

NATIONAL FINANCIAL SERVICES LLC - Held NMS Stocks and Options Order Routing Public Report

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1st Quarter, 2022

January 2022

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
7.97	69.98	27.34	2.66	0.02

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)	10.27	41.90	22.89	20.26	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Investors Exchange (IEXG)	9.23	0.00	0.38	0.39	12.37	0	0.0000	0	0.0000	0	0.0000	-869	-9.0000
National Financial Services LLC (XSTM)	8.56	0.00	0.00	0.00	11.47	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	7.47	30.12	20.73	18.88	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Goldman, Sachs & Co. (GSCO)	5.32	0.00	0.00	0.00	7.13	0	0.0000	0	0.0000	0	0.0000	-1,063	-10.0000
Credit Suisse Securities (USA) LLC (FBCO)	4.98	0.00	26.40	30.21	5.94	0	0.0000	-6,575	-21.6612	-87	-21.7019	-125	-10.0000
UBS Securities LLC - ATS (UBSA)	4.88	0.00	0.00	0.00	6.54	0	0.0000	0	0.0000	0	0.0000	-891	-10.0000
Jane Street Capital, LLC (JNST)	4.81	20.50	0.22	0.17	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO)	4.60	0.00	0.17	0.09	6.16	0	0.0000	0	0.0000	0	0.0000	-67	-10.0000
NASDAQ Execution Services, LLC (NSDQ)	4.59	0.01	0.20	0.35	6.15	-520	-13.5000	-188	-13.4394	2	2.2050	-293	-14.8240
INTELLIGENT CROSS LLC (INCR)	4.51	0.00	0.00	0.00	6.05	0	0.0000	0	0.0000	0	0.0000	-326	-8.0000
EBX LLC (EBXL)	4.50	0.00	0.00	0.00	6.03	0	0.0000	0	0.0000	0	0.0000	-74	-6.7977

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)
Morgan Stanley & Company LLC (MSCO)	3.91	0.00	7.78	7.34	5.04	0	0.0000	-1,611	-25.3042	-5	-30.4358	-1,015	-20.0000
JP Morgan Securities LLC (JPMS)	3.71	0.00	0.00	0.00	4.97	0	0.0000	0	0.0000	0	0.0000	-208	-12.0000
Barclays Capital, Inc. (LEHM)	3.40	0.00	0.00	0.00	4.55	0	0.0000	0	0.0000	0	0.0000	-280	-10.0000
VIRTU Americas LLC (KCGM)	1.62	0.00	19.59	20.78	1.64	0	0.0000	-3,494	-22.2927	-71	-22.3058	-13	-10.0000
BNP Paribas Securities Corp. (BNPX)	1.25	0.00	0.03	0.03	1.68	0	0.0000	0	0.0000	0	0.0000	0	0.0000
BIDS Trading LP (BIDS)	1.23	0.00	0.00	0.00	1.65	0	0.0000	0	0.0000	0	0.0000	-34	-15.0000
Liquidnet, Inc. (LQNA)	1.20	0.00	0.03	0.03	1.61	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Material Aspects:

Citadel Securities LLC (CDRG):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market." NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

Investors Exchange (IEXG):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable.

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National Financial Services LLC (XSTM):

Orders may be routed to NFS's Alternative Trading System, CrossStream. NFS is not charged an explicit fee for orders executed in CrossStream but may receive a trading commission from the contra-side party against which the order executed.

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VIRTU Americas, LLC (NITE):

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Goldman, Sachs & Co. (GSCO):

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Credit Suisse Securities (USA) LLC (FBCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by Credit Suisse Securities (USA) LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by Credit Suisse Securities (USA) LLC for routing these orders are passed back to NFS plus an additional router fee.

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UBS Securities LLC - ATS (UBSA):

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Jane Street Capital, LLC (JNST):

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Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO):

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NASDAQ Execution Services, LLC (NSDQ):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: <https://nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

INTELLIGENT CROSS LLC (INCR):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

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EBX LLC (EBXL):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders may be routed through EBX LLC in which NFS or its affiliates have an interest.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Morgan Stanley & Company LLC (MSCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by Morgan Stanley & Co. LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by Morgan Stanley & Co. LLC for routing these orders are passed back to NFS plus an additional router fee.

