The Securities and Exchange Commission ("SEC" or "Commission") Rule 606, as amended (the "Rule") requires all brokerage firms to make publicly available quarterly reports that present a general overview of the Firm's routing of non-directed customer orders in covered equity and option securities. Non-directed orders are orders that customers have not specifically instructed to be routed to a specific destination. For these non-directed orders, Morgan Stanley & Co. LLC ("Morgan Stanley") has selected the execution venue on behalf of its customers. In addition, Morgan Stanley must identify the significant venues to which it routed customer orders for execution during the applicable quarter. To obtain information about the rule, you may access the following web site addresses: http://www.sec.gov/rules/final/34-43590.htm and http://www.sec.gov/interp/legal/mrslb13a.htm and https://www.sec.gov/rules/final/2018/34-84528.pdf and https://www.sec.gov/tm/faq-rule-606-regulation-nms.

The report is divided into three sections: one for stocks included in the S&P 500 index; one for stocks not included in the S&P 500 index; and one for exchange-listed options. For each section, this report identifies the venues most often selected by Morgan Stanley, sets forth the percentage of various types of orders routed to the venues and associated fees and rebates. In addition, at the end of the report, there is a discussion of the material aspects, if any, of Morgan Stanley's relationship with the venues and General Disclosure section that provides additional information relevant to Morgan Stanley’s order routing and handling practices.
## October 2022

### S&P 500 Stocks

**Summary**

<table>
<thead>
<tr>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Venues

<table>
<thead>
<tr>
<th>Venue - Non-Directed Order Flow</th>
<th>Non-Directed Orders (%)</th>
<th>Market Orders (%)</th>
<th>Marketable Limit Orders (%)</th>
<th>Non-Marketable Limit Orders (%)</th>
<th>Other Orders (%)</th>
<th>Net Payment Paid/Received for Market Orders(USD)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Other Orders(USD)</th>
<th>Net Payment Paid/Received for Other Orders(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### October 2022

### Non-S&P 500 Stocks

**Summary**

<table>
<thead>
<tr>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Venues

<table>
<thead>
<tr>
<th>Venue - Non-Directed Order Flow</th>
<th>Non-Directed Orders (%)</th>
<th>Market Orders (%)</th>
<th>Marketable Limit Orders (%)</th>
<th>Non-Marketable Limit Orders (%)</th>
<th>Other Orders (%)</th>
<th>Net Payment Paid/Received for Market Orders(USD)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Other Orders(USD)</th>
<th>Net Payment Paid/Received for Other Orders(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### October 2022
## Options

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

| 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 Marketable Limit Orders(USD) | Net Payment Paid/Received for Non-Marketable Limit Orders(USD) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/Received for Other Orders(cents per hundred shares) |
|-------------------------------|------------------------|------------------|-----------------------------|-------------------------------|-----------------|-----------------------------------------------|------------------------------------------------|------------------------------------------------|---------------------------------|------------------------------------------------|------------------------------------------------|
| CBOE GLOBAL MARKETS INC. (XCBO) | 19.93                  | 0.00             | 0.00                        | 0.00                          | 19.93           | 0.00                                          | 0.00                                            | 0.00                                                | 19.93                           | -290,898.81                    | -10.2442                        |
| INTERNATIONAL SECURITIES EXCHANGE, LLC (XISEX) | 18.04                  | 0.00             | 0.00                        | 0.00                          | 18.04           | 0.00                                          | 0.00                                            | 0.00                                                | 18.04                           | 140,435.11                      | 10.1655                         |
| NASDAQ OPTIONS MARKET (XNDO) | 17.65                  | 0.00             | 0.00                        | 0.00                          | 17.65           | 0.00                                          | 0.00                                            | 0.00                                                | 17.65                           | -93,395.79                     | -6.0479                         |
| NYSE ARCA OPTIONS (ARCO)      | 16.44                  | 0.00             | 0.00                        | 0.00                          | 16.44           | 0.00                                          | 0.00                                            | 0.00                                                | 16.44                           | -54,406.10                     | -3.1133                         |
| CBOE EDGX OPTIONS EXCHANGE (EDGO) | 5.94                   | 0.00             | 0.00                        | 0.00                          | 5.94            | 0.00                                          | 0.00                                            | 0.00                                                | 5.94                            | 207,663.15                     | 29.8737                         |
| MIAX EMMERALD LLC (EMLD)      | 5.08                   | 0.00             | 0.00                        | 0.00                          | 5.08            | 0.00                                          | 0.00                                            | 0.00                                                | 5.08                            | -55,779.88                     | -17.7237                        |
| MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO) | 4.72                   | 0.00             | 0.00                        | 0.00                          | 4.72            | 0.00                                          | 0.00                                            | 0.00                                                | 4.72                            | 225,723.05                     | 30.5893                         |
| CBOE C2 OPTIONS EXCHANGE (C2OX) | 3.35                   | 0.00             | 0.00                        | 0.00                          | 3.35            | 0.00                                          | 0.00                                            | 0.00                                                | 3.35                            | -293,728.84                    | -34.8553                        |
| PHILADELPHIA OPTIONS EXCHANGE (XPHO) | 3.22                   | 0.00             | 0.00                        | 0.00                          | 3.22            | 0.00                                          | 0.00                                            | 0.00                                                | 3.22                            | 63,829.03                      | 10.0678                         |
| ISE GEMINI EXCHANGE (GMNI)    | 3.25                   | 0.00             | 0.00                        | 0.00                          | 3.25            | 0.00                                          | 0.00                                            | 0.00                                                | 3.25                            | 892,095.40                     | 40.2991                         |

