0.21	9.38	0.00	0.0000	0.0000	-43.2883	-29.0000	744.5170	28.9709	0.0000	0.0000
NYSE Arca, Inc. (ARCA)	1.67	0.00	0.58	6.15	0.00	0.0000	0.0000	-283.3650	-30.0000	1,232.9271	24.3859	0.0000	0.0000

Jane Street Capital, LLC (JNST):
Firm not charged.

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.

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.

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, (2) Closing Cross Tier B, (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 and Tape C securities, (4) the rebate provided for executing ADV of at least 4 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 150% or more versus the volume of such executed orders in June 2021, (5) the rebate for achieving QMM Tier 1 incentive, and (6) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders for adding one million shares of liquidity, on average, during the month. A description of the 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>

Firm qualified for Providing Tier 2, MOC/LOC Tier 1, NYSE d-Order Tier 1, charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close, Remove Tier 1 for Tape A securities, and Remove Tier for Tape B and Tape C securities. The venue provided a fee cap of \$35,000 per month for opening executions. A description of the 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>

Firm not charged.

Firm not charged.

Firm did not qualify for tiered pricing. A description of the 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/edqx

Firm did not qualify for tiered pricing. A description of the fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.miaxoptions.com/fees/pearl-equities>

Firm qualified for Tier 3 for adding .20% of consolidated ADV. A description of the 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

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	55.42	6.68	31.47	6.44

[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)
Citadel Securities LLC (CDRG)	13.15	15.60	18.35	6.59	18.78	-33.1305	-0.0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	12.55	0.06	1.69	35.55	19.30	-250.9095	-15.6260	-1,718.3670	-26.5234	42,243.9032	21.6667	994.2662	2.5888
New York Stock Exchange LLC (NYSE)	5.83	0.06	1.07	15.07	15.24	-15.9552	-2.5596	-1,070.9238	-26.8384	10,828.5694	18.6684	577.6209	2.8283
NYSE Arca, Inc. (ARCA)	4.04	0.02	1.11	10.69	9.28	-43.9770	-29.3082	-819.0835	-18.3863	7,686.3246	21.2869	-553.3865	-6.8088
Cboe EDGX Exchange, Inc. (EDGX)	3.80	0.00	1.09	11.85	0.02	0.0000	0.0000	-769.6340	-28.7063	3,511.3568	14.2573	-8.7000	-30.0000
UBS Securities LLC (UBSS)	3.49	5.67	5.02	0.03	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Two Sigma Securities, LLC (SOHO)	3.32	5.42	4.52	0.04	0.06	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MIAX Pearl Equities (EPRL)	2.17	0.00	0.30	6.85	0.00	0.0000	0.0000	-104.9307	-29.0000	1,718.6354	28.3199	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 0.80% of the total consolidated volume and executing ADV of 350,000 or more shares through Midpoint Extended Life Orders during the month, (2) Closing Cross Tier B, (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 and Tape C securities, (4) the rebate provided for executing ADV of at least 4 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 150% or more versus the volume of such executed orders in June 2021, (5) the rebate for achieving QMM Tier 1 incentive, and (6) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders for adding one million shares of liquidity, on average, during the month. A description of the 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>

New York Stock Exchange LLC (NYSE):
Firm qualified for Providing Tier 2, MOC/LOC Tier 1, NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close, Remove Tier 1 for Tape A securities, and Remove Tier for Tape B and Tape C securities. The venue provided a fee cap of \$35,000 for the month for opening executions. A description of the 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>

NYSE Arca, Inc. (ARCA):
Firm qualified for Tier 3 for adding .20% of consolidated ADV. A description of the 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

Cboe EDGX Exchange, Inc. (EDGX):
Firm did not qualify for tiered pricing. A description of the 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/

UBS Securities LLC (UBSS):
Firm not charged.

Two Sigma Securities, LLC (SOHO):
Firm not charged.

MIAX Pearl Equities (EPRL):
Firm did not qualify for tiered pricing. A description of the fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at:<https://www.miaxoptions.com/fees/pearl-equities>

April 2022

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
81.89	9.83	12.37	42.02	35.78

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)	17.84	19.17	17.64	18.16	17.02	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-8,266.2000	-2.6636
Citadel Securities LLC (CDRG)	15.48	21.29	22.48	22.94	2.72	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Global Execution Brokers, LP (GEBB)	14.95	19.16	21.81	23.09	1.89	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Matrix Executions, LLC (RSKY)	12.36	21.22	19.03	17.85	1.17	0.0000	0.0000	-0.9800	-0.0006	0.0000	0.0000	-1,024.8300	-5.8790
Wolverine Execution Services, LLC (WEXX)	12.17	19.16	19.04	17.96	1.09	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nasdaq PHLX LLC (XPHO)	9.82	0.00	0.00	0.00	27.50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-117,945.5726	-26.0078
Nasdaq Options Market (XNDQ)	7.32	0.00	0.00	0.00	20.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-27,494.9372	-29.2630
Cboe BZX Exchange, Inc. (BATO)	7.29	0.00	0.00	0.00	20.39	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-55,304.2500	-55.8787
Cboe Exchange, Inc. (CBOE)	1.86	0.00	0.00	0.00	5.21	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-33,903.9275	-24.5547
NYSE Arca, Inc. (ARCO)	0.91	0.00	0.00	0.00	2.54	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5,274.5590	-7.5762

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.

Matrix Executions, LLC (RSKY):
Firm not charged for Wealth Management division executions cleared by Matrix Executions LLC; however, Firm pays exchange and regulatory fees, less exchange rebates where applicable, for any orders that are routed by the Wealth Management division and cleared by the Firm following execution. Rebates received by Firm may exceed fees paid by Firm. Matrix Executions, LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.matrixexecutions.com/606>

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 preferred market makers pursuant to marketing fee program sponsored by exchange. A description of the 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>

Nasdaq Options Market (XNDQ):
Firm did not qualify for tiered pricing. A description of the 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>

Cboe BZX Exchange, Inc. (BATO):
Firm did not qualify for tiered pricing. A description of the 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/

Cboe Exchange, Inc. (CBOE):
Firm did not qualify for tiered pricing with respect to customer order flow. Firm received marketing fees from preferred market makers pursuant to marketing fee program sponsored by exchange. A description of the 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

NYSE Arca, Inc. (ARCO):
Firm did not qualify for tiered pricing. A description of the 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>

May 2022

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	61.73	4.29	27.79	6.20

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)	32.43	47.83	41.48	2.72	5.85	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	21.52	26.08	27.88	10.28	22.09	-9.3135	-0.0090	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Virtu Americas LLC (NITE)	20.72	24.91	26.66	10.21	21.92	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	12.26	0.00	0.70	37.75	28.24	-4.0860	-30.0000	-186.5610	-30.0000	7,772.6947	30.6371	495.2723	7.3040
New York Stock Exchange LLC (NYSE)	4.60	0.03	0.57	11.51	21.90	-11.1614	-2.3260	-97.5228	-26.8784	2,043.9934	19.1909	176.5630	1.4743

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)
MIAX Pearl Equities (EPRL)	2.56	0.00	0.07	9.21	0.00	0.0000	0.0000	-8.1606	-29.0000	661.5277	28.9746	0.0000	0.0000
Cboe EDGX Exchange, Inc. (EDGX)	2.15	0.00	0.50	7.68	0.00	0.0000	0.0000	-113.4900	-30.0000	1,161.2204	15.6869	0.0000	0.0000
NYSE Arca, Inc. (ARCA)	1.61	0.00	0.46	5.72	0.00	0.0000	0.0000	-88.7035	-29.7693	1,199.1715	24.3045	0.0000	0.0000
Cboe BZX Exchange, Inc. (BATS)	1.38	0.00	0.33	4.92	0.00	0.0000	0.0000	-57.2490	-29.9060	1,355.6127	26.6598	-0.0026	-3.2500
UBS Securities LLC (UBSS)	0.77	1.15	1.35	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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, (2) Closing Cross Tier B, (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 and Tape C securities, (4) the rebate provided for executing ADV of at least 4 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 150% or more versus the volume of such executed orders in June 2021, (5) the rebate for achieving QMM Tier 1 incentive, and (6) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders for adding one million shares of liquidity, on average, during the month. A description of the 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>

New York Stock Exchange LLC (NYSE):

Firm qualified for Providing Tier 2, MOC/LOC Tier 1, NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close, Remove Tier 1 for Tape A securities, and Remove Tier for Tape B and Tape C securities. The venue provided a fee cap of \$35,000 for the month for opening executions. A description of the 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>

MIAX Pearl Equities (EPRL):

Firm did not qualify for tiered pricing. A description of the fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.miaxoptions.com/fees/pearl-equities>

Cboe EDGX Exchange, Inc. (EDGX):

Firm did not qualify for tiered pricing. A description of the 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/

NYSE Arca, Inc. (ARCA):

Firm qualified for Tier 4 for adding .20% of consolidated ADV and 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 description of the 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

Cboe BZX Exchange, Inc. (BATS):

Firm qualified for Add/Remove Volume Tier 3. A description of the 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/

UBS Securities LLC (UBSS):

Firm not charged.

May 2022

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	56.97	6.44	29.92	6.68

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)	23.93	30.76	31.63	9.09	23.94	-3.2920	-0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Virtu Americas LLC (NITE)	22.22	28.22	27.93	9.12	24.23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Jane Street Capital, LLC (JNST)	22.13	33.15	30.78	2.87	6.61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	11.78	0.11	1.16	34.69	19.20	-326.4199	-11.8157	-922.5331	-17.1004	39,509.8539	20.8293	1,140.0298	3.4105
New York Stock Exchange LLC (NYSE)	5.74	0.05	0.71	15.55	15.23	-95.6844	-5.6626	-619.0686	-17.4977	13,518.7246	18.5717	966.2005	4.0137
NYSE Arca, Inc. (ARCA)	3.94	0.01	0.64	10.89	9.46	-19.3731	-29.1676	-802.1183	-29.3109	6,034.2195	22.0217	-1,043.3180	-10.7183
Cboe EDGX Exchange, Inc. (EDGX)	3.35	0.00	0.72	11.05	0.01	0.0000	0.0000	-622.5704	-29.4130	4,025.8532	14.7785	-8.7000	-30.0000
Two Sigma Securities, LLC (SOHO)	2.42	3.84	2.91	0.13	0.10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
UBS Securities LLC (UBSS)	2.40	3.86	2.96	0.01	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Cboe BZX Exchange, Inc. (BATS)	2.09	0.00	0.56	6.60	1.22	-0.3000	-30.0000	-442.5875	-29.7308	4,382.9441	25.5038	-68.2414	-6.3852

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.

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.

Jane Street Capital, LLC (JNST):

Firm not charged.

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, (2) Closing Cross Tier B, (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 and Tape C securities, (4) the rebate provided for executing ADV of at least 4 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 150% or more versus the volume of such executed orders in June 2021 , (5) the rebate for achieving QMM Tier 1 incentive, and (6) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders for adding one million shares of liquidity, on average, during the month. A description of the 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>

New York Stock Exchange LLC (NYSE):

Firm qualified for Providing Tier 2, MOC/LOC Tier 1, NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close, Remove Tier 1 for Tape A securities, and Remove Tier for Tape B and Tape C securities. The venue provided a fee cap of \$35,000 for the month for opening executions. A description of the 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>

NYSE Arca, Inc. (ARCA):

Firm qualified for Tier 4 for adding .20% of consolidated ADV and 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 description of the 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

Cboe EDGX Exchange, Inc. (EDGX):

Firm did not qualify for tiered pricing. A description of the 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/

Two Sigma Securities, LLC (SOHO):

Firm not charged.