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JP Morgan Securities LLC (JPMS):

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Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Barclays Capital, Inc. (LEHM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

VIRTU Americas LLC (KCGM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by VIRTU Americas LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by VIRTU Americas LLC for routing these orders are passed back to NFS plus an additional router fee.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

BNP Paribas Securities Corp. (BNPX):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

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BIDS Trading LP (BIDS):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS is charged fees by BIDS Trading LP on a tiered price schedule based on volume thresholds.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Liquidnet, Inc. (LQNA):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

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January 2022

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
4.97	32.87	46.65	20.33	0.14

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)
Investors Exchange (IEXG)	8.21	0.00	0.21	0.62	8.65	0	0.0000	0	0.0000	0	0.0000	-1,255	-9.0000
NASDAQ Execution Services, LLC (NSDQ)	7.71	0.04	0.27	1.48	8.12	-682	-13.5000	-297	-13.6520	46	3.0511	-1,291	-18.3939
National Financial Services LLC (XSTM)	6.61	0.00	0.00	0.00	6.96	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Goldman, Sachs & Co. (GSCO)	5.45	0.00	0.00	0.00	5.75	0	0.0000	0	0.0000	0	0.0000	-1,715	-10.0000
INTELLIGENT CROSS LLC (INCR)	5.40	0.00	0.00	0.00	5.69	0	0.0000	0	0.0000	0	0.0000	-841	-8.0000
Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO)	5.24	0.00	0.13	0.12	5.53	0	0.0000	0	0.0000	0	0.0000	-154	-10.0000
EBX LLC (EBXL)	5.22	0.00	0.00	0.00	5.50	0	0.0000	0	0.0000	0	0.0000	-152	-6.6404
Morgan Stanley & Company LLC (MSCO)	5.20	0.00	4.57	3.37	5.44	0	0.0000	-3,233	-26.1711	-20	-27.4334	-1,903	-20.0000
Credit Suisse Securities (USA) LLC (FBCO)	5.13	0.00	11.92	10.24	5.30	0	0.0000	-6,852	-21.8657	-47	-21.9326	-261	-10.0000
JP Morgan Securities LLC (JPMS)	4.85	0.00	0.00	0.00	5.11	0	0.0000	0	0.0000	0	0.0000	-424	-12.0000
UBS Securities LLC - ATS (UBSA)	4.70	0.00	0.00	0.00	4.96	0	0.0000	0	0.0000	0	0.0000	-1,607	-10.0000
NYSE Arca (ARCA)	2.64	0.00	0.05	0.32	2.78	0	0.0000	-1	-29.3750	-14	-24.2588	-583	-20.8270
Cboe BZX U.S. Equities Exchange (BATS)	2.64	0.00	0.05	0.88	2.78	0	0.0000	-117	-7.7406	332	11.6025	-271	-28.5279
Cboe EDGX US Equities Exchange (EDGX)	2.64	0.00	0.05	0.83	2.78	0	0.0000	-4	-20.3288	327	27.8130	-287	-27.5458
Members Exchange (MEMX)	2.63	0.00	0.05	0.46	2.77	0	0.0000	-1	-15.1711	14	19.5085	-60	-28.9805
Cboe BYX U.S. Equities Exchange (YBAT)	2.63	0.00	0.00	0.00	2.77	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Cboe EDGA U.S. Equities Exchange (EDGA)	2.63	0.00	0.03	0.12	2.77	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Nasdaq BX (NQBX)	2.63	0.00	0.03	0.12	2.77	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Barclays Capital, Inc. (LEHM)	2.56	0.00	0.00	0.00	2.70	0	0.0000	0	0.0000	0	0.0000	-591	-10.0000
Citadel Securities LLC (CDRG)	2.09	41.75	34.95	35.44	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)
VIRTU Americas LLC (KCGM)	1.97	0.00	11.82	9.55	1.97	0	0.0000	-7,436	-22.9248	-75	-23.1612	-44	-10.0000
BNP Paribas Securities Corp. (BNPX)	1.94	0.00	0.03	0.05	2.05	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Material Aspects:

Investors Exchange (IEXG):

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INTELLIGENT CROSS LLC (INCR):

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Orders routed further by Morgan Stanley & Co. LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by Morgan Stanley & Co. LLC for routing these orders are passed back to NFS plus an additional router fee.

