

Cboe EDGX US Equities Exchange(EDGX)	0.03	0	0	11.11	0	0	0	0	0	0	0	0	0
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Material Aspects:

October 2024

Non S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed 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
100	99.23	0.58	0.18	0

Venues

Venue - Non-directed Order Flow	Non-Directed Orders(%)	Market Orders(%)	Marketable Limit Orders(%)	Non-Marketable Limit 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)	33.22	33.46	27.27	2.78	0	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	21.69	21.8	27.27	0	0	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	21.13	21.29	18.18	0	0	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	18.36	18.5	15.15	0	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	1.63	1.65	0	0	0	0	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)	1.2	1.19	3.03	0	0	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	1.05	1.06	0	0	0	0	0	0	0	0	0	0	0
StoneX Financial INC.(INTL)	0.85	0.86	0	0	0	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	0.58	0	3.03	86.11	0	0	0	0	0	0	0	0	0
Instinet BlockCross(BLKX)	0.2	0.18	3.03	0	0	0	0	0	0	0	0	0	0

Material Aspects:

October 2024

Option Contracts

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed 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
0	0	0	0	0

Venues

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

Material Aspects:

November 2024

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed 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
100.00	99.69	0.17	0.1	0.03

Venues

Venue - Non-directed Order Flow	Non-Directed Orders(%)	Market Orders(%)	Marketable Limit Orders(%)	Non-Marketable Limit 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)	37.6	37.7	60	6.67	100	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	19.46	19.56	20	0	0	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	19.25	19.39	0	0	0	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	16.29	16.41	0	0	0	0	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)	2.31	2.32	0	0	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	2.2	2.22	0	0	0	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	1.17	1.18	0	0	0	0	0	0	0	0	0	0	0
StoneX Financial INC.(INTL)	1.14	1.14	0	0	0	0	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	0.52	0	20	93.33	0	0	0	0	0	0	0	0	0
Instinet BlockCross(BLKX)	0.07	0.07	0	0	0	0	0	0	0	0	0	0	0

Material Aspects:

November 2024

Non S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed 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
100	99	0.58	0.37	0.04

Venues

Venue - Non-directed Order Flow	Non-Directed Orders(%)	Market Orders(%)	Marketable Limit Orders(%)	Non-Marketable Limit 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)	38.28	38.33	33.33	28.57	100	0	0	0	0	0	0	0	0
VIRTU Americas, LLC(NITE)	20	20.14	14.81	0	0	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	19.18	19.26	22.22	0	0	0	0	0	0	0	0	0	0
Jane Street Capital, LLC(JNST)	15.53	15.63	11.11	0	0	0	0	0	0	0	0	0	0
HRT FINANCIAL LP(HRTF)	2.49	2.47	7.41	0	0	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	1.92	1.92	3.7	0	0	0	0	0	0	0	0	0	0
StoneX Financial INC.(INTL)	1.1	1.11	0	0	0	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	1.06	1.07	0	0	0	0	0	0	0	0	0	0	0
NYSE Arca(ARCA)	0.19	0	7.41	33.33	0	0	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	0.13	0	0	28.57	0	0	0	0	0	0	0	0	0

Material Aspects:

November 2024

Option Contracts

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed 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
0	0	0	0	0

Venues

Venue - Non-directed Order Flow	Non-Directed Orders(%)	Market Orders(%)	Marketable Limit Orders(%)	Non-Marketable Limit 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)
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Material Aspects:

December 2024

Option Contracts

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed 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
0	0	0	0	0

Venues

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

Material Aspects: