

July 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
263	100.00	167	63.50	12	4.56	72	27.38	12	4.56

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)
Citadel Securities LLC(CDRG)	107	36.27	73	43.71	3	25.00	25	24.04	6	50.00	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	49	16.61	30	17.96	4	33.33	10	9.62	5	41.67	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	44	14.92	29	17.37	4	33.33	11	10.58	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	37	12.54	33	19.76	1	8.33	3	2.88	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	23	7.80	0	0.00	0	0.00	23	22.12	0	0.00	0	0	0	0	0	0	0
Choe EDGX US Equities Exchange(EDGX)	16	5.42	0	0.00	0	0.00	16	15.38	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	15	5.08	0	0.00	0	0.00	15	14.42	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	2	0.68	1	0.60	0	0.00	0	0.00	1	8.33	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	2	0.68	1	0.60	0	0.00	1	0.96	0	0.00	0	0	0	0	0	0	0

July 2022

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
415	100.00	332	80.00	10	2.41	63	15.18	10	2.41

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)
Citadel Securities LLC(CDRG)	131	27.01	109	32.83	4	40.00	11	9.17	7	30.43	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	86	17.73	74	22.29	2	20.00	7	5.83	3	13.04	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	79	16.29	75	22.59	3	30.00	1	0.83	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	67	13.81	63	18.98	1	10.00	3	2.50	0	0.00	0	0	0	0	0	0	0
Choe EDGX US Equities Exchange(EDGX)	37	7.63	0	0.00	0	0.00	37	30.83	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	30	6.19	0	0.00	0	0.00	30	25.00	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	25	5.15	0	0.00	0	0.00	25	20.83	0	0.00	0	0	0	0	0	0	0
Instinet BlockCross(BLKK)	14	2.89	1	0.30	0	0.00	0	0.00	13	56.52	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	6	1.24	6	1.81	0	0.00	0	0.00	0	0.00	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	4	0.82	4	1.20	0	0.00	0	0.00	0	0.00	0	0	0	0	0	0	0

July 2022

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
56	100.00	23	41.07	1	1.79	32	57.14	0	0.00

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)
Citadel Securities LLC(CDRG)	32	38.10	11	47.83	1	100.00	20	33.33	0	0.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)	23	27.38	1	4.35	0	0.00	22	36.67	0	0.00	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)	21	25.00	7	30.43	0	0.00	14	23.33	0	0.00	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)	6	7.14	4	17.39	0	0.00	2	3.33	0	0.00	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)	2	2.38	0	0.00	0	0.00	2	3.33	0	0.00	0	0	0	0	0	0	0

August 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
919	100.00	633	68.88	33	3.59	251	27.31	2	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)
Citadel Securities LLC(CDRG)	334	28.89	249	39.40	9	26.47	74	15.23	2	50.00	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	200	17.30	148	23.42	9	26.47	43	8.85	0	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	197	17.04	153	24.21	6	17.65	38	7.82	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	161	13.93	0	0.00	1	2.94	160	32.92	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	96	8.30	73	11.55	9	26.47	14	2.88	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	79	6.83	0	0.00	0	0.00	79	16.26	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	50	4.33	0	0.00	0	0.00	50	10.29	0	0.00	0	0	0	0	0	0	0
Members Exchange(MEMX)	21	1.82	0	0.00	0	0.00	21	4.32	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	12	1.04	7	1.11	0	0.00	5	1.03	0	0.00	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	4	0.35	2	0.32	0	0.00	2	0.41	0	0.00	0	0	0	0	0	0	0

August 2022

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
1,409	100.00	1,052	74.66	83	5.89	244	17.32	30	2.13