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JP Morgan Securities LLC (JPMS):

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NYSE Arca (ARCA):

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Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf

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Cboe BZX U.S. Equities Exchange (BATS):

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Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists:

https://www.cboe.com/us/equities/membership/fee_schedule/bzx/

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe EDGX US Equities Exchange (EDGX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists:

https://www.cboe.com/us/equities/membership/fee_schedule/edgx/

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Members Exchange (MEMX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: <https://info.memxtrading.com/fee-schedule/>

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe BYX U.S. Equities Exchange (YBAT):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

NFS orders sent to Cboe BYX U.S. Equities Exchange usually interact in ways that do not incur economics including but not limited to: removing non-displayed orders or removing mid-point peg liquidity

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists:

https://www.cboe.com/us/equities/membership/fee_schedule/byx/

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe EDGA U.S. Equities Exchange (EDGA):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

NFS orders sent to Cboe EDGA US Equities Exchange usually interact in ways that do not incur economics including but not limited to: removing non-displayed orders or removing mid-point peg liquidity

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists:

https://www.cboe.com/us/equities/membership/fee_schedule/edga/

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Nasdaq BX (NBX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://nasdaqtrader.com/Trader.aspx?id=bx_pricing

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Barclays Capital, Inc. (LEHM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Citadel Securities LLC (CDRG):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

VIRTU Americas LLC (KCGM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by VIRTU Americas LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by VIRTU Americas LLC for routing these orders are passed back to NFS plus an additional router fee.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

BNP Paribas Securities Corp. (BNPX):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

January 2022

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
99.98	0.00	0.00	0.00	100.00

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)
NYSE Arca Options (ARCA)	34.89	0.00	0.00	0.00	34.89	0	0.0000	0	0.0000	0	0.0000	8,518	28.7200
NASDAQ Options Market (NSDQ)	25.74	0.00	0.00	0.00	25.74	0	0.0000	0	0.0000	0	0.0000	-61	-0.6200
Cboe BZX Options Exchange, Inc. (BATS)	21.37	0.00	0.00	0.00	21.37	0	0.0000	0	0.0000	0	0.0000	1,770	18.1400
Cboe Options Exchange (CBOE)	14.76	0.00	0.00	0.00	14.76	0	0.0000	0	0.0000	0	0.0000	-1,880	-23.6600

Material Aspects:

NYSE Arca Options (ARCA):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf

NASDAQ Options Market (NSDQ):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-options-7>

Cboe BZX Options Exchange, Inc. (BATS):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/options/membership/fee_schedule/bzx/

Cboe Options Exchange (CBOE):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. NFS does not negotiate, set rates for, or solicit payment for order flow on options orders. However, NFS may generate rebates (e.g. Marketing Fees) associated with the routing of orders to CBOE options exchange. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/options/membership/fee_schedule

February 2022

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
8.54	69.86	27.17	2.79	0.18

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)	10.61	40.65	29.64	23.64	0.06	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Investors Exchange (IEXG)	9.65	0.00	0.01	0.00	13.16	0	0.0000	0	0.0000	0	0.0000	-925	-9.0000
National Financial Services LLC (XSTM)	8.10	0.00	0.00	0.00	11.05	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	7.76	29.30	27.82	22.18	0.02	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	5.11	20.81	0.25	0.35	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Credit Suisse Securities (USA) LLC (FBCO)	4.80	0.00	22.99	28.63	5.84	0	0.0000	-6,059	-22.6458	-54	-21.9638	-134	-10.0000
NASDAQ Execution Services, LLC (NSDQ)	4.77	0.01	0.09	0.64	6.49	-216	-13.5000	-1,025	-13.5000	51	32.2213	-257	-15.6510
Goldman, Sachs & Co. (GSCO)	4.62	0.00	0.00	0.00	6.29	0	0.0000	0	0.0000	0	0.0000	-568	-10.0000
EBX LLC (EBXL)	4.14	0.00	0.00	0.00	5.65	0	0.0000	0	0.0000	0	0.0000	-60	-6.5410
Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO)	4.14	0.00	0.00	0.00	5.64	0	0.0000	0	0.0000	0	0.0000	-52	-10.0000
INTELLIGENT CROSS LLC (INCR)	4.13	0.00	0.00	0.00	5.62	0	0.0000	0	0.0000	0	0.0000	-228	-8.0000
UBS Securities LLC - ATS (UBSA)	4.09	0.00	0.00	0.00	5.58	0	0.0000	0	0.0000	0	0.0000	-492	-10.0000
Morgan Stanley & Company LLC (MSCO)	3.70	0.00	5.31	5.74	4.90	0	0.0000	-1,471	-26.7636	-16	-30.3398	-1,002	-20.0000
JP Morgan Securities LLC (JPMS)	3.65	0.00	0.00	0.00	4.98	0	0.0000	0	0.0000	0	0.0000	-152	-12.0000
Barclays Capital, Inc. (LEHM)	2.85	0.00	0.00	0.00	3.89	0	0.0000	0	0.0000	0	0.0000	-194	-10.0000
G1 Execution Services, LLC (ETMM)	1.66	6.74	0.08	0.08	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)
VIRTU Americas LLC (KCGM)	1.47	0.00	13.62	17.48	1.59	0	0.0000	-3,195	-23.7690	-47	-24.3774	-11	-10.0000
NYSE Arca (ARCA)	1.24	0.00	0.00	0.00	1.69	0	0.0000	0	0.0000	0	0.0000	-73	-27.1010
Cboe BZX U.S. Equities Exchange (BATS)	1.23	0.00	0.00	0.00	1.68	0	0.0000	0	0.0000	0	0.0000	-69	-29.8281
Cboe EDGX US Equities Exchange (EDGX)	1.23	0.00	0.00	0.35	1.68	0	0.0000	0	0.0000	79	32.0000	-52	-29.7723
BNP Paribas Securities Corp. (BNPX)	1.23	0.00	0.00	0.00	1.67	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Material Aspects:

