# Fearnley Securities, INC - Held NMS Stocks and Options Order Routing Public Report

Generated on Fri Jul 30 2021 20:14:02 GMT-0400 (Eastern Daylight Time)

2nd Quarter, 2021

# April 2021

### 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
1	100.00	73.29	1.14	17.43	8.14

#### 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 (CDRG)	28.34	32.67	28.57	17.76	12.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
UBS Securities LLC (UBSS)	14.98	17.33	14.29	10.28	4.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas, LLC (NITE)	13.36	14.00	14.29	12.15	10.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Two Sigma Securities (SOHO)	12.38	12.89	14.29	4.67	24.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Instinet (INCA)	12.05	2.22	0.00	48.60	24.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	11.89	14.22	14.29	2.80	10.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	5.70	6.67	14.29	3.74	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
The Nasdaq Stock Market LLC (NSDQ)	1.30	0.00	0.00	0.00	16.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

#### Material Aspects:

Citadel Securities (CDRG):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/CDRG/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

UBS Securities LLC (UBSS):

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Two Sigma Securities (SOHO):

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Jane Street Capital, LLC (JNST):

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The Nasdaq Stock Market LLC (NSDQ):

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# April 2021

### 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	47.05	6.02	20.41	26.52

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)
Instinet (INCA)	42.85	0.55	54.98	65.59	97.63	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities (CDRG)	15.47	27.55	10.43	8.53	0.54	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas, LLC (NITE)	11.25	19.60	8.53	7.13	0.22	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	10.22	18.26	9.95	4.48	0.43	0	0.0000	0	0.0000	0	0.0000	0	0.0000
UBS Securities LLC (UBSS)	10.13	17.42	7.11	7.13	0.22	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Two Sigma Securities (SOHO)	8.94	15.66	6.64	5.31	0.32	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE ARCA (ARCA)	0.49	0.00	2.37	1.68	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	0.46	0.97	0.00	0.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

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)
The Nasdaq Stock Market LLC (NSDQ)	0.17	0.00	0.00	0.00	0.65	0	0.0000	0	0.0000	0	0.0000	0	0.0000
BNY Mellon Capital Markets LLC (BKCM)	0.03	0.00	0.00	0.14	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Instinet (INCA):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/INCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

Citadel Securities (CDRG

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G1 Execution Services, LLC (ETMM):

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UBS Securities LLC (UBSS):

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Two Sigma Securities (SOHO):

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NYSE ARCA (ARCA):

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Jane Street Capital, LLC (JNST):

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BNY Mellon Capital Markets LLC (BKCM):

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April 2021

## **Options**

#### 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	51.43	8.57	40.00	0.00

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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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 (CITL)	57.14	61.11	66.67	50.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Susquehanna International Group, LLP (SUSQ)	42.86	38.89	33.33	50.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Citadel Securities (CITL):

 $https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/O/CITL/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

 $Susque hanna\ International\ Group, LLP\ (SUSQ): \\ https://nms606.karngroup.com/api/606stats/public606/606/report/FERN_NEOV/material/2021Q2/0/SUSQ/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

# May 2021

### S&P 500 Stocks

#### Summary

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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	51.45	3.11	24.87	20.58

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 (CDRG)	24.76	28.33	17.24	18.10	25.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Instinet (INCA)	20.90	9.58	31.03	31.90	34.38	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas, LLC (NITE)	12.54	14.17	17.24	11.64	8.85	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	11.79	13.33	6.90	11.64	8.85	0	0.0000	0	0.0000	0	0.0000	0	0.0000
UBS Securities LLC (UBSS)	11.79	12.71	6.90	12.50	9.38	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Two Sigma Securities (SOHO)	10.83	11.46	17.24	9.91	9.38	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	7.40	10.42	3.45	4.31	4.17	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Citadel Securities (CDRG):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/CDRG/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

Instinet (INCA)

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Virtu Americas, LLC (NITE):

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Jane Street Capital, LLC (JNST):

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# May 2021

#### 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	46.76	11.93	38.38	2.93

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)
Instinet (INCA)	29.29	1.16	44.44	70.52	67.35	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities (CDRG)	19.33	28.38	16.67	5.64	4.08	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas, LLC (NITE)	13.24	19.55	9.09	4.23	4.08	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	12.96	18.73	9.60	4.94	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
UBS Securities LLC (UBSS)	12.45	18.07	9.60	4.37	2.04	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Two Sigma Securities (SOHO)	9.73	13.86	6.57	3.95	4.08	0	0.0000	0	0.0000	0	0.0000	0	0.0000

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)
NYSE ARCA (ARCA)	2.44	0.00	4.04	6.35	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
The Nasdaq Stock Market LLC (NSDQ)	0.42	0.00	0.00	0.00	18.37	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	0.14	0.25	0.00	0.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Instinet (INCA):

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G1 Execution Services, LLC (ETMM):

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Two Sigma Securities (SOHO):

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NYSE ARCA (ARCA):

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The Nasdaq Stock Market LLC (NSDQ):