### Material Aspects:

**CBOE GLOBAL MARKETS INC. (XCBO):**  
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XCBO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XCBO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualifies for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a “preferred” market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from “preferred” registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

**INTERNATIONAL SECURITIES EXCHANGE, LLC (XISEX):**
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XISX. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XISX's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

NASDAQ OPTIONS MARKET (XNQ): The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XNQ. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XNQ's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

NYSE ARCA OPTIONS (ARCO): The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to ARCO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting ARCO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

CBOE EDGX OPTIONS EXCHANGE (EDGO): The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to EDGO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting EDGO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a 'preferred' market maker by an exchange member. With respect to such exchange program, the Firm may receive payments from 'preferred' registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

MIAX EMERALD, LLC (EMLD): An affiliate of Morgan Stanley holds a minority ownership stake in Miami International Holdings, Inc. (who is the parent company of MIAX, MIAX PEARL, MIAX PEARL Equities, and MIAX EMERALD).

The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to EMLD. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting EMLD's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO):
An affiliate of Morgan Stanley holds a minority ownership stake in Miami International Holdings, Inc. (who is the parent company of MIAX, MIAX PEARL, MIAX PEARL Equities, and MIAX EMERALD).

The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XMIO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XMIO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a “preferenced” market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from “preferenced” registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

CBOT C2 OPTIONS EXCHANGE (C2O):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to C2O. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting C2O's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

PHILADELPHIA OPTIONS EXCHANGE (XPHO):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XPHO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XPHO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a “preferenced” market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from “preferenced” registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

ISE GEMINI EXCHANGE (GMNI):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to GMNI. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting GMNI's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a “preferenced” market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from “preferenced” registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

November 2022

S&P 500 Stocks

Summary

<table>
<thead>
<tr>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Venues

<table>
<thead>
<tr>
<th>Venue - Non-directed Order Flow</th>
<th>Non-Directed Orders (%)</th>
<th>Market Orders (%)</th>
<th>Marketable Limit Orders (%)</th>
<th>Non-Marketable Limit Orders (%)</th>
<th>Other Orders (%)</th>
<th>Net Payment Paid/Received for Market Orders(USD)</th>
<th>Net Payment Paid/Received for Market Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Other Orders(USD)</th>
<th>Net Payment Paid/Received for Other Orders(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOE GLOBAL MARKETS INC. (XCBO)</td>
<td>19.31</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>19.31</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>-176,057.85</td>
<td>-7.8707</td>
</tr>
<tr>
<td>NASDAQ OPTIONS MARKET (XNDQ)</td>
<td>17.26</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>17.26</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>-113,544.16</td>
<td>-7.3155</td>
</tr>
</tbody>
</table>

### November 2022

**Non-S&P 500 Stocks**

**Summary**

<table>
<thead>
<tr>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
</table>