Citadel Securities LLC (CDRG):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market." NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

Investors Exchange (IEXG):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable.

Visit exchange websites directly for detailed price lists: <https://exchange.iex.io/resources/trading/fee-schedule/>

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

National Financial Services LLC (XSTM):

Orders may be routed to NFS's Alternative Trading System, CrossStream. NFS is not charged an explicit fee for orders executed in CrossStream but may receive a trading commission from the contra-side party against which the order executed.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

VIRTU Americas, LLC (NITE):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

Jane Street Capital, LLC (JNST):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

Credit Suisse Securities (USA) LLC (FBCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by Credit Suisse Securities (USA) LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by Credit Suisse Securities (USA) LLC for routing these orders are passed back to NFS plus an additional router fee.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NASDAQ Execution Services, LLC (NSDQ):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: <https://nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Goldman, Sachs & Co. (GSCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

EBX LLC (EBXL):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders may be routed through EBX LLC in which NFS or its affiliates have an interest.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

INTELLIGENT CROSS LLC (INCR):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

UBS Securities LLC - ATS (UBSA):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Morgan Stanley & Company LLC (MSCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC. Orders routed further by Morgan Stanley & Co. LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable. Execution fees and rebates incurred by Morgan Stanley & Co. LLC for routing these orders are passed back to NFS plus an additional router fee. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

JP Morgan Securities LLC (JPMS):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Barclays Capital, Inc. (LEHM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

G1 Execution Services, LLC (ETMM):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market." NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

VIRTU Americas LLC (KCGM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC. Orders routed further by VIRTU Americas LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable. Execution fees and rebates incurred by VIRTU Americas LLC for routing these orders are passed back to NFS plus an additional router fee. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NYSE Arca (ARCA):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges. Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges. Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange. Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe BZX U.S. Equities Exchange (BATS):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges. Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges. Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange. Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/equities/membership/fee_schedule/bzx/ Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe EDGX US Equities Exchange (EDGX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges. Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges. Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange. Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/equities/membership/fee_schedule/edgx/ Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

BNP Paribas Securities Corp. (BNPX):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems. Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

February 2022

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
5.23	39.10	46.47	13.98	0.45

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)
Investors Exchange (IEXG)	7.87	0.00	0.02	0.56	8.46	0	0.0000	0	0.0000	0	0.0000	-867	-9.0000
NASDAQ Execution Services, LLC (NSDQ)	7.28	0.05	0.08	1.02	7.81	-716	-13.5000	-120	-13.5000	502	29.6851	-1,606	-21.3256
National Financial Services LLC (XSTM)	7.08	0.00	0.00	0.00	7.61	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Credit Suisse Securities (USA) LLC (FBCO)	5.52	0.00	10.02	7.77	5.80	0	0.0000	-5,535	-22.5505	-40	-18.3421	-279	-10.0000
Goldman, Sachs & Co. (GSCO)	5.49	0.00	0.00	0.00	5.90	0	0.0000	0	0.0000	0	0.0000	-1,305	-10.0000
INTELLIGENT CROSS LLC (INCR)	5.47	0.00	0.00	0.00	5.87	0	0.0000	0	0.0000	0	0.0000	-640	-8.0000
EBX LLC (EBXL)	5.34	0.00	0.00	0.00	5.74	0	0.0000	0	0.0000	0	0.0000	-128	-6.6301
Morgan Stanley & Company LLC (MSCO)	5.22	0.00	3.05	2.53	5.57	0	0.0000	-1,623	-25.7499	-4	-28.8115	-1,709	-20.0000
Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO)	5.09	0.00	0.00	0.00	5.47	0	0.0000	0	0.0000	0	0.0000	-106	-10.0000
UBS Securities LLC - ATS (UBSA)	5.03	0.00	0.00	0.00	5.41	0	0.0000	0	0.0000	0	0.0000	-1,265	-10.0000
JP Morgan Securities LLC (JPMS)	4.74	0.00	0.00	0.00	5.10	0	0.0000	0	0.0000	0	0.0000	-272	-12.0000
Barclays Capital, Inc. (LEHM)	3.13	0.00	0.00	0.00	3.36	0	0.0000	0	0.0000	0	0.0000	-355	-10.0000
Citadel Securities LLC (CDRG)	2.82	40.95	39.29	39.03	0.01	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NYSE Arca (ARCA)	2.30	0.00	0.00	0.27	2.47	0	0.0000	0	0.0000	1	16.6666	-760	-19.9084
Cboe EDGX US Equities Exchange (EDGX)	2.30	0.00	0.00	0.98	2.46	0	0.0000	0	0.0000	650	31.9936	-331	-29.3515
Cboe BZX U.S. Equities Exchange (BATS)	2.30	0.00	0.00	1.24	2.46	0	0.0000	0	0.0000	411	16.0046	-483	-29.5151

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)
Members Exchange (MEMX)	2.28	0.00	0.01	0.50	2.45	0	0.0000	0	0.0000	109	36.9693	-123	-28.9720
Cboe BYX U.S. Equities Exchange (YBAT)	2.28	0.00	0.00	0.00	2.45	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Cboe EDGA U.S. Equities Exchange (EDGA)	2.28	0.00	0.00	0.00	2.45	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Nasdaq BX (NBX)	2.28	0.00	0.00	0.00	2.45	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	2.12	28.76	38.41	38.48	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
BNP Paribas Securities Corp. (BNPX)	1.89	0.00	0.00	0.00	2.03	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Material Aspects:

Investors Exchange (IEXG):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable.

Visit exchange websites directly for detailed price lists: <https://exchange.iex.io/resources/trading/fee-schedule/>

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NASDAQ Execution Services, LLC (NSDQ):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: <https://nasdaqtrader.com/Trader.aspx?id=PriceListTrading2>

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

National Financial Services LLC (XSTM):

Orders may be routed to NFS's Alternative Trading System, CrossStream. NFS is not charged an explicit fee for orders executed in CrossStream but may receive a trading commission from the contra-side party against which the order executed.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

Credit Suisse Securities (USA) LLC (FBCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by Credit Suisse Securities (USA) LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by Credit Suisse Securities (USA) LLC for routing these orders are passed back to NFS plus an additional router fee.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Goldman, Sachs & Co. (GSCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

INTELLIGENT CROSS LLC (INCR):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

EBX LLC (EBXL):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders may be routed through EBX LLC in which NFS or its affiliates have an interest.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Morgan Stanley & Company LLC (MSCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.
NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.
Orders routed further by Morgan Stanley & Co. LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.
Execution fees and rebates incurred by Morgan Stanley & Co. LLC for routing these orders are passed back to NFS plus an additional router fee.
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

UBS Securities LLC - ATS (UBSA):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

JP Morgan Securities LLC (JPMS):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Barclays Capital, Inc. (LEHM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Citadel Securities LLC (CDRG):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."
NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

NYSE Arca (ARCA):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges
Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.
Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.
Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe EDGX US Equities Exchange (EDGX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges
Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.
Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.
Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/equities/membership/fee_schedule/edgx/
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe BZX U.S. Equities Exchange (BATS):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges
Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.
Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.
Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/equities/membership/fee_schedule/bzx/
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Members Exchange (MEMX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges
Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.
Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.
Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: <https://info.memxtrading.com/fee-schedule/>
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe BYX U.S. Equities Exchange (YBAT):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges
NFS orders sent to Cboe BYX U.S. Equities Exchange usually interact in ways that do not incur economics including but not limited to: removing non-displayed orders or removing mid-point peg liquidity
Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/equities/membership/fee_schedule/byx/
Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Cboe EDGA U.S. Equities Exchange (EDGA):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

NFS orders sent to Cboe EDGA US Equities Exchange usually interact in ways that do not incur economics including but not limited to: removing non-displayed orders or removing mid-point peg liquidity

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists:

https://www.cboe.com/us/equities/membership/fee_schedule/edga/

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Nasdaq BX (NQBX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://nasdaqtrader.com/Trader.aspx?id=bx_pricing

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

VIRTU Americas, LLC (NITE):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

BNP Paribas Securities Corp. (BNPX):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

February 2022

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
99.99	0.00	0.00	0.00	100.00

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)
NYSE Arca Options (ARCA)	41.87	0.00	0.00	0.00	41.87	0	0.0000	0	0.0000	0	0.0000	7,661	25.9900
NASDAQ Options Market (NSDQ)	23.08	0.00	0.00	0.00	23.08	0	0.0000	0	0.0000	0	0.0000	-949	-10.7500
Cboe Options Exchange (CBOE)	17.36	0.00	0.00	0.00	17.36	0	0.0000	0	0.0000	0	0.0000	-2,095	-22.6100
Cboe BZX Options Exchange, Inc. (BATS)	17.14	0.00	0.00	0.00	17.14	0	0.0000	0	0.0000	0	0.0000	4,035	31.9500

Material Aspects:

NYSE Arca Options (ARCA):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, and may include tiers based on volume thresholds.

Visit exchange websites directly for detailed price lists: https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf

NASDAQ Options Market (NSDQ):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-options-7>

Cboe Options Exchange (CBOE):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. NFS does not negotiate, set rates for, or solicit payment for order flow on options orders. However, NFS may generate rebates (e.g. Marketing Fees) associated with the routing of orders to CBOE options exchange. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/options/membership/fee_schedule/

Cboe BZX Options Exchange, Inc. (BATS):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/options/membership/fee_schedule/bzx

March 2022

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
8.72	71.63	25.72	2.42	0.23

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)	10.74	37.69	25.34	11.39	0.08	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Investors Exchange (IEXG)	9.95	0.00	0.02	10.80	13.97	0	0.0000	0	0.0000	0	0.0000	-1,082	-9.0000
National Financial Services LLC (XSTM)	8.41	0.00	0.00	0.00	11.91	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	7.29	25.27	23.31	10.25	0.02	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Jane Street Capital, LLC (JNST)	6.16	22.72	0.09	0.36	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Credit Suisse Securities (USA) LLC (FBCO)	4.99	0.00	26.84	19.04	6.28	0	0.0000	-8,398	-23.1996	-79	-20.9202	-154	-10.0000
Goldman, Sachs & Co. (GSCO)	4.95	0.00	0.00	0.00	7.01	0	0.0000	0	0.0000	0	0.0000	-858	-10.0000
NASDAQ Execution Services, LLC (NSDQ)	4.43	0.01	0.08	5.32	6.21	-2,728	-13.5003	-256	-13.5087	65	27.0597	-311	-16.7119
UBS Securities LLC - ATS (UBSA)	4.37	0.00	0.00	0.00	6.19	0	0.0000	0	0.0000	0	0.0000	-738	-10.0000
EBX LLC (EBXL)	4.24	0.00	0.00	0.00	6.01	0	0.0000	0	0.0000	0	0.0000	-58	-6.7242
INTELLIGENT CROSS LLC (INCR)	4.12	0.00	0.00	0.00	5.83	0	0.0000	0	0.0000	0	0.0000	-245	-8.0000

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)
Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO)	4.05	0.00	0.00	0.00	5.73	0	0.0000	0	0.0000	0	0.0000	-39	-10.0000
JP Morgan Securities LLC (JPMS)	3.57	0.00	0.00	0.00	5.06	0	0.0000	0	0.0000	0	0.0000	-196	-12.0000
G1 Execution Services, LLC (ETMM)	3.32	12.25	0.08	0.12	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Barclays Capital, Inc. (LEHM)	3.18	0.00	0.00	0.00	4.51	0	0.0000	0	0.0000	0	0.0000	-291	-10.0000
Morgan Stanley & Company LLC (MSCO)	1.74	0.00	6.56	4.39	2.27	0	0.0000	-1,966	-26.4871	-5	-30.2587	-666	-20.0000
VIRTU Americas LLC (KCGM)	1.36	0.00	17.34	13.12	1.40	0	0.0000	-3,331	-23.0803	-85	-24.0515	-15	-10.0000
Cboe EDGX US Equities Exchange (EDGX)	1.20	0.00	0.00	10.97	1.57	0	0.0000	0	0.0000	113	27.7878	-52	-30.0000
NYSE Arca (ARCA)	1.16	0.00	0.00	4.51	1.60	0	0.0000	0	0.0000	34	20.6901	-60	-19.6819
Members Exchange (MEMX)	1.14	0.00	0.00	4.53	1.56	0	0.0000	0	0.0000	36	20.7809	-12	-29.9750

Material Aspects:

Citadel Securities LLC (CDRG):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market." NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

Investors Exchange (IEXG):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable.

Visit exchange websites directly for detailed price lists: <https://exchange.iex.io/resources/trading/fee-schedule/>

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

National Financial Services LLC (XSTM):

Orders may be routed to NFS's Alternative Trading System, CrossStream. NFS is not charged an explicit fee for orders executed in CrossStream but may receive a trading commission from the contra-side party against which the order executed.