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Jane Street Capital, LLC (JNST):

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# May 2021

# **Options**

### 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	10.20	2.04	87.76	0.00

Venue - Non-directed Order Flow	Non- Directed Orders 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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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)
Susquehanna International Group, LLP (SUSQ)	48.98	40.00	0.00	51.16	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities (CITL)	46.94	40.00	0.00	48.84	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Wolverine Execution Svc. (WEXX)	4.08	20.00	100.00	0.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Susquehanna International Group, LLP (SUSQ): https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/O/SUSQ/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

Citadel Securities (CITL):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/0/CITL/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

 $Wolverine\ Execution\ Svc.\ (WEXX): \\ https://nms606.karngroup.com/api/606stats/public606/606/report/FERN_NEOV/material/2021Q2/O/WEXX/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

# June 2021

### 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
l	100.00	62.45	3.31	28.99	5.25

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 (CDRG)	31.71	36.76	5.88	21.48	44.44	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas, LLC (NITE)	12.84	13.08	17.65	12.08	11.11	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	12.65	13.71	17.65	10.74	7.41	0	0.0000	0	0.0000	0	0.0000	0	0.0000
UBS Securities LLC (UBSS)	11.87	15.26	11.76	5.37	7.41	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Instinet (INCA)	11.87	1.25	17.65	36.24	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Two Sigma Securities (SOHO)	11.87	13.08	11.76	10.07	7.41	0	0.0000	0	0.0000	0	0.0000	0	0.0000

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)
Jane Street Capital, LLC (JNST)	6.81	6.85	5.88	4.03	22.22	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE ARCA (ARCA)	0.19	0.00	5.88	0.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE New York Stock Exchange, Inc (NYSE)	0.19	0.00	5.88	0.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Citadel Securities (CDRG):

https://nms606.kamgroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/CDRG/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

Virtu Americas, LLC (NITE):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/NITE/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

G1 Execution Services, LLC (ETMM):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/ETMM/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

UBS Securities LLC (UBSS):

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Instinet (INCA):

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Two Sigma Securities (SOHO):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/SOHO/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

Jane Street Capital, LLC (JNST):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/JNST/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

NYSE ARCA (ARCA):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

NYSE New York Stock Exchange, Inc (NYSE):

 $https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/SP500/NYSE/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

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### June 2021

# 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	39.97	14.01	42.60	3.42

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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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)
Instinet (INCA)	35.48	3.17	33.25	63.50	73.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities (CDRG)	17.02	26.74	18.58	7.88	11.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
UBS Securities LLC (UBSS)	12.47	20.14	12.71	6.11	1.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
G1 Execution Services, LLC (ETMM)	11.99	19.02	12.96	5.95	1.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas, LLC (NITE)	10.62	17.05	10.27	5.47	1.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Two Sigma Securities (SOHO)	8.63	13.37	9.05	4.58	2.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE ARCA (ARCA)	3.39	0.00	2.69	6.43	8.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	0.27	0.51	0.24	0.08	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
The Nasdaq Stock Market LLC (NSDQ)	0.10	0.00	0.00	0.00	3.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE New York Stock Exchange, Inc (NYSE)	0.03	0.00	0.24	0.00	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Instinet (INCA):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/INCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

Citadel Securities (CDRG):

 $https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/CDRG/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

UBS Securities LLC (UBSS):

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G1 Execution Services, LLC (ETMM):

 $https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/ETMM/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

Virtu Americas, LLC (NITE):

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Two Sigma Securities (SOHO):

https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/SOHO/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

NYSE ARCA (ARCA):

 $https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0e94b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f35dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f36dee93b0/Material/2021Q2/NONSP500/ARCA/758fb8824f60/Material/2021Q2/NONSP500/Material/2021Q2/NONSP500/Material/2021Q2/NONSP500/Material/2021Q2/NONSP500/Material/2021Q2/NONSP500/Material/2021Q2/NONSP500/Material/2021Q2/$ 

Jane Street Capital, LLC (JNST):

https://nms606.kamgroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/JNST/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

The Nasdaq Stock Market LLC (NSDQ):

 $https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/NSDQ/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

NYSE New York Stock Exchange, Inc (NYSE):

 $https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/NONSP500/NYSE/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$ 

# June 2021

# **Options**

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	20.93	3.88	75.19	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 (CITL)	50.39	51.85	60.00	49.48	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Susquehanna International Group, LLP (SUSQ)	49.61	48.15	40.00	50.52	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000

### Material Aspects:

Citadel Securities (CITL): https://nms606.karngroup.com/api/606stats/public606/606/report/FERN\_NEOV/material/2021Q2/0/CITL/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf

 $Susque hanna\ International\ Group, LLP\ (SUSQ): \\ https://nms606.karngroup.com/api/606stats/public606/606/report/FERN_NEOV/material/2021Q2/0/SUSQ/758fb8824f35dee93b0e8fca7cde8b2b8a7e26b0/Material%20Aspects.pdf$