UBS Securities LLC (UBSS):

Firm not charged.

Cboe BZX Exchange, Inc. (BATS):

Firm qualified for Add/Remove Volume Tier 3. A description of the 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/

May 2022

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
82.57	9.06	11.05	39.79	40.10

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)	18.72	19.22	17.63	18.08	19.45	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	14.47	21.22	22.61	22.98	2.28	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Global Execution Brokers, LP (GEBB)	13.98	19.23	21.73	23.20	1.53	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Matrix Executions, LLC (RSKY)	11.53	21.16	19.12	17.86	0.98	-0.1500	-0.0003	-29.1400	-0.0187	3.4500	0.0025	-1,743.8600	-7.9501
Wolverine Execution Services, LLC (WEXX)	11.34	19.17	18.91	17.88	1.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nasdaq PHLX LLC (XPHO)	9.92	0.00	0.00	0.00	24.78	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-148,776.7274	-26.2924

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)	8.48	0.00	0.00	0.00	21.15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-87,204.1000	-54.3155
Nasdaq Options Market (XNDQ)	8.35	0.00	0.00	0.00	20.82	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-38,856.4020	-28.9565
Cboe Exchange, Inc. (CBOE)	2.25	0.00	0.00	0.00	5.61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-73,577.0900	-29.0245
NYSE Arca, Inc. (ARCO)	0.96	0.00	0.00	0.00	2.40	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-5,251.1435	-5.3624

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.

Matrix Executions, LLC (RSKY):

Firm not charged for Wealth Management division executions cleared by Matrix Executions LLC; however, Firm pays exchange and regulatory fees, less exchange rebates where applicable, for any orders that are routed by the Wealth Management division and cleared by the Firm following execution. Rebates received by Firm may exceed fees paid by Firm. Matrix Executions, LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.matrixexecutions.com/606>

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 preferred market makers pursuant to marketing fee program sponsored by exchange. A description of the 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>

Cboe BZX Exchange, Inc. (BATO):

Firm did not qualify for tiered pricing. A description of the 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/

Nasdaq Options Market (XNDQ):

Firm did not qualify for tiered pricing. A description of the 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>

Cboe Exchange, Inc. (CBOE):

Firm did not qualify for tiered pricing with respect to customer order flow. Firm received marketing fees from preferred market makers pursuant to marketing fee program sponsored by exchange. A description of the 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

NYSE Arca, Inc. (ARCO):

Firm did not qualify for tiered pricing. A description of the 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>

June 2022

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	57.53	4.69	31.01	6.77

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)	29.48	47.88	39.26	0.15	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Citadel Securities LLC (CDRG)	21.71	27.13	29.03	10.20	23.27	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Virtu Americas LLC (NITE)	20.39	24.93	27.56	10.34	22.95	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	13.32	0.00	0.84	36.18	30.72	-0.4200	-30.0000	-233.5770	-30.0000	6,029.4689	30.2237	154.6788	2.7357
New York Stock Exchange LLC (NYSE)	5.41	0.06	0.76	12.21	23.05	-5.4318	-1.9010	-172.2653	-27.6976	1,740.3733	18.8665	260.5570	3.1424
MIAX Pearl Equities (EPRL)	2.91	0.00	0.07	9.37	0.00	0.0000	0.0000	-4.4254	-29.0000	639.5834	28.9614	0.0000	0.0000
Cboe EDGX Exchange, Inc. (EDGX)	2.68	0.00	0.63	8.56	0.01	0.0000	0.0000	-89.1570	-30.0000	873.2928	15.5696	-0.3240	-30.0000
NYSE Arca, Inc. (ARCA)	1.84	0.00	0.65	5.84	0.00	0.0000	0.0000	-147.8850	-30.0000	958.9350	24.1670	-0.2460	-30.0000
Cboe BZX Exchange, Inc. (BATS)	1.42	0.00	0.45	4.54	0.00	0.0000	0.0000	-69.5310	-30.0000	779.8820	22.3412	-0.1710	-7.5000
MEMX LLC (MEMX)	0.84	0.00	0.75	2.61	0.00	0.0000	0.0000	-110.7570	-30.0000	239.3270	19.3558	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, (2) Closing Cross Tier B, (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 and Tape C securities, (4) the rebate provided for executing ADV of at least 4 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 150% or more versus the volume of such executed orders in June 2021, (5) the rebate for achieving QMM Tier 1 incentive, and (6) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders for adding one million shares of liquidity, on average, during the month. A description of the 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>

