

February 2020														

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	100.00	0.00	0.00	0.00

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)	61.33	61.33	0.00	0.00	0.00	0	0	0	0	0	0	0	0
VIRTU Americas LLC(NITE)	26.67	26.67	0.00	0.00	0.00	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	5.33	5.33	0.00	0.00	0.00	0	0	0	0	0	0	0	0
JANE STREET CAPITAL, LLC(INST)	2.67	2.67	0.00	0.00	0.00	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	2.67	2.67	0.00	0.00	0.00	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	1.33	1.33	0.00	0.00	0.00	0	0	0	0	0	0	0	0

Material Aspects:

February 2020

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
100.00	70.18	0.00	29.82	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed 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)	34.59	56.25	0.00	1.89	0.00	0	0	0	0	0	0	0
VIRTU Americas LLC(NITE)	19.55	31.25	0.00	1.89	0.00	0	0	0	0	0	0	0
Cboe EDGX U.S. Equities Exchange(EDGX)	17.29	0.00	0.00	43.40	0.00	0	0	0	0	0	0	0
NASDAQ Execution Services, LLC(NSDQ)	8.27	0.00	0.00	20.75	0.00	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	6.77	10.00	0.00	1.89	0.00	0	0	0	0	0	0	0
New York Stock Exchange(NYSE)	5.26	0.00	0.00	13.21	0.00	0	0	0	0	0	0	0
NYSE American(AMEX)	3.01	0.00	0.00	7.55	0.00	0	0	0	0	0	0	0
Cboe BZX U.S. Equities Exchange(ZBAT)	2.26	0.00	0.00	5.66	0.00	0	0	0	0	0	0	0

NYSE Arca(ARCA)	1.50	0.00	0.00	3.77	0.00	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	1.50	2.50	0.00	0.00	0.00	0	0	0	0	0	0	0	0

Material Aspects:

February 2020

Option Contracts Summary

	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
Non-Directed Orders as % of All Orders	0.00	0.00	0.00	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed 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:

March 2020

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	98.97	0.00	1.03	0.00

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)	54.08	54.64	0.00	0.00	0.00	0	0	0	0	0	0	0	0
VIRTU Americas LLC(NITE)	20.41	19.59	0.00	100.00	0.00	0	0	0	0	0	0	0	0
G1 Execution Services, LLC(ETMM)	9.18	9.28	0.00	0.00	0.00	0	0	0	0	0	0	0	0
Two Sigma Securities, LLC(SOHO)	6.12	6.19	0.00	0.00	0.00	0	0	0	0	0	0	0	0
JANE STREET CAPITAL, LLC(INST)	5.10	5.15	0.00	0.00	0.00	0	0	0	0	0	0	0	0
UBS Securities, LLC(UBSS)	4.08	4.12	0.00	0.00	0.00	0	0	0	0	0	0	0	0
State Street Global Markets, LLC(SSBS)	1.02	1.03	0.00	0.00	0.00	0	0	0	0	0	0	0	0

Material Aspects:

Material Aspects:

March 2020

Option Contracts
Summary

	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
Non-Directed Orders as % of All Orders	0.00	0.00	0.00	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed 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: