

July 2023

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
15	100.00	7	46.67	1	6.67

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
VIRTU Americas, LLC(NITE)	9	56.25	2	28.57	1
Jane Street Capital, LLC(JNST)	3	18.75	3	42.86	0
Citadel Securities LLC(CDRG)	2	12.50	2	28.57	0
UBS Securities, LLC (UBSS)	1	6.25	0	0.00	0
National Financial Services LLC(XSTM)	1	6.25	0	0.00	0

July 2023

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
85	100.00	74	87.06	0	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
National Financial Services LLC(XSTM)	41	27.15	0	0.00	0
Citadel Securities LLC(CDRG)	28	18.54	28	37.84	0
New York Stock Exchange(NYSE)	25	16.56	0	0.00	0
G1 Execution Services, LLC (ETMM)	18	11.92	18	24.32	0
VIRTU Americas, LLC(NITE)	18	11.92	14	18.92	0
Jane Street Capital, LLC(JNST)	13	8.61	13	17.57	0
Cboe EDGX US Equities Exchange (EDGX)	4	2.65	0	0.00	0

Members					
Exchange(MEMX)	2	1.32	0	0.00	0
Instinet BlockCross (BLKX)	1	0.66	0	0.00	0
Two Sigma Securities, LLC (SOHO)	1	0.66	1	1.35	0

July 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
0	0.00		00.00	0	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
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August 2023

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
15	100.00	10	66.67	0	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
VIRTU Americas, LLC(NITE)	9	50.00	4	40.00	0
Citadel Securities LLC(CDRG)	3	16.67	3	30.00	0
National Financial Services LLC(XSTM)	3	16.67	0	0.00	0
G1 Execution Services, LLC (ETMM)	2	11.11	2	20.00	0
Jane Street Capital, LLC(JNST)	1	5.56	1	10.00	0

August 2023

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
62	100.00	49	79.03	2	3.23

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
VIRTU Americas, LLC(NITE)	19	25.68	9	19.15	1
Citadel Securities LLC(CDRG)	18	24.32	16	34.04	1
G1 Execution Services, LLC (ETMM)	11	14.86	11	23.40	0
National Financial Services LLC(XSTM)	11	14.86	0	0.00	0
Jane Street Capital, LLC(JNST)	10	13.51	10	21.28	0
NASDAQ Execution Services, LLC (NSDQ)	4	5.41	0	0.00	0
Two Sigma Securities, LLC (SOHO)	1	1.35	1	2.13	0

August 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
3	100.00	0	0.00	1	33.33

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
Citadel Securities LLC(CDRG)	2	66.67	0	0.00	1
Dash Financial Technologies LLC (DASH)	1	33.33	0	0.00	0

September 2023

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
7	100.00	3	42.86	0	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
VIRTU Americas, LLC(NITE)		457.14	0	0.00	0

G1 Execution Services, LLC (ETMM)	2	28.57	2	66.67	0
Citadel Securities LLC(CDRG)	1	14.29	1	33.33	0

September 2023

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
43	100.00	30	69.77	0	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
New York Stock Exchange(NYSE)	20	28.99	0	0.00	0
Citadel Securities LLC(CDRG)	17	24.64	16	53.33	0
VIRTU Americas, LLC(NITE)	13	18.84	7	23.33	0
National Financial Services LLC(XSTM)	6	8.70	0	0.00	0
Cboe EDGX US Equities Exchange (EDGX)	4	5.80	0	0.00	0

G1 Execution Services, LLC (ETMM)	3	4.35	3	10.00	0
Jane Street Capital, LLC(JNST)	3	4.35	3	10.00	0
NASDAQ Execution Services, LLC (NSDQ)	2	2.90	0	0.00	0
Two Sigma Securities, LLC (SOHO)	1	1.45	1	3.33	0

September 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
0	0.00	0	0.00	0	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders	Non-Directed Orders(%)	Market Orders	Market Orders(%)	Marketable Limit Orders
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SECURITIES MANAGEMENT & RESEARCH -
Held NMS Stocks and Options Order Routing
Public Report
Generated on Tue Oct 10 2023 09:18:15
GMT-4 EDT

3rd Quarter, 2023

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	46.67	0	0.00

Marketable Limit Orders(%)	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other Orders	Other Orders(%)	Net Payment Paid/Received for Market Orders (USD)
100.00	6	85.71	0	0.00	0
0.00	0	0.00	0	0.00	0
0.00	0	0.00	0	0.00	0
0.00	1	14.29	0	0.00	0
0.00	0	0.00	1	100.00	0

Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders		Other Orders as % of Non-Directed Orders	
		Total Other Orders		
	11	12.94	0	0.00

Marketable Limit Orders(%)	Non-Marketable Limit Orders		Non-Marketable Limit Orders(%)		Other Orders		Other Orders(%)		Net Payment Paid/Received for Market Orders (USD)
	0.00	0	0.00	41	97.62	0			
	0.00	0	0.00	0	0.00	0			
	0.00	25	71.43	0	0.00	0			
	0.00	0	0.00	0	0.00	0			
	0.00	4	11.43	0	0.00	0			
	0.00	0	0.00	0	0.00	0			
	0.00	4	11.43	0	0.00	0			

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	33.33	0	0.00	

Marketable Limit Orders(%)	Non-Marketable Limit Orders		Non-Marketable Limit Orders(%)	Other Orders	Other Orders(%)	Net Payment Paid/Received for Market Orders (USD)
	0.00	5	100.00	0	0.00	0
	0.00	0	0.00	0	0.00	0
	0.00	0	0.00	3	100.00	0
	0.00	0	0.00	0	0.00	0
	0.00	0	0.00	0	0.00	0

Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders		Total Other Orders	Other Orders as % of Non-Directed Orders	
	11	17.74	0	0.00	

Marketable Limit Orders(%)	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other Orders	Other Orders(%)	Net Payment Paid/Received for Market Orders (USD)
50.00	9	64.29	0	0.00	0
50.00	1	7.14	0	0.00	0
0.00	0	0.00	0	0.00	0
0.00	0	0.00	11	100.00	0
0.00	0	0.00	0	0.00	0
0.00	4	28.57	0	0.00	0
0.00	0	0.00	0	0.00	0

Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Total Other Orders	Other Orders as % of Non-Directed Orders
	266.67	0	0.00

Marketable Limit Orders(%)	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other Orders	Other Orders(%)	Net Payment Paid/Received for Market Orders (USD)
100.00	1	50.00	0	0.00	0
0.00	1	50.00	0	0.00	0

Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Total Other Orders	Other Orders as % of Non-Directed Orders
4	57.14	0	0.00

Marketable Limit Orders(%)	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other Orders	Other Orders(%)	Net Payment Paid/Received for Market Orders (USD)
0.00	4	100.00	0	0.00	0

0.00	0	0.00	0	0.00	0
0.00	0	0.00	0	0.00	0

Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders		Total Other Orders		Other Orders as % of Non-Directed Orders	
	13	30.23		0	0.00	

Marketable Limit Orders(%)	Non-Marketable Limit Orders		Non-Marketable Limit Orders(%)		Other Orders		Other Orders(%)		Net Payment Paid/Received for Market Orders (USD)	
	0.00	20	60.61		0	0.00		0.00		0
	0.00	1	3.03		0	0.00		0.00		0
	0.00	6	18.18		0	0.00		0.00		0
	0.00	0	0.00		6	100.00				0
	0.00	4	12.12		0	0.00		0.00		0

0.00	0	0.00	0	0.00	0
0.00	0	0.00	0	0.00	0
0.00	2	6.06	0	0.00	0
0.00	0	0.00	0	0.00	0

Total Non-Marketable Limit Orders	Non-Marketable Limit Orders as % of Non-Directed Orders		Other Orders as % of Non-Directed Orders	
	Total Other Orders			
	0	0.00	0	0.00

Marketable Limit Orders(%)	Non-Marketable Limit Orders		Other Orders		Net Payment Paid/Received for Market Orders (USD)
	Non-Marketable Limit Orders	Non-Marketable Limit Orders(%)	Other Orders	Other Orders(%)	

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)
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

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0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

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)
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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)
0		0	0	0	0	0
0		0	0	0	0	0
0		0	0	0	0	0
0		0	0	0	0	0
0		0	0	0	0	0

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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)
0	0	0	0	0	0	0
0	0	0	0	0	0	0

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)
0	0	0	0	0	0	0

0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

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)
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0

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)
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