Merrill Lynch Pierce Fenner & Smith Inc. - Held NMS Stocks and Options Order Routing Public Report

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3rd Quarter, 2023

July 2023

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	42.76	2.91	52.88	1.44

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)
BofA Securities, Inc.	80.26	62.52	84.47	93.88	98.15	-2,201.41	-0.1644	-9,315.95	-3.5395	103,790.08	21.4695	758.47	2.5621
CITADEL SECURITIES LLC	4.74	11.05	0.15	0.00	0.76	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Virtu Americas, LLC	3.49	8.13	0.10	0.00	0.62	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Two Sigma Securities, LLC	2.51	5.85	0.08	0.00	0.36	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC.	2.42	0.58	8.65	3.63	0.05	-374.05	-3.6416	-1,068.82	-5.9246	1,187.66	17.4419	-0.40	-2.6316
Jane Street Capital	1.80	4.21	0.06	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
UBS Securities, LLC	1.59	3.72	0.06	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
G1 Execution Services, LLC	1.56	3.65	0.05	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
The Nasdaq Stock Market LLC	1.44	0.29	5.01	2.20	0.03	-186.27	-3.9629	-907.04	-12.4467	1,157.43	24.2809	-0.07	-3.4000
MEMX LLC	0.04	0.00	0.34	0.06	0.00	0.00	0.0000	-188.83	-29.2237	103.24	19.9663	0.00	0.0000

Material Aspects:

BofA Securities, Inc.:

Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") is a broker-dealer that executes its customer orders in National Market System ("NMS") securities as agent. MLPF&S routes the bulk of its customer held orders in NMS stocks and NMS securities that are option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, leveraging BofAS's connectivity and other infrastructure. As further described below, BofAS then may either further route, as agent, MLPF&S customer orders to other venues for execution or, with respect to MLPF&S's brokerage customer orders in NMS stocks, BofAS may execute such MLPF&S customer orders on a principal basis. BofAS acts as a registered market maker in numerous Nasdaq and other exchange-listed securities and may execute customer orders in such securities on a principal basis. BofAS also may principally commit capital to facilitate customer transactions or serve as the contra-side to customer orders executed internally through one or more alternative trading systems operated by BofAS. BofAS, however, does not transact on a principal basis with respect to any orders executed on behalf of MLPF&S investment advisory customers or with respect to any MLPF&S customer orders in option contracts. BofAS stands to realize 100% of any profits or losses generated when BofAS trades as agent or principal with respect to MLPF&S customer orders. In addition, BofAS may route MLPF&S customer orders to other venues including but not limited to national securities exchanges, multi-lateral trading facilities, other alternative trading systems or external liquidity providers, or broker-dealers. For information about BofAS's routing of its customer orders in NMS securities and the material aspects of its relationships with its identified trading venues, see BofAS's quarterly public disclosure, available at http://public.s3.com/rule606/bofas. When BofAS routes orders to certain SEC-registered securities exchanges, BofAS pays fees and receives credits in accordance with that market center's published fee schedule filed with the SEC, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by a market center to BofAS over a period of time will exceed the charges assessed. Likewise, in some cases, the charges over a period of time will exceed the credits. BofAS passes through to MLPF&S the net credit or net charge attributable to MLPF&S customer orders. Aside from holdings that BofAS may acquire from time to time as part of its ordinary market making, block positioning, client facilitation and related hedging activities, an MLPF&S affiliate under common control may acquire equity stakes in market centers as part of a strategic investment. In this regard, an MLPF&S affiliate owns a minority equity investment stake in the following market centers and therefore stands to participate as a shareholder/investor in the profits that each market center realizes in part from the execution of securities transactions, including the execution of MLPF&S customer orders: Members Exchange (MEMX); CME; Tokyo Financial Exchange; JapanNext; Borsa Instanbul (BIST); Xpansiv; Kezar Trading (LeveL and Luminex); Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; PureStream Trading Technologies, Inc.; Equilend; Zanbato; LedgerEdge; and Liquidity Match (FXSpotStream). BofAS or an affiliate also own an equity stake in Miami International Holdings, Inc., which is the parent company of the MIAX family of options exchanges, including MIAX Pearl, LLC and MIAX Emerald, LLC. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the United States

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

Virtu Americas, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

Two Sigma Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

NEW YORK STOCK EXCHANGE, INC.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf.

Jane Street Capital:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

UBS Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

G1 Execution Services, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

The Nasdaq Stock Market LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-7.