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)
Citadel Securities LLC(CDRG)	482	29.04	391	37.42	36	3.42	43.37	4.33	12	1.20	0	0	0	0	0	0	0
WVTV Americas, LLC(NITE)	298	17.95	233	22.30	19	1.83	22.89	2.29	17	1.70	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	291	17.53	258	24.69	19	1.83	22.89	2.29	1	0.10	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	164	9.88	143	13.68	8	0.76	9.64	0.96	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	102	6.14	0	0.00	1	0.09	1.20	0.12	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	99	5.96	0	0.00	0	0.00	0.00	0.00	99	9.90	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	72	4.34	0	0.00	0	0.00	0.00	0.00	72	7.20	0	0	0	0	0	0	0
Instinet BlockCross(BLKK)	70	4.22	0	0.00	0	0.00	0.00	0.00	70	7.00	0	0	0	0	0	0	0
Members Exchange(MEMX)	44	2.65	0	0.00	0	0.00	0.00	0.00	44	4.40	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOWO)	16	0.96	14	1.34	0	0.00	0.00	0.00	2	0.20	0	0	0	0	0	0	0

August 2022

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
280	100.00	78	27.86	11	3.93	191	68.21	0	0.00

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)
Citadel Securities LLC(CDRG)	205	40.51	46	8.97	4	0.76	33.33	11.90	0	0.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)	168	33.20	1	0.19	0	0.00	0.00	0.00	167	32.86	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)	92	18.18	12	2.39	4	0.76	33.33	11.90	0	0.00	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)	27	5.34	17	3.33	4	0.76	33.33	11.90	6	1.18	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)	14	2.77	2	0.39	0	0.00	0.00	0.00	12	2.32	0	0	0	0	0	0	0

September 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
599	100.00	483	80.63	47	7.85	67	11.19	2	0.33

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)
Credit Securities LLC(CDRG)	208	27.08	171	33.33	21	42.00	15	7.39	1	50.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	156	20.31	136	26.51	11	22.00	9	4.43	0	0.00	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	154	20.05	134	26.12	10	20.00	9	4.43	1	50.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	84	10.94	0	0.00	0	0.00	84	41.38	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	74	9.64	62	12.09	8	16.00	4	1.97	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	52	6.77	0	0.00	0	0.00	52	25.62	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	23	2.99	0	0.00	0	0.00	23	11.33	0	0.00	0	0	0	0	0	0	0
Members Exchange(MEMX)	7	0.91	0	0.00	0	0.00	7	3.45	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOAC)	6	0.78	6	1.17	0	0.00	0	0.00	0	0.00	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	4	0.52	4	0.78	0	0.00	0	0.00	0	0.00	0	0	0	0	0	0	0

September 2022

Non-S&P 500 Stocks

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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
1,023	100.00	782	76.44	63	6.35	167	16.32	9	0.88

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)
Credit Securities LLC(CDRG)	367	28.49	313	37.67	27	39.71	24	7.72	3	3.85	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	227	17.62	203	24.43	13	19.12	11	3.54	0	0.00	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	213	16.54	180	21.66	15	22.06	12	3.86	6	7.69	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	135	10.48	120	14.44	10	14.71	5	1.61	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	89	6.91	0	0.00	0	0.00	89	28.62	0	0.00	0	0	0	0	0	0	0
Instinet BlockCross(BLCK)	69	5.36	0	0.00	0	0.00	0	0.00	69	88.46	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	63	4.89	1	0.12	0	0.00	62	19.94	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	55	4.27	0	0.00	0	0.00	55	17.68	0	0.00	0	0	0	0	0	0	0
Members Exchange(MEMX)	24	1.86	0	0.00	0	0.00	24	7.72	0	0.00	0	0	0	0	0	0	0
NYSE American(AMEX)	14	1.09	0	0.00	0	0.00	14	4.50	0	0.00	0	0	0	0	0	0	0

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
259	100.00	58	22.39	13	5.02	187	72.20	1	0.39

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)
Citadel Securities LLC(CDRG)	141	39.17	25	43.10	13	81.25	102	35.79	1	100.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)	119	33.06	0	0.00	0	0.00	119	41.75	0	0.00	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)	67	18.61	13	22.41	0	0.00	54	18.95	0	0.00	0	0	0	0	0	0	0
Susquehanna Capital Group[SUSQ]	26	7.22	20	34.48	3	18.75	3	1.05	0	0.00	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)	7	1.94	0	0.00	0	0.00	7	2.46	0	0.00	0	0	0	0	0	0	0

Net Payment Paid/Received for Other Orders(cents per hundred shares)
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Net Payment Paid/Received for Other Orders(cents per hundred shares)
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Net Payment Paid/Received for Other Orders(cents per hundred shares)
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