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NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

VIRTU Americas, LLC (NITE):

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Jane Street Capital, LLC (JNST):

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Credit Suisse Securities (USA) LLC (FBCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by Credit Suisse Securities (USA) LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by Credit Suisse Securities (USA) LLC for routing these orders are passed back to NFS plus an additional router fee.

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NASDAQ Execution Services, LLC (NSDQ):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

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UBS Securities LLC - ATS (UBSA):

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EBX LLC (EBXL):

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Orders may be routed through EBX LLC in which NFS or its affiliates have an interest.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

INTELLIGENT CROSS LLC (INCR):

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Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO):

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JP Morgan Securities LLC (JPMS):

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G1 Execution Services, LLC (ETMM):

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NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

Barclays Capital, Inc. (LEHM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

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Morgan Stanley & Company LLC (MSCO):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by Morgan Stanley & Co. LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by Morgan Stanley & Co. LLC for routing these orders are passed back to NFS plus an additional router fee.

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VIRTU Americas LLC (KCGM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by VIRTU Americas LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by VIRTU Americas LLC for routing these orders are passed back to NFS plus an additional router fee.

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Cboe EDGX US Equities Exchange (EDGX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

Rebates are generally for limit orders required to be displayed on exchange per the SEC Limit Order Display Rule but may also include marketable orders executed on certain exchanges.

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https://www.cboe.com/us/equities/membership/fee_schedule/edgx/

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NYSE Arca (ARCA):

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Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

Members Exchange (MEMX):

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March 2022

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
5.02	43.96	42.51	13.21	0.32

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)
Investors Exchange (IEXG)	8.50	0.00	0.89	15.00	9.16	0	0.0000	0	0.0000	0	0.0000	-1,744	-9.0000
National Financial Services LLC (XSTM)	7.97	0.00	0.00	0.00	8.69	0	0.0000	0	0.0000	0	0.0000	0	0.0000
NASDAQ Execution Services, LLC (NSDQ)	7.30	0.05	0.93	5.30	7.91	-688	-13.5000	-498	-11.9304	118	5.8812	-2,597	-22.3917
Goldman, Sachs & Co. (GSCO)	5.97	0.00	0.00	0.00	6.51	0	0.0000	0	0.0000	0	0.0000	-1,944	-10.0000
Credit Suisse Securities (USA) LLC (FBCO)	5.82	0.00	16.08	6.84	6.18	0	0.0000	-9,190	-22.3088	-86	-23.0571	-298	-10.0000
INTELLIGENT CROSS LLC (INCR)	5.80	0.00	0.00	0.00	6.32	0	0.0000	0	0.0000	0	0.0000	-787	-8.0000
EBX LLC (EBXL)	5.55	0.00	0.00	0.00	6.05	0	0.0000	0	0.0000	0	0.0000	-193	-6.5038
Merrill Lynch, Pierce, Fenner & Smith Inc. (MLCO)	5.36	0.00	0.00	0.00	5.85	0	0.0000	0	0.0000	0	0.0000	-142	-10.0000
UBS Securities LLC - ATS (UBSA)	5.36	0.00	0.00	0.00	5.84	0	0.0000	0	0.0000	0	0.0000	-1,529	-10.0000
JP Morgan Securities LLC (JPMS)	5.06	0.00	0.00	0.00	5.52	0	0.0000	0	0.0000	0	0.0000	-667	-12.0000
Barclays Capital, Inc. (LEHM)	3.18	0.00	0.00	0.00	3.47	0	0.0000	0	0.0000	0	0.0000	-617	-10.0000
Citadel Securities LLC (CDRG)	2.94	37.82	30.76	13.13	0.01	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)
Morgan Stanley & Company LLC (MSCO)	2.36	0.00	5.16	2.20	2.52	0	0.0000	-3,346	-25.6930	-15	-22.4686	-1,005	-20.0000
Cboe EDGX US Equities Exchange (EDGX)	2.22	0.00	0.65	9.76	2.35	0	0.0000	-93	-20.7842	496	20.1913	-355	-28.3210
Members Exchange (MEMX)	2.21	0.00	0.36	11.71	2.33	0	0.0000	-25	-24.1621	262	16.1986	-186	-26.9627
Cboe BZX U.S. Equities Exchange (BATS)	2.21	0.00	0.41	7.22	2.35	0	0.0000	-110	-17.4311	373	14.0235	-962	-26.7689
NYSE Arca (ARCA)	2.20	0.00	0.37	3.90	2.37	0	0.0000	-4	-1.5003	52	4.7754	-1,043	-22.3302
Cboe BYX U.S. Equities Exchange (YBAT)	2.14	0.00	0.00	0.00	2.33	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Cboe EDGA U.S. Equities Exchange (EDGA)	2.14	0.00	0.00	0.00	2.33	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Nasdaq BX (NBX)	2.14	0.00	0.00	0.00	2.33	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas, LLC (NITE)	2.03	25.06	29.38	12.44	0.00	0	0.0000	0	0.0000	0	0.0000	0	0.0000
VIRTU Americas LLC (KCGM)	1.68	0.00	13.12	6.11	1.69	0	0.0000	-7,696	-23.5032	-106	-22.0842	-56	-10.0000