MEMX LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

July 2023

Non-S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	39.52	5.04	53.69	1.74

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)
BofA Securities, Inc.	86.17	71.83	89.53	96.00	99.08	-9,325.60	-0.1760	-160,750.90	-6.6637	435,330.44	17.0719	-1,945.82	-1.1571
CITADEL SECURITIES LLC	3.32	8.36	0.14	0.00	0.32	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Virtu Americas, LLC	2.42	6.10	0.11	0.00	0.13	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Two Sigma Securities, LLC	1.77	4.44	0.07	0.00	0.29	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Jane Street Capital	1.25	3.17	0.05	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
UBS Securities, LLC	1.10	2.78	0.05	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
G1 Execution Services, LLC	1.09	2.76	0.05	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE Arca, Inc.	0.92	0.19	3.28	1.26	0.06	-1,694.12	-15.1688	-4,837.99	-16.8165	1,259.64	19.9189	-7.45	-9.4786
NEW YORK STOCK EXCHANGE, INC.	0.80	0.15	2.17	1.18	0.02	-535.68	-5.7551	-4,241.18	-14.8631	2,980.42	16.4584	0.00	0.0000
The Nasdaq Stock Market LLC	0.76	0.14	2.28	1.09	0.04	-286.36	-3.9372	-5,648.36	-18.7962	4,243.92	26.6598	-2.38	-4.3182

Material Aspects:

BofA Securities, Inc.:
Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") is a broker-dealer that executes its customer orders in National Market System ("NMS") securities as agent. MLPF&S routes the bulk of its customer held orders in NMS stocks and NMS securities that are option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, leveraging BofAS's connectivity and other infrastructure. As further described below, BofAS then may either further route, as agent, MLPF&S customer orders to other venues for execution or, with respect to MLPF&S's brokerage customer orders in NMS stocks, BofAS may execute such MLPF&S customer orders on a principal basis. BofAS acts as a registered market maker in numerous Nasdaq and other exchange-listed securities and may execute customer orders in such securities on a principal basis. BofAS also may principally commit capital to facilitate customer transactions or serve as the contra-side to customer orders executed internally through one or more alternative trading systems operated by BofAS. BofAS, however, does not transact on a principal basis with respect to any orders executed on behalf of MLPF&S investment advisory customers or with respect to any MLPF&S customer orders in option contracts. BofAS stands to realize 100% of any profits or losses generated when BofAS trades as agent or principal with respect to MLPF&S customer orders. In addition, BofAS may route MLPF&S customer orders to other venues including but not limited to national securities exchanges, multi-lateral trading facilities, other alternative trading systems or external liquidity providers, or broker-dealers. For information about BofAS's routing of its customer orders in NMS securities and the material aspects of its relationships with its identified trading venues, see BofAS's quarterly public disclosure, available at http://public.s3.com/rule606/bofas. When BofAS routes orders to certain SEC-registered securities exchanges, BofAS pays fees and receives credits in accordance with that market center's published fee schedule filed with the SEC, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by a market center to BofAS over a period of time will exceed the charges assessed. Likewise, in some cases, the charges over a period of time will exceed the credits. BofAS passes through to MLPF&S the net credit or net charge attributable to MLPF&S customer orders. Aside from holdings that BofAS may acquire from time to time as part of its ordinary market making, block positioning, client facilitation and related hedging activities, an MLPF&S affiliate under common control may acquire equity stakes in market centers as part of a strategic investment. In this regard, an MLPF&S affiliate owns a minority equity investment stake in the following market centers and therefore stands to participate as a shareholder/investor in the profits that each market center realizes in part from the execution of securities transactions, including the execution of MLPF&S customer orders: Members Exchange (MEMX); CME; Tokyo Financial Exchange; JapanNext; Borsa Instanbul (BIST); Xpansiv; Kezar Trading (LeveL and Luminex); Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; PureStream Trading Technologies, Inc.; Equilend; Zanbato; LedgerEdge; and Liquidity Match (FXSpotStream). BofAS or an affiliate also own an equity stake in Miami International Holdings, Inc., which is the parent company of the MIAX family of options exchanges, including MIAX Pearl, LLC and MIAX Emerald, LLC. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the United States

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Virtu Americas, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Two Sigma Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Jane Street Capital:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

UBS Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

G1 Execution Services, LLC:

MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

NYSE Arca, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf

NEW YORK STOCK EXCHANGE, INC.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf.

The Nasdaq Stock Market LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-7.

July 2023

Options

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	3.76	20.38	56.83	19.02

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)
NYSE ARCA OPTIONS	30.51	0.00	7.13	50.55	1.69	0.00	0.0000	4,751.21	3.2276	588,251.92	46.5757	356.70	9.8809
Nasdaq PHLX LLC	22.12	0.01	3.00	36.06	5.33	0.00	0.0000	-426.98	-0.7663	-46.19	-0.0325	-10.42	-0.1537
Dash Financial Technologies	7.75	29.35	4.24	1.90	24.74	0.00	0.0000	11,053.88	7.5326	10,053.55	11.9605	2,294.32	3.3198
CITADEL SECURITIES LLC	7.49	43.92	11.85	0.55	16.35	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Nasdaq ISE, LLC	7.06	0.00	1.80	0.76	32.91	0.00	0.0000	-3,678.36	-7.8443	18,671.06	77.8317	122.38	17.8397
Cboe Exchange, Inc.	5.99	0.00	9.41	4.65	7.50	-5.00	-50.0000	-13,275.25	-6.1705	-11,177.73	-7.6147	-114.12	-0.1796
Global Execution Brokers, LP	5.46	26.71	13.61	0.72	6.67	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
The NASDAQ Options Market LLC	2.82	0.00	4.16	3.46	0.03	0.00	0.0000	-56,522.79	-38.7381	95,407.36	47.4420	-47.27	-6.1310
Nasdaq BX, Inc.	1.85	0.00	8.68	0.14	0.02	0.00	0.0000	-112,545.00	-40.8988	-2,273.10	-42.4958	-345.46	-42.5968