**Options**

**Summary**

<table>
<thead>
<tr>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.47</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Venue - Non-directed Order Flow</td>
<td>Non-Directed Orders (%)</td>
<td>Market Orders (%)</td>
<td>Marketable Limit Orders (%)</td>
<td>Other Orders (%)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------</td>
<td>-------------------</td>
<td>-----------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>INTERNATIONAL SECURITIES EXCHANGE, LLC (XISX)</td>
<td>14.47</td>
<td>0.00</td>
<td>0.00</td>
<td>14.47</td>
</tr>
<tr>
<td>NYSE ARCA OPTIONS (ARCO)</td>
<td>12.77</td>
<td>0.00</td>
<td>0.00</td>
<td>12.77</td>
</tr>
<tr>
<td>CBOE EDGX OPTIONS EXCHANGE (EDGO)</td>
<td>6.58</td>
<td>0.00</td>
<td>0.00</td>
<td>6.53</td>
</tr>
<tr>
<td>ISE GEMINI EXCHANGE (GMNI)</td>
<td>6.42</td>
<td>0.00</td>
<td>0.00</td>
<td>6.42</td>
</tr>
<tr>
<td>MIAX EMERALD, LLC (EMLD)</td>
<td>6.04</td>
<td>0.00</td>
<td>0.00</td>
<td>6.04</td>
</tr>
<tr>
<td>MIAI INTERNATIONAL SECURITIES EXCHANGE (XMIO)</td>
<td>6.04</td>
<td>0.00</td>
<td>0.00</td>
<td>6.04</td>
</tr>
<tr>
<td>CBOE BZX OPTIONS EXCHANGE (BATO)</td>
<td>3.88</td>
<td>0.00</td>
<td>0.00</td>
<td>3.88</td>
</tr>
<tr>
<td>PHILADELPHIA OPTIONS EXCHANGE (XPHO)</td>
<td>3.07</td>
<td>0.00</td>
<td>0.00</td>
<td>3.07</td>
</tr>
</tbody>
</table>

Material Aspects:

CBOE GLOBAL MARKETS INC. (XCBO):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XCBO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XCBO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a “preferred” market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from “preferred” registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's public website.

NASDAQ OPTIONS MARKET (XNDO):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XNDQ. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XNDO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's public website.

INTERNATIONAL SECURITIES EXCHANGE, LLC (XISX):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XISX. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XISX's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's public website.
Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to ARCO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting ARCO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

**Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to EDGO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.**

Information reflecting EDGO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a "preferenced" market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from "preferenced" registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

**Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to GMNI. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.**

Information reflecting GMNI's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a "preferenced" market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from "preferenced" registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

**Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to EMLD. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.**

Information reflecting EMLD's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a "preferenced" market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from "preferenced" registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to BATO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting BATO’s fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

PHILADELPHIA OPTIONS EXCHANGE (XPHO):

The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XPHO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XPHO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a “preferenced” market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from “preferenced” registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

### December 2022

#### S&P 500 Stocks

**Summary**

<table>
<thead>
<tr>
<th></th>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Venues**

<table>
<thead>
<tr>
<th>Venue - Non-directed Order Flow</th>
<th>Non-Directed Orders (%)</th>
<th>Market Orders (%)</th>
<th>Marketable Limit Orders (%)</th>
<th>Non-Marketable Limit Orders (%)</th>
<th>Other Orders (%)</th>
<th>Net Payment Paid/Received for Market Orders(USD)</th>
<th>Net Payment Paid/Received for Market Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Other Orders(USD)</th>
<th>Net Payment Paid/Received for Other Orders(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**December 2022**

#### Non-S&P 500 Stocks

**Summary**

<table>
<thead>
<tr>
<th></th>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Page 9 of 14
### Venues

