

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

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3rd Quarter, 2022

July 2022

## S&P 500 Stocks

### Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 78.88  | 2.68   | 13.18  | 5.25  |

### Venues

| Venue -<br>Non-<br>directed<br>Order Flow | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| BofA<br>Securities,<br>Inc.               | 100.00                         | 100.00                  | 100.00                            | 100.00                                    | 100.00                 | -4,569.89   | -0.1924   | -9,142.23  | -4.7839  | 57,051.79   | 25.0737   | 7,866.79   | 4.8791   |

### 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 equity securities and NMS option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, and 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 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. 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. 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 MLPF&S affiliate 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: MembersX; CME; Tokyo Financial Exchange; JapanNext; Borsa Istanbul (BIST); Level; Luminex; Turquoise; Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; Purestream; Equilend; and 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 and the MIAX Pearl equities exchange. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the US.

July 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 |
|--|---|---|---|--|
| 100.00                                 | 74.30                                     | 4.03  | 15.00   | 6.67                                     |

**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.           | 100.00                  | 100.00            | 100.00                      | 100.00                          | 100.00           | -8,694.06  | -0.1292   | -81,489.75   | -4.8600   | 228,856.60   | 19.7601   | 17,320.92                                       | 2.3891   |

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**July 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 |
|--|---|---|---|--|
| 100.00                                 | 28.22                                     | 10.46   | 59.78   | 1.54                                     |

**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.           | 100.00                  | 100.00            | 100.00                      | 100.00                          | 100.00           | 0.00   | 0.0000  | -318,623.53  | -17.8210  | 511,806.22   | 28.8829   | -18,436.30                                      | -11.7979   |

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August 2022

S&P 500 Stocks

Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 79.97  | 2.73   | 12.74  | 4.56  |

Venues

| Venue -<br>Non-<br>directed<br>Order Flow | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| BofA<br>Securities,<br>Inc.               | 100.00                         | 100.00                  | 100.00                            | 100.00                                    | 100.00                 | -7,622.57   | -0.2829   | -6,451.96  | -3.6310  | 73,268.98   | 25.4304   | 7,880.00   | 4.2629   |

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Non-S&P 500 Stocks

Summary

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|---|--|--|--|---|
| 100.00                                    | 72.61  | 4.33   | 15.45  | 7.60  |

Venues

| Venue -<br>Non-<br>directed<br>Order Flow | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| BofA<br>Securities,<br>Inc.               | 100.00                         | 100.00                  | 100.00                            | 100.00                                    | 100.00                 | -24,307.33  | -0.2807   | -84,362.48   | -3.8005  | 357,434.36  | 20.4053   | 34,355.24  | 3.1415   |

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Options

Summary

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|---|--|--|--|---|
| 100.00                                    | 28.00  | 10.60  | 59.86  | 1.54  |

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.           | 100.00                  | 100.00            | 100.00                      | 100.00                          | 100.00           | 0.00   | 0.0000  | -388,575.22  | -15.6131  | 675,228.52   | 38.5001   | -7,318.37                                       | -4.7009  |

#### Material Aspects:

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## September 2022

### S&P 500 Stocks

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|--|---|---|---|--|
| 100.00                                 | 80.04                                     | 2.84  | 12.99   | 4.13                                     |

#### 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.           | 100.00                  | 100.00            | 100.00                      | 100.00                          | 100.00           | -7,459.97  | -0.2779   | -5,200.65  | -2.8368   | 81,495.87  | 26.8584   | 7,358.09  | 4.2671   |

#### 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 equity securities and NMS option contracts to its affiliated broker-dealer under common control, BofA Securities, Inc. ("BofAS"), for further order handling, and 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 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. 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. 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 MLPF&S affiliate 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: MembersX; CME; Tokyo Financial Exchange; JapanNext; Borsa Istanbul (BIST); Level; Luminex; Turquoise; Curve Global; Trumid; MTS S.p.A.; iSwap; Philippine Dealing Systems; Purestream; Equilend; and FXSpotStream. BofAS or an affiliate also own an equity stake in Miami International Holdings, Inc., which is the parent company of the MIAAX family of options exchanges and the MIAAX Pearl equities exchange. Additionally, BofAS owns and is the broker-dealer operator of Instinct X®, an NMS stock Alternative Trading System in the US.

September 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 |
|--|---|---|---|--|
| 100.00                                 | 74.97                                     | 4.19  | 14.76   | 6.07                                     |

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.           | 100.00                  | 100.00            | 100.00                      | 100.00                          | 100.00           | -12,773.24                                       | -0.1621   | -63,115.55   | -3.5866   | 270,871.64   | 20.2743   | 15,643.82                                       | 2.0415   |

Material Aspects:

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September 2022

Options

Summary

| Non-Directed Orders<br>as % of All Orders | Market Orders as % of<br>Non-Directed Orders | Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Non-Marketable Limit<br>Orders as % of Non-<br>Directed Orders | Other Orders as % of<br>Non-Directed Orders |
|---|--|--|--|---|
| 100.00                                    | 30.73  | 11.03  | 56.54  | 1.70  |

Venues

| Venue -<br>Non-<br>directed<br>Order Flow | Non-<br>Directed<br>Orders (%) | Market<br>Orders<br>(%) | Marketable<br>Limit Orders<br>(%) | Non-<br>Marketable<br>Limit Orders<br>(%) | Other<br>Orders<br>(%) | Net Payment<br>Paid/Received for<br>Market<br>Orders(USD) | Net Payment Paid/<br>Received for Market<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(USD) | Net Payment Paid/<br>Received for Non-<br>Marketable Limit<br>Orders(cents per<br>hundred shares) | Net Payment<br>Paid/Received for<br>Other<br>Orders(USD) | Net Payment Paid/<br>Received for Other<br>Orders(cents per<br>hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| BofA<br>Securities,<br>Inc.               | 100.00                         | 100.00                  | 100.00                            | 100.00                                    | 100.00                 | 0.00  | 0.0000  | -350,859.11  | -15.7581   | 476,196.62  | 34.6009   | -16,196.61   | -11.1411   |

Material Aspects:

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