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)
BOX Exchange LLC	1.61	0.00	7.53	0.12	0.03	0.00	0.0000	15,939.08	6.8163	44.96	4.3477	66.10	12.1507

Material Aspects:

NYSE ARCA OPTIONS:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS qualified for various tier pricing during this quarter. In July, BofAS qualified for an additional $0.18 customer posting rebate in Penny Interval Program symbols. In August and September, BofAS qualified for an additional $0.11 customer posting rebate in Penny Interval Program symbols. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf.

Nasdaq PHLX LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. In addition, BofAS participates in, and may receive a marketing fee credit under this exchange's approved and administered Marketing Fee Program. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/phlx/rules.

Dash Financial Technologies:
Orders routed to this market center for execution may be executed by such center or may be further routed by Dash to other venues (such as exchanges or other market centers) for execution. For MLPF&S's customer orders routed to exchanges, Dash pays fees or receives credits in accordance with the published fee schedules of the relevant exchanges, may receive incremental pricing benefits in accordance with such published fee schedules, and may participate in fee programs sponsored by the relevant exchanges. In some cases, the credits or rebates offered by relevant exchanges to Dash over a period of time may exceed the charges assessed and, in such cases, Dash passes through to BofAS the net credit or net charge attributable to MLPF&S customer orders, which BofAS in turn passes through to MLPF&S.

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Nasdaq ISE, LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/ise/rules.

Cboe Exchange, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. In addition, BofAS participates in, and may receive a marketing fee credit under this exchange's approved and administered Marketing Fee Program. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.cboe.com/us/options/membership/fee_schedule/cone/.

Global Execution Brokers, LP:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

The NASDAQ Options Market LLC:
When routing orders to this market center for execution, including client orders, BofA Securities, Inc. ("BofAS") pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS qualified for various tier pricing benefits during this quarter. In July, August and September, BofAS qualified for an additional $0.30 customer posting rebate in Penny Interval Program symbols and an additional $0.20 customer posting rebate in non-Penny Interval Program symbols. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules

Nasdaq BX, Inc.:
When routing orders to this market center for execution, including client orders, BofA Securities, Inc. ("BofAS") pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/bx/rules/BX%20Options%207.

BOX Exchange LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://boxoptions.com/fee-schedule/

August 2023

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	38.04	2.25	58.63	1.08

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)
BofA Securities, Inc.	80.59	59.37	84.23	93.89	97.83	-1,798.08	-0.1493	-5,613.06	-2.6815	86,336.82	20.2518	2,276.41	1.7695
CITADEL SECURITIES LLC	4.54	11.90	0.15	0.00	0.84	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Virtu Americas, LLC	3.33	8.72	0.11	0.00	0.74	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC.	2.60	0.61	9.69	3.67	0.13	-313.67	-2.7087	-745.43	-4.8522	963.12	16.7974	-2.11	-2.7420
Two Sigma Securities, LLC	2.42	6.35	0.08	0.00	0.31	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Jane Street Capital	1.82	4.77	0.06	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
The Nasdaq Stock Market LLC	1.55	0.31	5.02	2.25	0.12	-177.19	-3.4033	-500.01	-7.8845	1,077.12	23.4599	0.90	1.0150
G1 Execution Services, LLC	1.53	4.01	0.05	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
UBS Securities, LLC	1.51	3.96	0.03	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Cboe BZX Exchange, Inc.	0.03	0.00	0.12	0.04	0.00	-0.01	-7.5000	-99.46	-29.5560	104.66	17.2560	0.10	22.5556

Material Aspects:

BofA Securities, Inc.:
Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") is a broker-dealer that executes its customer orders in National Market System ("NMS") securities as agent. MLPF&S routes the bulk of its customer held orders in NMS stocks and NMS securities that are option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, leveraging BofAS's connectivity and other infrastructure. As further described below, BofAS then may either further route, as agent, MLPF&S customer orders to other venues for execution or, with respect to MLPF&S's brokerage customer orders in NMS stocks, BofAS may execute such MLPF&S customer orders on a principal basis. BofAS acts as a registered market maker in numerous Nasdaq and other exchange-listed securities and may execute customer orders in such securities on a principal basis. BofAS also may principally commit capital to facilitate customer transactions or serve as the contra-side to customer orders executed internally through one or more alternative trading systems operated by BofAS. BofAS, however, does not transact on a principal basis with respect to any orders executed on behalf of MLPF&S investment advisory customers or with respect to any MLPF&S customer orders in option contracts. BofAS stands to realize 100% of any profits or losses generated when BofAS trades as agent or principal with respect to MLPF&S customer orders. In addition, BofAS may route MLPF&S customer orders to other venues including but not limited to national securities exchanges, multi-lateral trading facilities, other alternative trading systems or external liquidity providers, or broker-dealers. For information about BofAS's routing of its customer orders in NMS securities and the material aspects of its relationships with its identified trading venues, see BofAS's quarterly public disclosure, available at http://public.s3.com/rule606/bofas. When BofAS routes orders to certain SEC-registered securities exchanges, BofAS pays fees and receives credits in accordance with that market center's published fee schedule filed with the SEC, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by a market center to BofAS over a period of time will exceed the charges assessed. Likewise, in some cases, the charges over a period of time will exceed the credits. BofAS passes through to MLPF&S the net credit or net charge attributable to MLPF&S customer orders. Aside from holdings that BofAS may acquire from time to time as part of its ordinary market making, block positioning, client facilitation and related hedging activities, an MLPF&S affiliate under common control may acquire equity stakes in market centers as part of a strategic investment. In this regard, an MLPF&S affiliate owns a minority equity investment stake in the following market centers and therefore stands to participate as a shareholder/investor in the profits that each market center realizes in part from the execution of securities transactions, including the execution of MLPF&S customer orders: Members Exchange (MEMX); CME; Tokyo Financial Exchange; JapanNext; Borsa Instanbul (BIST); Xpansiv; Kezar Trading (LeveL and Luminex); Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; PureStream Trading Technologies, Inc.; Equilend; Zanbato; LedgerEdge; and Liquidity Match (FXSpotStream). BofAS or an affiliate also own an equity stake in Miami International Holdings, Inc., which is the parent company of the MIAX family of options exchanges, including MIAX Pearl, LLC and MIAX Emerald, LLC. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the United States

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

Virtu Americas, LLC:

MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

NEW YORK STOCK EXCHANGE, INC.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf.

Two Sigma Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

Jane Street Capital:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

The Nasdaq Stock Market LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-7.

G1 Execution Services, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

UBS Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

Cboe BZX Exchange, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.cboe.com/us/equities/membership/fee_schedule/bzx/

August 2023

Non-S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	35.94	4.42	58.44	1.20

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)
BofA Securities, Inc.	86.39	70.13	90.16	95.84	99.05	-9,762.01	-0.1572	-149,422.58	-5.4073	399,772.98	13.6399	5,766.35	0.7634
CITADEL SECURITIES LLC	3.18	8.83	0.15	0.00	0.33	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Virtu Americas, LLC	2.32	6.42	0.11	0.00	0.13	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Two Sigma Securities, LLC	1.68	4.66	0.09	0.00	0.29	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Jane Street Capital	1.26	3.51	0.06	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	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)
UBS Securities, LLC	1.07	2.96	0.05	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
G1 Execution Services, LLC	1.05	2.93	0.05	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE Arca, Inc.	1.00	0.20	3.20	1.35	0.07	-1,624.22	-14.4764	-3,743.03	-12.8894	1,362.89	20.5226	-13.26	-6.6946
NEW YORK STOCK EXCHANGE, INC.	0.86	0.14	1.99	1.24	0.02	-495.80	-4.2883	-4,025.51	-12.6571	3,225.25	14.7543	-34.35	-4.9992
The Nasdaq Stock Market LLC	0.82	0.15	2.07	1.15	0.04	-365.06	-4.2002	-4,912.81	-16.0319	4,295.35	22.3459	7.68	4.7731

Material Aspects:

BofA Securities, Inc.:
Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") is a broker-dealer that executes its customer orders in National Market System ("NMS") securities as agent. MLPF&S routes the bulk of its customer held orders in NMS stocks and NMS securities that are option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, leveraging BofAS's connectivity and other infrastructure. As further described below, BofAS then may either further route, as agent, MLPF&S customer orders to other venues for execution or, with respect to MLPF&S's brokerage customer orders in NMS stocks, BofAS may execute such MLPF&S customer orders on a principal basis. BofAS acts as a registered market maker in numerous Nasdaq and other exchange-listed securities and may execute customer orders in such securities on a principal basis. BofAS also may principally commit capital to facilitate customer transactions or serve as the contra-side to customer orders executed internally through one or more alternative trading systems operated by BofAS. BofAS, however, does not transact on a principal basis with respect to any orders executed on behalf of MLPF&S investment advisory customers or with respect to any MLPF&S customer orders in option contracts. BofAS stands to realize 100% of any profits or losses generated when BofAS trades as agent or principal with respect to MLPF&S customer orders. In addition, BofAS may route MLPF&S customer orders to other venues including but not limited to national securities exchanges, multi-lateral trading facilities, other alternative trading systems or external liquidity providers, or broker-dealers. For information about BofAS's routing of its customer orders in NMS securities and the material aspects of its relationships with its identified trading venues, see BofAS's quarterly public disclosure, available at http://public.s3.com/rule606/bofas. When BofAS routes orders to certain SEC-registered securities exchanges, BofAS pays fees and receives credits in accordance with that market center's published fee schedule filed with the SEC, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by a market center to BofAS over a period of time will exceed the charges assessed. Likewise, in some cases, the charges over a period of time will exceed the credits. BofAS passes through to MLPF&S the net credit or net charge attributable to MLPF&S customer orders. Aside from holdings that BofAS may acquire from time to time as part of its ordinary market making, block positioning, client facilitation and related hedging activities, an MLPF&S affiliate under common control may acquire equity stakes in market centers as part of a strategic investment. In this regard, an MLPF&S affiliate owns a minority equity investment stake in the following market centers and therefore stands to participate as a shareholder/investor in the profits that each market center realizes in part from the execution of securities transactions, including the execution of MLPF&S customer orders: Members Exchange (MEMX); CME; Tokyo Financial Exchange; JapanNext; Borsa Instanbul (BIST); Xpansiv; Kezar Trading (LeveL and Luminex); Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; PureStream Trading Technologies, Inc.; Equilend; Zanbato; LedgerEdge; and Liquidity Match (FXSpotStream). BofAS or an affiliate also own an equity stake in Miami International Holdings, Inc., which is the parent company of the MIAX family of options exchanges, including MIAX Pearl, LLC and MIAX Emerald, LLC. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the United States

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Virtu Americas, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Two Sigma Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Jane Street Capital:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

UBS Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

G1 Execution Services, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

NYSE Arca, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf

NEW YORK STOCK EXCHANGE, INC.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf.

The Nasdaq Stock Market LLC:

When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-7.

August 2023

Options

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	3.60	20.98	56.02	19.40

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	28.72	0.00	6.06	48.18	2.39	0.00	0.0000	111.76	0.0799	596,324.86	46.6933	-147.48	-2.2766
Nasdaq PHLX LLC	23.02	0.00	2.70	38.18	5.49	0.00	0.0000	-1,308.37	-2.1745	-69.60	-0.0455	-148.00	-0.2116
Dash Financial Technologies	7.30	25.45	3.96	1.78	23.50	0.00	0.0000	11,220.89	7.5620	9,244.23	11.9137	-25.65	-0.0342
Nasdaq ISE, LLC	6.96	0.00	2.18	0.79	31.26	0.00	0.0000	-7,048.39	-10.7765	18,072.17	73.8876	-582.24	-0.3376
CITADEL SECURITIES LLC	6.83	37.98	10.26	0.45	15.77	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Cboe Exchange, Inc.	6.45	0.00	9.88	4.93	8.33	0.00	0.0000	-13,662.43	-5.6990	-13,502.68	-9.1736	-676.34	-0.2450
Global Execution Brokers, LP	5.74	36.57	13.61	0.64	6.24	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
The NASDAQ Options Market LLC	2.52	0.00	3.37	3.23	0.04	0.00	0.0000	-48,426.46	-39.1537	96,236.22	47.0246	-61.33	-8.2212
Nasdaq BX, Inc.	2.37	0.00	10.60	0.24	0.02	0.00	0.0000	-167,687.82	-39.6576	-2,793.83	-38.3347	-438.36	-44.3236
BOX Exchange LLC	2.06	0.00	9.41	0.13	0.04	0.00	0.0000	17,457.84	4.9974	-4.10	-0.2118	55.60	10.7544

Material Aspects:

NYSE ARCA OPTIONS:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS qualified for various tier pricing during this quarter. In July, BofAS qualified for an additional $0.18 customer posting rebate in Penny Interval Program symbols. In August and September, BofAS qualified for an additional $0.11 customer posting rebate in Penny Interval Program symbols. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf.

Nasdaq PHLX LLC:

When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. In addition, BofAS participates in, and may receive a marketing fee credit under this exchange's approved and administered Marketing Fee Program. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/phlx/rules.

Dash Financial Technologies:
Orders routed to this market center for execution may be executed by such center or may be further routed by Dash to other venues (such as exchanges or other market centers) for execution. For MLPF&S's customer orders routed to exchanges, Dash pays fees or receives credits in accordance with the published fee schedules of the relevant exchanges, may receive incremental pricing benefits in accordance with such published fee schedules, and may participate in fee programs sponsored by the relevant exchanges. In some cases, the credits or rebates offered by relevant exchanges to Dash over a period of time may exceed the charges assessed and, in such cases, Dash passes through to BofAS the net credit or net charge attributable to MLPF&S customer orders, which BofAS in turn passes through to MLPF&S.