Material Aspects:

Investors Exchange (IEXG):

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JP Morgan Securities LLC (JPMS):

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Citadel Securities LLC (CDRG):

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Morgan Stanley & Company LLC (MSCO):

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Cboe BZX U.S. Equities Exchange (BATS):

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Cboe BYX U.S. Equities Exchange (YBAT):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

NFS orders sent to Cboe BYX U.S. Equities Exchange usually interact in ways that do not incur economics including but not limited to: removing non-displayed orders or removing mid-point peg liquidity

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists:

https://www.cboe.com/us/equities/membership/fee_schedule/byx/

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Cboe EDGA U.S. Equities Exchange (EDGA):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

NFS orders sent to Cboe EDGA US Equities Exchange usually interact in ways that do not incur economics including but not limited to: removing non-displayed orders or removing mid-point peg liquidity

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists:

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Nasdaq BX (NBX):

NFS may be charged fees or receive rebates for orders executed on specific equities exchanges

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Economics associated with Market orders, Marketable Limit orders and Other orders may represent a variety of different interaction types on the exchange, including but not limited to: participating in the exchange's opening or closing auction; displaying limit orders on the exchange; and removing liquidity on the exchange. The per-share economics described on this report represent a mix of interactions on the exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, and are non-negotiable. Visit exchange websites directly for detailed price lists: https://nasdaqtrader.com/Trader.aspx?id=bx_pricing

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

VIRTU Americas, LLC (NITE):

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

NFS does not accept payment for order flow, rebates, or other remuneration from this venue.

VIRTU Americas LLC (KCGM):

NFS may be charged fees for orders executed in Alternative Trading Systems. These fees are agreed upon between NFS and the Alternative Trading Systems or directly set by the Alternative Trading Systems.

NFS may route orders for additional routing to Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. LLC, and VIRTU Americas LLC.

Orders routed further by VIRTU Americas LLC are sent to exchanges which incur fees and rebates based on the exchange rules, subject to SEC approval, and are non-negotiable.

Execution fees and rebates incurred by VIRTU Americas LLC for routing these orders are passed back to NFS plus an additional router fee.

Orders to each venue are classified according to the parameters of the child order routed to the venue, not the parent order. For example, a customer market order routed to an ATS as a mid-point peg order will be classified as "Other," not as "Market."

March 2022

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
99.98	0.00	0.00	0.00	100.00

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)
NYSE Arca Options (ARCA)	44.11	0.00	0.00	0.00	44.11	0	0.0000	0	0.0000	0	0.0000	11,074	28.9700
NASDAQ Options Market (NSDQ)	21.20	0.00	0.00	0.00	21.20	0	0.0000	0	0.0000	0	0.0000	291	2.7800
Cboe BZX Options Exchange, Inc. (BATS)	19.89	0.00	0.00	0.00	19.89	0	0.0000	0	0.0000	0	0.0000	5,447	33.9200

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)
Cboe Options Exchange (CBOE)	12.97	0.00	0.00	0.00	12.97	0	0.0000	0	0.0000	0	0.0000	-2,012	-23.4500

Material Aspects:

NYSE Arca Options (ARCA):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf

NASDAQ Options Market (NSDQ):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-options-7>

Cboe BZX Options Exchange, Inc. (BATS):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges. Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds. Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/options/membership/fee_schedule/bzx/

Cboe Options Exchange (CBOE):

NFS may be charged fees or receive rebates for orders executed on specific options exchanges.

NFS does not negotiate, set rates for, or solicit payment for order flow on options orders. However, NFS may generate rebates (e.g. Marketing Fees) associated with the routing of orders to CBOE options exchange.

Fees and rebates are set by exchange rules, subject to SEC approval, are non-negotiable, and may include tiers based on volume thresholds.

Visit exchange websites directly for detailed price lists: https://www.cboe.com/us/options/membership/fee_schedule/