<table>
<thead>
<tr>
<th>Venue - Non-directed Order Flow</th>
<th>Non-Directed Orders (%)</th>
<th>Market Orders (%)</th>
<th>Marketable Limit Orders (%)</th>
<th>Non-Marketable Limit Orders (%)</th>
<th>Other Orders (%)</th>
<th>Net Payment Paid/Received for Market Orders(USD)</th>
<th>Net Payment Paid/Received for Market Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Other Orders(USD)</th>
<th>Net Payment Paid/Received for Other Orders(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOE GLOBAL MARKETS INC. (XCBO)</td>
<td>20.53</td>
<td>100.00</td>
<td>0.00</td>
<td>0.00</td>
<td>20.53</td>
<td>0.18</td>
<td>9.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>-321,446.68</td>
<td>-15.0315</td>
</tr>
<tr>
<td>NASDAQ OPTIONS MARKET (XNDQ)</td>
<td>16.03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>16.03</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>-243,067.05</td>
<td>-12.8856</td>
</tr>
<tr>
<td>INTERNATIONAL SECURITIES EXCHANGE LLC (XIX)</td>
<td>15.62</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>15.62</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>30,041.78</td>
<td>3.5367</td>
</tr>
<tr>
<td>NYSE ARCA OPTIONS (ARCO)</td>
<td>13.79</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>13.79</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>2,515.30</td>
<td>0.2099</td>
</tr>
<tr>
<td>NYSE AMEX OPTIONS (AMXO)</td>
<td>9.40</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>9.40</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>41,090.30</td>
<td>13.3946</td>
</tr>
<tr>
<td>ISE GEMINI EXCHANGE (GMNI)</td>
<td>4.83</td>
<td>0.00</td>
<td>0.00</td>
<td>100.00</td>
<td>4.83</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>718,756.31</td>
<td>39.3048</td>
</tr>
<tr>
<td>MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO)</td>
<td>4.33</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>4.33</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>161,934.36</td>
<td>30.3864</td>
</tr>
<tr>
<td>CBOE EDGX OPTIONS EXCHANGE (EDGO)</td>
<td>4.29</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>4.29</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>126,060.80</td>
<td>29.4240</td>
</tr>
<tr>
<td>MIAX EMERALD, LLC (EMLD)</td>
<td>4.10</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>4.10</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>-66,753.75</td>
<td>-28.7543</td>
</tr>
<tr>
<td>CBOE BZX OPTIONS EXCHANGE (BATO)</td>
<td>2.91</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.91</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>-113,337.35</td>
<td>-14.3568</td>
</tr>
</tbody>
</table>

### December 2022

#### Options

**Summary**

<table>
<thead>
<tr>
<th>Non-Directed Orders as % of All Orders</th>
<th>Market Orders as % of Non-Directed Orders</th>
<th>Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Non-Marketable Limit Orders as % of Non-Directed Orders</th>
<th>Other Orders as % of Non-Directed Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.02</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Material Aspects:**

CBOE GLOBAL MARKETS INC. (XCBO):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XNQ. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XNQ's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

NASDAQ OPTIONS MARKET (XNDQ):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XNDQ. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XNDQ's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

INTERNATIONAL SECURITIES EXCHANGE, LLC (XISX):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XISX. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XISX's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

NASDX ARCA OPTIONS (ARCO):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to ARCO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting ARCO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

NYSE ARCA OPTIONS (AMXO):
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to AMXO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting AMXO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

ISE GEMINI EXCHANGE (GMNI):

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any.

Information reflecting GMNI's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.
The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to GMNI. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting GMNI's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO):

An affiliate of Morgan Stanley holds a minority ownership stake in Miami International Holdings, Inc. (who is the parent company of MIAX, MIAX PEARL, MIAX PEARL Equities, and MIAX EMERALD).

The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to XMIO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting XMIO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

CBOE EDGX OPTIONS EXCHANGE (EDGO):

The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to EDGO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting EDGO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

MIAX EMERALD, LLC (EMLD):

An affiliate of Morgan Stanley holds a minority ownership stake in Miami International Holdings, Inc. (who is the parent company of MIAX, MIAX PEARL, MIAX PEARL Equities, and MIAX EMERALD).

The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to EMLD. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting EMLD's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.

CBOE BZX OPTIONS EXCHANGE (BATO):

The Firm is a Market Maker on this exchange and benefits from profits on such activity.

Morgan Stanley receives rebates and pays fees for the routing of customer orders in exchange listed options to BATO. When the rebates received exceed the fees paid to such venue, the Firm receives benefits from the trading activity. In addition, certain exchanges offer volume-based tiered rates based on the type of order routed. The Firm receives incremental pricing benefits from exchange offers volume-based tiered rates. The volume tiers are published in the fee schedule by the exchange.

Information reflecting BATO's fee schedule, as applicable to MSCO, can be found at: https://www.morganstanley.com/content/dam/msdotcom/en/institutional-sales/sec_rules_605_606/MSCO_options_rate_card_2022q4.xlsx

The reflected rates represent what the Firm would receive, per contract, for routed orders based on the applicable rebates the Firm qualified for during the specified time period, if any. Additionally, pursuant to an exchange-sponsored marketing fee program, the Firm may receive payments from the exchange as a result of its designation as a ‘preferred’ market-maker by an exchange member. With respect to such exchange program, the Firm may receive payments from ‘preferred’ registered market makers for options orders the Firm sends to the exchange.