Nasdaq ISE, LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/ise/rules.

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Cboe Exchange, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. In addition, BofAS participates in, and may receive a marketing fee credit under this exchange's approved and administered Marketing Fee Program. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.cboe.com/us/options/membership/fee_schedule/cone/.

Global Execution Brokers, LP:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

The NASDAQ Options Market LLC:
When routing orders to this market center for execution, including client orders, BofA Securities, Inc. ("BofAS") pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS qualified for various tier pricing benefits during this quarter. In July, August and September, BofAS qualified for an additional $0.30 customer posting rebate in Penny Interval Program symbols and an additional $0.20 customer posting rebate in non-Penny Interval Program symbols. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules

Nasdaq BX, Inc.:
When routing orders to this market center for execution, including client orders, BofA Securities, Inc. ("BofAS") pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/bx/rules/BX%20Options%207.

BOX Exchange LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://boxoptions.com/fee-schedule/

September 2023

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	38.18	2.05	58.65	1.12

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)
BofA Securities, Inc.	78.73	55.27	82.96	93.48	97.95	-1,465.89	-0.1530	-4,898.88	-2.6753	72,129.28	23.0151	1,967.18	2.0473

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	5.03	13.14	0.17	0.00	0.84	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Virtu Americas, LLC	3.65	9.53	0.13	0.00	0.51	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC.	2.73	0.56	10.26	3.92	0.12	-211.35	-2.7354	-567.23	-4.4699	1,049.20	17.3055	-2.04	-4.1617
Two Sigma Securities, LLC	2.70	7.04	0.09	0.00	0.44	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Jane Street Capital	2.05	5.36	0.07	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
UBS Securities, LLC	1.69	4.41	0.07	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
G1 Execution Services, LLC	1.68	4.39	0.06	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
The Nasdaq Stock Market LLC	1.62	0.30	5.19	2.38	0.11	-141.60	-3.7315	-413.50	-8.5409	1,344.41	27.0943	0.34	1.2632
Cboe BZX Exchange, Inc.	0.03	0.00	0.17	0.05	0.00	-0.04	-7.5000	-89.65	-27.6234	120.16	20.2728	0.00	0.0000

Material Aspects:

BofA Securities, Inc.:
Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") is a broker-dealer that executes its customer orders in National Market System ("NMS") securities as agent. MLPF&S routes the bulk of its customer held orders in NMS stocks and NMS securities that are option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, leveraging BofAS's connectivity and other infrastructure. As further described below, BofAS then may either further route, as agent, MLPF&S customer orders to other venues for execution or, with respect to MLPF&S's brokerage customer orders in NMS stocks, BofAS may execute such MLPF&S customer orders on a principal basis. BofAS acts as a registered market maker in numerous Nasdaq and other exchange-listed securities and may execute customer orders in such securities on a principal basis. BofAS also may principally commit capital to facilitate customer transactions or serve as the contra-side to customer orders executed internally through one or more alternative trading systems operated by BofAS. BofAS, however, does not transact on a principal basis with respect to any orders executed on behalf of MLPF&S investment advisory customers or with respect to any MLPF&S customer orders in option contracts. BofAS stands to realize 100% of any profits or losses generated when BofAS trades as agent or principal with respect to MLPF&S customer orders. In addition, BofAS may route MLPF&S customer orders to other venues including but not limited to national securities exchanges, multi-lateral trading facilities, other alternative trading systems or external liquidity providers, or broker-dealers. For information about BofAS's routing of its customer orders in NMS securities and the material aspects of its relationships with its identified trading venues, see BofAS's quarterly public disclosure, available at http://public.s3.com/rule606/bofas. When BofAS routes orders to certain SEC-registered securities exchanges, BofAS pays fees and receives credits in accordance with that market center's published fee schedule filed with the SEC, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by a market center to BofAS over a period of time will exceed the charges assessed. Likewise, in some cases, the charges over a period of time will exceed the credits. BofAS passes through to MLPF&S the net credit or net charge attributable to MLPF&S customer orders. Aside from holdings that BofAS may acquire from time to time as part of its ordinary market making, block positioning, client facilitation and related hedging activities, an MLPF&S affiliate under common control may acquire equity stakes in market centers as part of a strategic investment. In this regard, an MLPF&S affiliate owns a minority equity investment stake in the following market centers and therefore stands to participate as a shareholder/investor in the profits that each market center realizes in part from the execution of securities transactions, including the execution of MLPF&S customer orders: Members Exchange (MEMX); CME; Tokyo Financial Exchange; JapanNext; Borsa Instanbul (BIST); Xpansiv; Kezar Trading (LeveL and Luminex); Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; PureStream Trading Technologies, Inc.; Equilend; Zanbato; LedgerEdge; and Liquidity Match (FXSpotStream). BofAS or an affiliate also own an equity stake in Miami International Holdings, Inc., which is the parent company of the MIAX family of options exchanges, including MIAX Pearl, LLC and MIAX Emerald, LLC. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the United States

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

Virtu Americas, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

NEW YORK STOCK EXCHANGE, INC.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf.

