

5571	100	4975	89.3	63	1.13	532	9.55	1	0.02
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Venues

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)	1856	29.76	1780	35.78	18	28.57	57	4.8	1	9.09	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	1379	22.11	1311	26.35	15	23.81	53	4.47	0	0	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	953	15.28	910	18.29	15	23.81	28	2.36	0	0	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	886	14.21	860	17.29	14	22.22	12	1.01	0	0	0	0	0	0	0	0	0	0
NYSE Arca(ARCA)	355	5.69	0	0	0	0	355	29.91	0	0	0	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	279	4.47	0	0	0	0	279	23.5	0	0	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	244	3.91	0	0	0	0	244	20.56	0	0	0	0	0	0	0	0	0	0
Members Exchange(MEMX)	82	1.31	0	0	0	0	82	6.91	0	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	75	1.2	72	1.45	0	0	3	0.25	0	0	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	55	0.88	0	0	0	0	55	4.63	0	0	0	0	0	0	0	0	0	0

Material Aspects:

October 2023

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
5	100	5	100	0	0	0	0	0	0

Venues

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)	5	100	5	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0

November 2023

S&P 500 Stocks

Summary

	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	
Total Non-Directed Orders	1818	100	1692	93.07	57	3.14	65	3.58	4	0.22

Venues

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)	654	33.56	616	36.41	19	33.33	16	8.16	3	75	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	475	24.37	443	26.18	16	28.07	15	7.65	1	25	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	347	17.8	327	19.33	11	19.3	9	4.59	0	0	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	287	14.73	273	16.13	10	17.54	4	2.04	0	0	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	80	4.1	0	0	0	0	80	40.82	0	0	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	52	2.67	0	0	0	0	52	26.53	0	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	20	1.03	19	1.12	1	1.75	0	0	0	0	0	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	15	0.77	0	0	0	0	15	7.65	0	0	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	13	0.67	12	0.71	0	0	1	0.51	0	0	0	0	0	0	0	0	0	0
StoneX Financial INC.(INTL)	3	0.15	2	0.12	0	0	1	0.51	0	0	0	0	0	0	0	0	0	0

Material Aspects:

November 2023

Non S&P 500 Stocks

Summary

	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	
Total Non-Directed Orders	5489	100	4793	87.32	76	1.38	616	11.22	4	0.07

Venues

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)	1775	24.52	1684	35.13	23	29.49	68	2.88	0	0	0	0	0	0	0	0	0	0
NYSE Arca(ARCA)	1268	17.52	0	0	2	2.56	1266	53.67	0	0	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	1208	16.69	1144	23.87	17	21.79	43	1.82	4	44.44	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	1047	14.46	987	20.59	23	29.49	37	1.57	0	0	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	936	12.93	878	18.32	10	12.82	48	2.03	0	0	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	304	4.2	0	0	1	1.28	303	12.84	0	0	0	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	258	3.56	0	0	0	0	258	10.94	0	0	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	222	3.07	0	0	0	0	222	9.41	0	0	0	0	0	0	0	0	0	0
Members Exchange(MEMX)	90	1.24	0	0	0	0	90	3.82	0	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	60	0.83	57	1.19	1	1.28	2	0.08	0	0	0	0	0	0	0	0	0	0

Material Aspects:

November 2023

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
7	100	7	100	0	0	0	0	0	0

Venues

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)
Susquehanna Capital Group(SUSQ)	4	57.14	4	57.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Citadel Securities LLC(CDRG)	3	42.86	3	42.86	0	0	0	0	0	0	0	0	0	0	0	0	0	0

December 2023

S&P 500 Stocks

Summary

	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	
Total Non-Directed Orders	1725	100	1646	95.42	20	1.16	56	3.25	3	0.17

Venues

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)	521	27.94	504	30.69	6	30	11	5.61	0	0	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	421	22.57	399	24.3	6	30	15	7.65	1	14.29	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	407	21.82	388	23.63	5	25	12	6.12	2	28.57	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	326	17.48	317	19.31	3	15	6	3.06	0	0	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	90	4.83	0	0	0	0	90	45.92	0	0	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	57	3.06	0	0	0	0	57	29.08	0	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	15	0.8	15	0.91	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	13	0.7	13	0.79	0	0	0	0	0	0	0	0	0	0	0	0	0	0
StoneX Financial INC.(INTL)	6	0.32	6	0.37	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Instinet BlockCross(BLKX)	4	0.21	0	0	0	0	0	0	4	57.14	0	0	0	0	0	0	0	0

Material Aspects:

December 2023

Non S&P 500 Stocks

Summary

	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	
Total Non-Directed Orders	5247	100	4779	91.08	35	0.67	428	8.16	5	0.1

Venues

