





<b>Citadel Securities LLC(CDRG)</b>	33.00	36.05	40.00	3.79	0.00	0	0	0	0	0	0	0	0
<b>VIRTU Americas, LLC(NITE)</b>	26.69	29.34	20.00	2.27	0.00	0	0	0	0	0	0	0	0
<b>G1 Execution Services, LLC(ETMM)</b>	22.09	24.38	30.00	0.00	0.00	0	0	0	0	0	0	0	0
<b>Jane Street Capital, LLC(JNST)</b>	7.46	8.15	0.00	1.52	0.00	0	0	0	0	0	0	0	0
<b>NASDAQ Execution Services, LLC(NSDQ)</b>	5.02	0.00	10.00	52.27	0.00	0	0	0	0	0	0	0	0
<b>NYSE Arca(ARCA)</b>	2.94	0.00	0.00	31.06	0.00	0	0	0	0	0	0	0	0
<b>Two Sigma Securities, LLC(SOHO)</b>	1.43	1.60	0.00	0.00	0.00	0	0	0	0	0	0	0	0
<b>New York Stock Exchange(NYSE)</b>	0.72	0.00	0.00	7.58	0.00	0	0	0	0	0	0	0	0
<b>StoneX Financial INC.(INTL)</b>	0.22	0.24	0.00	0.00	0.00	0	0	0	0	0	0	0	0
<b>UBS Securities, LLC(UBSS)</b>	0.22	0.24	0.00	0.00	0.00	0	0	0	0	0	0	0	0

Material Aspects:

April 2023

---

Option Contracts

**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
0	0	0	0	0

**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)

Material Aspects:

**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	99.43	0.39	0.17	0

**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)
<b>Citadel Securities LLC(CDRG)</b>	38.76	38.92	75.00	2.70	0.00	0	0	0	0	0	0	0	0
<b>VIRTU Americas, LLC(NITE)</b>	27.89	28.21	0.00	0.00	0.00	0	0	0	0	0	0	0	0
<b>G1 Execution Services, LLC(ETMM)</b>	17.79	17.93	12.50	2.70	0.00	0	0	0	0	0	0	0	0
<b>Jane Street Capital, LLC(JNST)</b>	12.97	13.05	12.50	2.70	0.00	0	0	0	0	0	0	0	0
<b>Two Sigma Securities, LLC(SOHO)</b>	1.25	1.27	0.00	0.00	0.00	0	0	0	0	0	0	0	0
<b>UBS Securities, LLC(UBSS)</b>	0.61	0.61	0.00	0.00	0.00	0	0	0	0	0	0	0	0
<b>New York Stock Exchange(NYSE)</b>	0.45	0.00	0.00	56.76	0.00	0	0	0	0	0	0	0	0
<b>NASDAQ Execution Services, LLC(NSDQ)</b>	0.24	0.00	0.00	29.73	0.00	0	0	0	0	0	0	0	0
<b>Cboe EDGX US Equities Exchange(EDGX)</b>	0.02	0.00	0.00	2.70	0.00	0	0	0	0	0	0	0	0
<b>Members Exchange(MEMX)</b>	0.02	0.00	0.00	2.70	0.00	0	0	0	0	0	0	0	0

Material Aspects:











<b>Citadel Securities LLC(CDRG)</b>	39.65	40.26	36.36	19.23	0.00	0	0	0	0	0	0	0	0
<b>VIRTU Americas, LLC(NITE)</b>	25.84	26.16	30.30	0.00	0.00	0	0	0	0	0	0	0	0
<b>G1 Execution Services, LLC(ETMM)</b>	17.18	17.24	19.70	7.69	0.00	0	0	0	0	0	0	0	0
<b>Jane Street Capital, LLC(JNST)</b>	14.49	14.77	10.61	11.54	0.00	0	0	0	0	0	0	0	0
<b>Two Sigma Securities, LLC(SOHO)</b>	1.00	1.07	0.00	0.00	0.00	0	0	0	0	0	0	0	0
<b>NASDAQ Execution Services, LLC(NSDQ)</b>	0.54	0.00	1.52	23.08	0.00	0	0	0	0	0	0	0	0
<b>UBS Securities, LLC(UBSS)</b>	0.54	0.50	1.52	0.00	0.00	0	0	0	0	0	0	0	0
<b>Cboe EDGX US Equities Exchange(EDGX)</b>	0.31	0.00	0.00	15.38	0.00	0	0	0	0	0	0	0	0
<b>NYSE Arca(ARCA)</b>	0.23	0.00	0.00	11.54	0.00	0	0	0	0	0	0	0	0
<b>New York Stock Exchange(NYSE)</b>	0.23	0.00	0.00	11.54	0.00	0	0	0	0	0	0	0	0

Material Aspects:

June 2023

---

Option Contracts

**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
0	0	0	0	0

**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)

**Material Aspects:**