New York Stock Exchange LLC (NYSE):

Firm qualified for Providing Tier 2, MOC/LOC Tier 1, NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close, Remove Tier 1 for Tape A securities, Remove Tier for Tape B and Tape C securities, and Midpoint Liquidity Tier 3 for adding at least .0075% of consolidated ADV through the midpoint for tapes A, B, and C securities combined. The venue provided a fee cap of \$35,000 for the month for opening executions. A description of the 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>

MIAX Pearl Equities (EPRL):

Firm did not qualify for tiered pricing. A description of the fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://www.miaxoptions.com/fees/pearl-equities>

Cboe EDGX Exchange, Inc. (EDGX):

Firm did not qualify for tiered pricing. A description of the 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/

NYSE Arca, Inc. (ARCA):
Firm qualified for Tier 4 for adding .20% of consolidated ADV and 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 description of the 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

Cboe BZX Exchange, Inc. (BATS):
Firm qualified for Add/Remove Volume Tier 2. A description of the 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/

MEMX LLC (MEMX):
Firm did not qualify for tiered pricing . A description of the fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at: <https://info.memxtrading.com/fee-schedule/>

June 2022

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	52.60	6.61	34.18	6.61

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
Citadel Securities LLC (CDRG)	24.00	32.21	33.72	8.98	25.84	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Virtu Americas LLC (NITE)	22.03	29.05	29.63	8.88	26.59	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Jane Street Capital, LLC (JNST)	20.39	34.80	31.00	0.13	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
The Nasdaq Stock Market (NSDQ)	12.79	0.07	0.70	33.20	20.81	-215.2923	-14.4510	-588.4611	-27.5964	36,924.0751	19.8494	1,352.2258	4.5452
New York Stock Exchange LLC (NYSE)	6.11	0.05	0.55	14.65	15.79	-21.3066	-1.4654	-233.1262	-13.8848	9,996.1160	18.2130	473.5293	3.0686
NYSE Arca, Inc. (ARCA)	4.16	0.02	0.54	10.19	9.65	-24.2197	-29.1768	-340.7952	-22.3499	4,672.3401	21.4252	-639.6150	-9.9803
Cboe EDGX Exchange, Inc. (EDGX)	3.63	0.00	0.50	10.53	0.00	0.0000	0.0000	-285.9810	-30.0000	3,061.7675	14.2926	-0.8940	-30.0000
MIAX Pearl Equities (EPRL)	2.49	0.00	0.10	7.28	0.00	0.0000	0.0000	-38.0683	-29.0000	1,898.4264	28.1401	0.0000	0.0000
Cboe BZX Exchange, Inc. (BATS)	2.21	0.00	0.38	6.15	1.32	0.0000	0.0000	-181.5920	-29.9484	2,434.9306	20.6071	-39.8110	-4.2765

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)
UBS Securities LLC (UBSS)	2.19	3.80	2.88	0.01	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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.

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.

Jane Street Capital, LLC (JNST):
Firm not charged.

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, (2) Closing Cross Tier B, (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 and Tape C securities, (4) the rebate provided for executing ADV of at least 4 million shares through midpoint and Midpoint Extended Life Orders and increasing the executed volume of such orders by 150% or more versus the volume of such executed orders in June 2021 , (5) the rebate for achieving QMM Tier 1 incentive, and (6) a cap of \$35,000 for opening cross charges from Market-On-Open and Limit-On-Open orders for adding one million shares of liquidity, on average, during the month. A description of the 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>

New York Stock Exchange LLC (NYSE):
Firm qualified for Providing Tier 2, MOC/LOC Tier 1, NYSE d-Order Tier 1 charges applicable for Executions at the Close after the first 750,000 ADV of aggregate executions at the close, Remove Tier 1 for Tape A securities, Remove Tier for Tape B and Tape C securities, and Midpoint Liquidity Tier 3 for adding at least .0075% of consolidated ADV through the midpoint for tapes A, B, and C securities combined. The venue provided a fee cap of \$35,000 for the month for opening executions. A description of the 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>

NYSE Arca, Inc. (ARCA):
Firm qualified for Tier 4 for adding .20% of consolidated ADV and 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 description of the 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

Cboe EDGX Exchange, Inc. (EDGX):
Firm did not qualify for tiered pricing. A description of the 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/

MIAX Pearl Equities (EPRL):
Firm did not qualify for tiered pricing. A description of the fees and rebates offered by this venue, including the pricing tiers offered and the pricing for each tier, is available at:<https://www.miaxoptions.com/fees/pearl-equities>

Cboe BZX Exchange, Inc. (BATS):
Firm qualified for Add/Remove Volume Tier 2. A description of the 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/

UBS Securities LLC (UBSS):
Firm not charged.

June 2022

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
78.13	10.69	12.86	42.93	33.52

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)	21.75	19.20	17.47	18.17	28.61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-12,040.2400	-3.0165
Citadel Securities LLC (CDRG)	16.07	21.29	22.47	23.19	2.88	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Global Execution Brokers, LP (GEBB)	15.35	19.00	21.23	23.12	1.97	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Matrix Executions, LLC (RSKY)	12.94	21.26	19.28	18.00	1.37	0.0000	0.0000	0.0000	0.0000	0.1600	0.0001	-296.9400	-2.0148
Wolverine Execution Services, LLC (WEXX)	12.53	19.25	19.55	17.52	1.32	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nasdaq PHLX LLC (XPHO)	11.91	0.00	0.00	0.00	35.60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-138,877.9306	-28.1296
Cboe BZX Exchange, Inc. (BATO)	3.58	0.00	0.00	0.00	10.70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-76,562.2500	-53.0511
Nasdaq Options Market (XNDQ)	3.52	0.00	0.00	0.00	10.51	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-24,783.5792	-27.2623
Cboe Exchange, Inc. (CBOE)	1.45	0.00	0.00	0.00	4.33	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-31,542.7600	-21.6932
NYSE Arca, Inc. (ARCO)	0.90	0.00	0.00	0.00	2.71	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-9,716.9280	-12.3336

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.

Matrix Executions, LLC (RSKY):

Firm not charged for Wealth Management division executions cleared by Matrix Executions LLC; however, Firm pays exchange and regulatory fees, less exchange rebates where applicable, for any orders that are routed by the Wealth Management division and cleared by the Firm following execution. Rebates received by Firm may exceed fees paid by Firm. Matrix Executions, LLC's recent reports pursuant to SEC Rule 606(a) are available at: <https://www.matrixexecutions.com/606>

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 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>

Cboe BZX Exchange, Inc. (BATO):

Firm did not qualify for tiered pricing. A description of the 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/

Nasdaq Options Market (XNDQ):

Firm did not qualify for tiered pricing. A description of the 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>

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 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

NYSE Arca, Inc. (ARCO):

Firm did not qualify for tiered pricing. A description of the 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>