

1st Quarter, 2022

January 2022

S&P 500 Stocks  
Summary

Total Non-Directed Orders	Non-Directed Orders as % of All 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	Other Orders as % of Non-Directed Orders	
822	100.00	689	83.82	20	2.43	87	10.58	
							26	3.16

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)	330	37.89	293	42.53	9		45.00	20	14.71	8	30.77	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	221	25.37	183	26.56	5		25.00	18	13.24	15	57.69	0	0	0	0	0	0	0
Jane Street Capital, LLC(INST)	172	19.75	162	23.51	5		25.00	5	3.68	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	39	4.48	0	0.00	0		0.00	39	28.68	0	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	32	3.67	31	4.50	1		5.00	0	0.00	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	28	3.21	0	0.00	0		0.00	28	20.59	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	25	2.87	0	0.00	0		0.00	25	18.38	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	12	1.38	11	1.60	0		0.00	0	0.00	1	3.85	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	12	1.38	9	1.31	0		0.00	1	0.74	2	7.69	0	0	0	0	0	0	0

January 2022

Non-S&P 500 Stocks  
Summary

Total Non-Directed Orders	Non-Directed Orders as % of All 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	
2,620	100.00	2,361	90.11	67	2.56	167	6.37	25	0.95

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)	1,067	39.27	995	42.14	29		42.65	31	12.76	12	26.67	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	730	26.87	662	28.04	21		30.88	35	14.40	12	26.67	0	0	0	0	0	0	0
Jane Street Capital, LLC(INST)	522	19.21	504	21.35	14		20.59	4	1.65	0	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	133	4.90	131	5.55	2		2.94	0	0.00	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	67	2.47	0	0.00	0		0.00	67	27.57	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	46	1.69	0	0.00	1		1.47	45	18.52	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	43	1.58	0	0.00	1		1.47	42	17.28	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	42	1.55	41	1.74	0		0.00	1	0.41	0	0.00	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	29	1.07	28	1.19	0		0.00	0	0.00	1	2.22	0	0	0	0	0	0	0
Instinet BlockCross(BLXX)	20	0.74	0	0.00	0		0.00	0	0.00	20	44.44	0	0	0	0	0	0	0

January 2022

Option Contracts  
Summary

Total Non-Directed Orders	Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders		Total Marketable Limit 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	
602	100.00	256	42.52	77	12.79		243	40.37	26	4.32

#### 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(CDNG)		275	44.79	118	46.09	42	54.55	115	45.10	0	0.00	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)		166	27.04	96	37.50	26	33.77	18	7.06	26	100.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)		85	13.84	4	1.56	1	1.30	80	31.37	0	0.00	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)		53	8.63	20	7.81	4	5.19	29	11.37	0	0.00	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)		35	5.70	18	7.03	4	5.19	13	5.10	0	0.00	0	0	0	0	0	0	0

#### February 2022

#### S&P 500 Stocks Summary

							Non-Marketable			
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	Limit Orders as % of Non-Directed Orders	Total Other Orders	Other Orders as % of Non-Directed Orders	
931	100.00	783	84.10	33	3.54		92	9.88	23	2.47

#### 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(CDNG)		376	36.02	326	41.63	13	40.63	25	12.20	12	50.00	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)		269	25.77	235	30.01	7	21.88	18	8.78	9	37.50	0	0	0	0	0	0	0
Jane Street Capital, LLC(INST)		169	16.19	150	19.16	7	21.88	12	5.85	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)		70	6.70	0	0.00	0	0.00	70	34.15	0	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)		55	5.27	50	6.39	1	3.13	4	1.95	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)		53	5.08	0	0.00	1	3.13	52	25.37	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)		18	1.72	12	1.53	1	3.13	4	1.95	1	4.17	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)		17	1.63	0	0.00	0	0.00	17	8.29	0	0.00	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)		13	1.25	10	1.28	2	6.25	0	0.00	1	4.17	0	0	0	0	0	0	0
Members Exchange(MEMX)		3	0.29	0	0.00	0	0.00	3	1.46	0	0.00	0	0	0	0	0	0	0

#### February 2022

#### Non-S&P 500 Stocks Summary

						Non-Marketable				
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	Limit Orders as % of Non-Directed Orders	Total Other Orders	Other Orders as % of Non-Directed Orders	
2,421	100.00	2,124	87.73	69	2.85			200		
							8.26	28	1.16	

