

4th Quarter, 2024

October 2024

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
749	100.00	590	78.77	23	3.07	127	16.96	9	1.20

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)		221	28.15	195	33.05	8	34.78	14	8.59	4	44.44	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)		166	21.15	139	23.56	11	47.83	13	7.98	3	33.33	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)		129	16.43	124	21.02	1	4.35	4	2.45	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(UNST)		104	13.25	98	16.61	2	8.70	4	2.45	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)		61	7.77	0	0.00	0	0.00	61	37.42	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)		39	4.97	0	0.00	0	0.00	39	23.93	0	0.00	0	0	0	0	0	0	0
Members Exchange(MEMX)		15	1.91	0	0.00	0	0.00	15	9.20	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)		13	1.66	0	0.00	0	0.00	13	7.98	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)		12	1.53	10	1.69	1	4.35	0	0.00	1	11.11	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)		11	1.40	11	1.86	0	0.00	0	0.00	0	0.00	0	0	0	0	0	0	0

October 2024

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
2,557	100.00	2,099	82.09	79	3.09	363	14.20	16	0.63

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)		698	26.73	659	31.25	10	12.20	17	4.21	12	75.00	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)		674	25.81	486	23.04	53	64.63	132	32.67	3	18.75	0	0	0	0	0	0	0

G1 Execution Services, LLC(ETMM)	471	18.04	454	21.53	9	10.98	8	1.98	0	0.00	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	409	15.66	396	18.78	6	7.32	7	1.73	0	0.00	0	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	116	4.44	0	0.00	0	0.00	116	28.71	0	0.00	0	0	0	0	0	0	0	0
Members Exchange(MEMX)	55	2.11	0	0.00	0	0.00	55	13.61	0	0.00	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	37	1.42	35	1.66	0	0.00	2	0.50	0	0.00	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	31	1.19	0	0.00	0	0.00	31	7.67	0	0.00	0	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)	29	1.11	28	1.33	0	0.00	1	0.25	0	0.00	0	0	0	0	0	0	0	0
NYSE Arca(ARCA)	24	0.92	0	0.00	1	1.22	23	5.69	0	0.00	0	0	0	0	0	0	0	0

October 2024

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									
	346	100.00	147	42.49	50	14.45	148	42.77	1	0.29								

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)		183	51.55	84	56.76	29	54.72	69	45.10	1	100.00	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)		59	16.62	42	28.38	12	22.64	5	3.27	0	0.00	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)		57	16.06	16	10.81	7	13.21	34	22.22	0	0.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)		49	13.80	4	2.70	3	5.66	42	27.45	0	0.00	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)		7	1.97	2	1.35	2	3.77	3	1.96	0	0.00	0	0	0	0	0	0	0

November 2024

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									
	662	100.00	545	82.33	20	3.02	79	11.93	18	2.72								

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)		243	34.57	209	38.28	8	40.00	15	12.61	11	61.11	0	0	0	0	0	0	0

VIRTU Americas, LLC(NITE)	148	21.05	121	22.16	8	40.00	15	12.61	4	22.22	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	111	15.79	105	19.23	2	10.00	4	3.36	0	0.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	86	12.23	81	14.84	2	10.00	3	2.52	0	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	29	4.13	0	0.00	0	0.00	29	24.37	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	28	3.98	0	0.00	0	0.00	28	23.53	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	17	2.42	0	0.00	0	0.00	17	14.29	0	0.00	0	0	0	0	0	0	0
StoneX Financial INC.(INTL)	9	1.28	8	1.47	0	0.00	1	0.84	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	9	1.28	8	1.47	0	0.00	0	0.00	1	5.56	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)	8	1.14	8	1.47	0	0.00	0	0.00	0	0.00	0	0	0	0	0	0	0

November 2024

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
2,016	100.00	1,687	83.68	82	4.07	229	11.36	18	0.89

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)	683	32.51	644	37.70	20	22.47	9	3.15	10	55.56	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	451	21.47	329	19.26	43	48.31	72	25.17	7	38.89	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	359	17.09	347	20.32	5	5.62	7	2.45	0	0.00	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	278	13.23	264	15.46	12	13.48	2	0.70	0	0.00	0	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)	88	4.19	0	0.00	0	0.00	88	30.77	0	0.00	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	43	2.05	0	0.00	0	0.00	43	15.03	0	0.00	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	41	1.95	40	2.34	0	0.00	1	0.35	0	0.00	0	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)	38	1.81	37	2.17	1	1.12	0	0.00	0	0.00	0	0	0	0	0	0	0	0
Instinet BlockCross(BLKX)	30	1.43	23	1.35	7	7.87	0	0.00	0	0.00	0	0	0	0	0	0	0	0
Members Exchange(MEMX)	23	1.09	0	0.00	0	0.00	23	8.04	0	0.00	0	0	0	0	0	0	0	0

November 2024

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	
295	100.00	139	47.12	28	9.49		128	43.39	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)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
Citadel Securities LLC(CDRG)		127	46.18	68	51.52	12	48.00	47	39.83	0	0.00	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)		57	20.73	44	33.33	7	28.00	6	5.08	0	0.00	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)		54	19.64	16	12.12	3	12.00	35	29.66	0	0.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)		27	9.82	0	0.00	1	4.00	26	22.03	0	0.00	0	0	0	0	0	0	0
Morgan Stanley & Company LLC(MSCO)		10	3.64	4	3.03	2	8.00	4	3.39	0	0.00	0	0	0	0	0	0	0

December 2024

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	
852	100.00	743	87.21	24	2.82		65	7.63	20	2.35

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)		319	35.88	286	38.39	9	37.50	15	15.00	9	45.00	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)		165	18.56	134	17.99	10	41.67	14	14.00	7	35.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)		143	16.09	140	18.79	1	4.17	2	2.00	0	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)		136	15.30	129	17.32	2	8.33	5	5.00	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)		28	3.15	0	0.00	0	0.00	28	28.00	0	0.00	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)		23	2.59	22	2.95	0	0.00	1	1.00	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)		22	2.47	0	0.00	0	0.00	22	22.00	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)		21	2.36	19	2.55	1	4.17	0	0.00	1	5.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)		10	1.12	0	0.00	0	0.00	10	10.00	0	0.00	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)		9	1.01	6	0.81	0	0.00	0	0.00	3	15.00	0	0	0	0	0	0	0

December 2024

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				
2,693	100.00	2,221	82.47	93	3.45	351	13.03	28	1.04				

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)		862	30.56	810	36.16	15	15.00	18	3.97	19	67.86	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)		587	20.81	421	18.79	51	51.00	108	23.84	7	25.00	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)		439	15.56	424	18.93	9	9.00	6	1.32	0	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)		402	14.25	378	16.88	12	12.00	12	2.65	0	0.00	0	0	0	0	0	0	0
Cboe EDGX US Equities Exchange(EDGX)		130	4.61	0	0.00	0	0.00	130	28.70	0	0.00	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)		95	3.37	90	4.02	4	4.00	1	0.22	0	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)		85	3.01	0	0.00	0	0.00	85	18.76	0	0.00	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)		66	2.34	64	2.86	2	2.00	0	0.00	0	0.00	0	0	0	0	0	0	0
Members Exchange(MEMX)		39	1.38	0	0.00	0	0.00	39	8.61	0	0.00	0	0	0	0	0	0	0
Instinet																		
BlockCross(BLKX)		27	0.96	20	0.89	7	7.00	0	0.00	0	0.00	0	0	0	0	0	0	0

December 2024

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				
327	100.00	153	46.79	31	9.48	142	43.43	1	0.31				

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)		141	43.12	67	43.79	16	50.00	58	41.13	0	0.00	0	0	0	0	0	0	0
Wolverine Execution Services LLC(WEXX)		67	20.49	12	7.84	2	6.25	53	37.59	0	0.00	0	0	0	0	0	0	0
Dash Financial Technologies LLC(DASH)		57	17.43	27	17.65	5	15.63	25	17.73	0	0.00	0	0	0	0	0	0	0
Susquehanna Capital Group(SUSQ)		45	13.76	36	23.53	5	15.63	3	2.13	1	100.00	0	0	0	0	0	0	0

Morgan Stanley & Company LLC(MSCO)	17	5.20	11	7.19	4	12.50	2	1.42	0	0.00	0	0	0	0	0	0	0	0
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