



November 2022  
S&P 500 Stocks

Summary									
Total Non-Directed Orders	Non-Directed Orders as % of All Orders	Total Market Orders	Market Orders as % of Non-Directed Orders	Total Marketable Limit Orders	Marketable Limit Orders as % of Non-Directed Orders	Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Total Other Orders	Other Orders as % of Non-Directed Orders
786	100.00	613	77.99	22	2.80	141	17.94	10	1.27

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders	Marketable Limit Orders(%)	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other 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)	261	30.71	222	36.22	11		50.00	24	11.76	4	36.36	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	196	23.06	166	27.08	5		22.73	19	9.31	6	54.55	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	160	18.82	134	21.86	4		18.18	22	10.78	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	90	10.59	80	13.05	2		9.09	8	3.92	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	41	4.82	0	0.00	0		0.00	41	20.10	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	38	4.47	0	0.00	0		0.00	38	18.63	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	35	4.12	0	0.00	0		0.00	35	17.16	0	0.00	0	0	0	0	0	0	0
Members Exchange(MEMX)	15	1.76	0	0.00	0		0.00	15	7.35	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	8	0.94	6	0.98	0		0.00	2	0.98	0	0.00	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	4	0.47	4	0.65	0		0.00	0	0.00	0	0.00	0	0	0	0	0	0	0

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Non-S&P 500 Stocks Summary									
Total Non-Directed Orders	Non-Directed Orders as % of All Orders	Total Market Orders	Market Orders as % of Non-Directed Orders	Total Marketable Limit Orders	Marketable Limit Orders as % of Non-Directed Orders	Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Total Other Orders	Other Orders as % of Non-Directed Orders
1,737	100.00	1,453	83.65	65	3.74	215	12.38	4	0.23

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders	Marketable Limit Orders(%)	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other 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)	546	26.26	506	34.85	22		33.85	17	3.24	1	2.63	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	443	21.31	417	28.72	14		21.54	9	1.72	3	7.89	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	332	15.97	306	21.07	18		27.69	8	1.53	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	215	10.34	193	13.29	10		15.38	12	2.29	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	142	6.83	0	0.00	1		1.54	141	26.91	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	131	6.30	0	0.00	0		0.00	131	25.00	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	101	4.86	0	0.00	0		0.00	101	19.27	0	0.00	0	0	0	0	0	0	0
NYSE American(AMEX)	57	2.74	0	0.00	0		0.00	57	10.88	0	0.00	0	0	0	0	0	0	0
Instinet BlockCross(BLUX)	34	1.64	0	0.00	0		0.00	0	0.00	34	89.47	0	0	0	0	0	0	0
Members Exchange(MEMX)	32	1.54	0	0.00	0		0.00	32	6.11	0	0.00	0	0	0	0	0	0	0

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Option Contracts Summary									
Total Non-Directed Orders	Non-Directed Orders as % of All Orders	Total Market Orders	Market Orders as % of Non-Directed Orders	Total Marketable Limit Orders	Marketable Limit Orders as % of Non-Directed Orders	Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Total Other Orders	Other Orders as % of Non-Directed Orders
162	100.00	63	38.89	2	1.23	97	59.88	0	0.00

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders	Marketable Limit Orders(%)	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other 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)	106	36.81	32	50.79	0		0.00	74	33.18	0	0.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)	98	34.03	1	1.59	0		0.00	97	43.50	0	0.00	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)	50	17.36	6	9.52	0		0.00	44	19.73	0	0.00	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)	28	9.72	21	33.33	2		100.00	5	2.24	0	0.00	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)	6	2.08	3	4.76	0		0.00	3	1.35	0	0.00	0	0	0	0	0	0	0