Two Sigma Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

Jane Street Capital:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

UBS Securities, LLC:

MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

G1 Execution Services, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter

The Nasdaq Stock Market LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-7.

Cboe BZX Exchange, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.cboe.com/us/equities/membership/fee_schedule/bzx/

September 2023

Non-S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	36.52	3.99	58.18	1.31

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)
BofA Securities, Inc.	84.72	66.13	88.62	95.80	98.96	-6,562.40	-0.1488	-105,463.31	-5.3271	297,987.66	14.5556	5,416.15	0.9479
CITADEL SECURITIES LLC	3.69	10.07	0.17	0.00	0.29	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Virtu Americas, LLC	2.62	7.17	0.11	0.00	0.12	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Two Sigma Securities, LLC	1.95	5.33	0.09	0.00	0.26	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Jane Street Capital	1.50	4.11	0.06	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
G1 Execution Services, LLC	1.22	3.32	0.06	0.00	0.01	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
UBS Securities, LLC	1.22	3.32	0.06	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE Arca, Inc.	1.00	0.20	3.43	1.35	0.17	-1,401.73	-15.0907	-3,944.15	-14.8250	1,404.21	18.6046	-29.94	-9.0003
NEW YORK STOCK EXCHANGE, INC.	0.87	0.14	2.27	1.25	0.04	-332.04	-3.8173	-4,009.14	-14.9737	3,553.90	17.3233	-38.82	-5.5996

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
The Nasdaq Stock Market LLC	0.81	0.13	2.28	1.15	0.07	-261.39	-3.8187	-4,333.73	-16.8297	4,303.43	22.5567	-2.20	-0.9745

Material Aspects:

BofA Securities, Inc.:
Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") is a broker-dealer that executes its customer orders in National Market System ("NMS") securities as agent. MLPF&S routes the bulk of its customer held orders in NMS stocks and NMS securities that are option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, leveraging BofAS's connectivity and other infrastructure. As further described below, BofAS then may either further route, as agent, MLPF&S customer orders to other venues for execution or, with respect to MLPF&S's brokerage customer orders in NMS stocks, BofAS may execute such MLPF&S customer orders on a principal basis. BofAS acts as a registered market maker in numerous Nasdaq and other exchange-listed securities and may execute customer orders in such securities on a principal basis. BofAS also may principally commit capital to facilitate customer transactions or serve as the contra-side to customer orders executed internally through one or more alternative trading systems operated by BofAS. BofAS, however, does not transact on a principal basis with respect to any orders executed on behalf of MLPF&S investment advisory customers or with respect to any MLPF&S customer orders in option contracts. BofAS stands to realize 100% of any profits or losses generated when BofAS trades as agent or principal with respect to MLPF&S customer orders. In addition, BofAS may route MLPF&S customer orders to other venues including but not limited to national securities exchanges, multi-lateral trading facilities, other alternative trading systems or external liquidity providers, or broker-dealers. For information about BofAS's routing of its customer orders in NMS securities and the material aspects of its relationships with its identified trading venues, see BofAS's quarterly public disclosure, available at http://public.s3.com/rule606/bofas. When BofAS routes orders to certain SEC-registered securities exchanges, BofAS pays fees and receives credits in accordance with that market center's published fee schedule filed with the SEC, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by a market center to BofAS over a period of time will exceed the charges assessed. Likewise, in some cases, the charges over a period of time will exceed the credits. BofAS passes through to MLPF&S the net credit or net charge attributable to MLPF&S customer orders. Aside from holdings that BofAS may acquire from time to time as part of its ordinary market making, block positioning, client facilitation and related hedging activities, an MLPF&S affiliate under common control may acquire equity stakes in market centers as part of a strategic investment. In this regard, an MLPF&S affiliate owns a minority equity investment stake in the following market centers and therefore stands to participate as a shareholder/investor in the profits that each market center realizes in part from the execution of securities transactions, including the execution of MLPF&S customer orders: Members Exchange (MEMX); CME; Tokyo Financial Exchange; JapanNext; Borsa Instanbul (BIST); Xpansiv; Kezar Trading (LeveL and Luminex); Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; PureStream Trading Technologies, Inc.; Equilend; Zanbato; LedgerEdge; and Liquidity Match (FXSpotStream). BofAS or an affiliate also own an equity stake in Miami International Holdings, Inc., which is the parent company of the MIAX family of options exchanges, including MIAX Pearl, LLC and MIAX Emerald, LLC. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the United States

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Virtu Americas, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Two Sigma Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Jane Street Capital:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

G1 Execution Services, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

UBS Securities, LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

NYSE Arca, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf

NEW YORK STOCK EXCHANGE, INC.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf.