#### 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(CDNG)		976	38.27	905	42.61	26	35.14	27	8.85	18	38.30	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)		635	24.90	566	26.65	30	40.54	30	9.84	9	19.15	0	0	0	0	0	0	0
Jane Street Capital, LLC(INST)		486	19.06	470	22.13	8	10.81	8	2.62	0	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)		140	5.49	133	6.26	3	4.05	4	1.31	0	0.00	0	0	0	0	0	0	0

Cboe EDGX US Equities Exchange(EDGX)	80	3.14	0	0.00	1	1.35	79	25.90	0	0.00	0	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	75	2.94	0	0.00	2	2.70	73	23.93	0	0.00	0	0	0	0	0	0	0	0	0
NYSE Arca(ARCA)	38	1.49	0	0.00	0	0.00	38	12.46	0	0.00	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	37	1.45	34	1.60	2	2.70	1	0.33	0	0.00	0	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	36	1.41	0	0.00	0	0.00	36	11.80	0	0.00	0	0	0	0	0	0	0	0	0
Instinet	19	0.75	0	0.00	0	0.00	0	0.00	19	40.43	0	0	0	0	0	0	0	0	0
BlockCross(BLCK)																			

February 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
497	100.00	125	25.15	84	16.90	284	57.14	4	0.80

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)	244	48.90	67	53.60	40	47.06	136	47.72	1	25.00	0	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)	92	18.44	1	0.80	2	2.35	89	31.23	0	0.00	0	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)	87	17.43	38	30.40	32	37.65	14	4.91	3	75.00	0	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)	56	11.22	13	10.40	5	5.88	38	13.33	0	0.00	0	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)	20	4.01	6	4.80	6	7.06	8	2.81	0	0.00	0	0	0	0	0	0	0	0

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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
1,120	100.00	983	87.77	30	2.68	89	7.95	18	1.61

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)	430	35.95	387	39.37	13	43.33	20	12.12	10	55.56	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(VITE)	272	22.74	244	24.82	14	46.67	8	4.85	6	33.33	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	218	18.23	204	20.75	3	10.00	11	6.67	0	0.00	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	128	10.70	122	12.41	0	0.00	5	3.03	1	5.56	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	66	5.52	0	0.00	0	0.00	66	40.00	0	0.00	0	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	27	2.26	0	0.00	0	0.00	27	16.36	0	0.00	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	21	1.76	0	0.00	0	0.00	21	12.73	0	0.00	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	17	1.42	17	1.73	0	0.00	0	0.00	0	0.00	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	10	0.84	9	0.92	0	0.00	0	0.00	1	5.56	0	0	0	0	0	0	0	0
Members Exchange(MEMX)	7	0.59	0	0.00	0	0.00	7	4.24	0	0.00	0	0	0	0	0	0	0	0

March 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
1,931	100.00	1,637	84.77	83	4.30	183	9.48	28	1.45

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)	688	33.76	633	38.67	19	22.89	17	6.37	19	37.25	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	436	21.39	365	22.30	35	42.17	30	11.24	6	11.76	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	416	20.41	383	23.40	22	26.51	11	4.12	0	0.00	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	211	10.35	198	12.10	6	7.23	6	2.25	1	1.96	0	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	74	3.63	0	0.00	0	0.00	74	27.72	0	0.00	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	54	2.65	0	0.00	0	0.00	54	20.22	0	0.00	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	44	2.16	41	2.50	1	1.20	2	0.75	0	0.00	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	25	1.23	0	0.00	0	0.00	25	9.36	0	0.00	0	0	0	0	0	0	0	0
Members Exchange(MEMX)	24	1.18	0	0.00	0	0.00	24	8.99	0	0.00	0	0	0	0	0	0	0	0
Instinet BlockCross(BLCK)	23	1.13	0	0.00	0	0.00	0	0.00	23	45.10	0	0	0	0	0	0	0	0

March 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
523	100.00	162	30.98	96	18.36	247	47.23	18	3.44

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)	216	39.78	79	48.77	31	32.63	104	38.81	2	11.11	0	0	0	0	0	0	0	0
Sunquhanna Capital Group(SUSQ)	119	21.92	49	30.25	39	41.05	16	5.97	15	83.33	0	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)	96	17.68	7	4.32	4	4.21	85	31.72	0	0.00	0	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)	89	16.39	21	12.96	15	15.79	53	19.78	0	0.00	0	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)	22	4.05	6	3.70	6	6.32	10	3.73	0	0.00	0	0	0	0	0	0	0	0
Interactive Brokers LLC(IBKR)	1	0.18	0	0.00	0	0.00	0	0.00	1	5.56	0	0	0	0	0	0	0	0