The Nasdaq Stock Market LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-7.

September 2023

Options

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	3.38	20.45	54.64	21.52

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	26.45	0.00	6.85	44.42	3.61	0.00	0.0000	-21,850.69	-14.3136	388,163.18	40.0085	-1,519.16	-2.8338
Nasdaq PHLX LLC	24.06	0.01	2.99	40.42	6.33	0.00	0.0000	-3,004.26	-4.7166	-96.30	-0.0705	-626.32	-2.4836
Nasdaq ISE, LLC	8.20	0.00	2.37	0.75	33.95	0.00	0.0000	-19,930.26	-29.3023	11,337.20	68.4200	-1,096.18	-3.2857
Cboe Exchange, Inc.	6.72	0.00	9.91	5.22	8.56	0.00	0.0000	-15,175.02	-6.5659	-14,281.98	-10.5783	-404.14	-0.6815
CITADEL SECURITIES LLC	6.38	36.80	9.36	0.42	13.90	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
Dash Financial Technologies	5.82	24.40	4.05	1.78	14.86	0.84	0.0009	9,827.23	7.7616	7,158.78	11.9230	325.34	0.5552
Global Execution Brokers, LP	5.52	38.79	13.19	0.58	5.54	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
The NASDAQ Options Market LLC	2.48	0.00	3.77	3.11	0.04	0.00	0.0000	-48,618.39	-37.0609	71,428.35	44.0992	-19.71	-1.4335
Cboe C2 Exchange, Inc.	2.29	0.00	7.41	0.37	2.68	0.00	0.0000	-139,901.30	-39.6753	-680.38	-9.7882	-2,722.59	-5.1782
Nasdaq BX, Inc.	1.94	0.00	8.25	0.46	0.03	0.00	0.0000	-112,911.88	-39.3907	-1,778.16	-17.9431	-204.67	-45.5835

Material Aspects:

NYSE ARCA OPTIONS:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS qualified for various tier pricing during this quarter. In July, BofAS qualified for an additional $0.18 customer posting rebate in Penny Interval Program symbols. In August and September, BofAS qualified for an additional $0.11 customer posting rebate in Penny Interval Program symbols. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf.

Nasdaq PHLX LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. In addition, BofAS participates in, and may receive a marketing fee credit under this exchange's approved and administered Marketing Fee Program. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/phlx/rules.

Nasdaq ISE, LLC:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/ise/rules.

Cboe Exchange, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. In addition, BofAS participates in, and may receive a marketing fee credit under this exchange's approved and administered Marketing Fee Program. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.cboe.com/us/options/membership/fee_schedule/cone/.

CITADEL SECURITIES LLC:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

Dash Financial Technologies:
Orders routed to this market center for execution may be executed by such center or may be further routed by Dash to other venues (such as exchanges or other market centers) for execution. For MLPF&S's customer orders routed to exchanges, Dash pays fees or receives credits in accordance with the published fee schedules of the relevant exchanges, may receive incremental pricing benefits in accordance with such published fee schedules, and may participate in fee programs sponsored by the relevant exchanges. In some cases, the credits or rebates offered by relevant exchanges to Dash over a period of time may exceed the charges assessed and, in such cases, Dash passes through to BofAS the net credit or net charge attributable to MLPF&S customer orders, which BofAS in turn passes through to MLPF&S.

Global Execution Brokers, LP:
MLPF&S did not receive any payment for order flow from or have any profit-sharing arrangement with this venue during the calendar quarter.

The NASDAQ Options Market LLC:
When routing orders to this market center for execution, including client orders, BofA Securities, Inc. ("BofAS") pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS qualified for various tier pricing benefits during this quarter. In July, August and September, BofAS qualified for an additional $0.30 customer posting rebate in Penny Interval Program symbols and an additional $0.20 customer posting rebate in non-Penny Interval Program symbols. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules

Cboe C2 Exchange, Inc.:
When routing orders to this market center for execution, including client orders, BofAS pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule at: https://www.cboe.com/us/options/membership/fee_schedule/ctwo/.

Nasdaq BX, Inc.:
When routing orders to this market center for execution, including client orders, BofA Securities, Inc. ("BofAS") pays fees or receives credits in accordance with this market center's published fee schedule, and may receive incremental pricing benefits if certain volume thresholds are met in accordance with such published fee schedule. In some cases, the credits offered by this market center to BofAS over a period of time may exceed the charges assessed. BofAS did not qualify for any preferred tier pricing during this quarter. For additional information regarding the pricing tiers offered by this market center, please refer the current fee schedule available at: https://listingcenter.nasdaq.com/rulebook/bx/rules/BX%20Options%207.