Detailed information about the exchange's overall fee schedule is available in the exchange's rule book and/or fee schedule on the exchange's public website.
General Disclosures

Equities
Morgan Stanley routes customer equity orders to national securities exchanges, alternative trading systems (ATSSs), including electronic communications networks (ECNs), and other venues. Certain venues offer cash credits for orders that provide liquidity to their books and charge explicit fees for orders that extract liquidity from their books (and certain venues invert this practice). The amount of credits that Morgan Stanley receives from one or more venues may exceed the amount that Morgan Stanley is charged. Morgan Stanley may also receive incremental pricing benefits from certain venues if certain volume thresholds are met. Such payments constitute payment for order flow.

For other disclosures regarding equity order practices please refer to the following link: U.S. Cash Equity Order Handling and Routing FAQs

Options
Morgan Stanley routes customer options orders to national securities exchanges. Certain venues offer cash credits for orders that provide liquidity to their books and charge explicit fees for orders that extract liquidity from their books (and certain venues invert this practice). The amount of credits that Morgan Stanley receives from one or more venues may exceed the amount that Morgan Stanley is charged. Morgan Stanley may also receive incremental pricing benefits from certain venues if certain volume thresholds are met. Such payments constitute payment for order flow.

Morgan Stanley participates in Exchange-sponsored listed options payment for order flow programs and accepts payment for order flow for certain listed options orders. In the course of providing liquidity, Morgan Stanley may preference certain options orders to the Firm’s options market maker, or third party market makers for execution.

Based on client configurations and/or instructions for non-marketable option orders, Morgan Stanley may send orders to one or multiple exchanges and may consider availability of its registered options market-maker to provide price-improvement and/or enhanced liquidity in an automated and anonymous manner via an exchange-sponsored price improvement offering. Subject to the above, Morgan Stanley considers opportunities for price-improvement, fill-rates, type of venue, exchange fees, rebates, and/or tiers when deciding where to route orders.

For other disclosures regarding options order practices please refer to the following link: U.S. IED Listed Options Order Handling and Routing Letter

Ownership Interests
In addition to the ownership interests disclosed in the prior sections, Morgan Stanley or certain affiliates also hold minority stakes in other venues which stand to appreciate as a result of any profits generated from the execution of customer orders.

Customer Requests for Information
In accordance with SEC Rule 606, upon written request, Morgan Stanley & Co. LLC will disclose to clients the identity of the venue to which client’s orders were routed for execution, whether the orders were directed or non-directed, and the time of the executions, if any, that resulted from such orders.
Disclaimer

The information and data provided herein (the "Reports") are the property of Morgan Stanley & Co. LLC ("Morgan Stanley") and cannot be redistributed in any form or manner without the prior written consent of Morgan Stanley & Co. LLC.

Morgan Stanley has prepared the Reports solely for informational purposes and consistent with Rules 605 and 606 (formerly Rules 11Ac1-5 and 11Ac1-6), as amended, under Regulation NMS (the "Disclosure Rules"). The information provided in the Reports is not intended to, and does not, encompass all the factors to be considered in a best execution analysis and related order routing determinations.

The disclosures required by Rules 605 and 606 do not encompass all of the factors that may be important to investors in evaluating the order routing services of a broker-dealer. In addition, any particular market center's statistics will encompass varying types of orders routed by different broker-dealers on behalf of customers with a wide range of objectives. Accordingly, the statistical information required by Rules 605 and 606 alone does not create a reliable basis to address whether any particular broker-dealer obtained the most favorable terms reasonably available under the circumstances for customer orders.

Morgan Stanley does not represent, warrant, or guarantee that the Reports are accurate. Morgan Stanley disclaims liability for any direct, indirect, punitive, special, consequential, or incidental damages related to the Reports or the use of the Reports. The information provided in the Reports may be impacted by market data system outages or errors, both internal and external, and it is dependent upon the integrity and accuracy of data provided by outside sources. Certain assumptions have been made in preparing the Reports, and changes to the assumptions may have a material impact on results. The Reports do not endorse or recommend any particular security or market participant.

This disclaimer applies to the Reports in their entirety, irrespective of whether the Reports are used or viewed in whole or in part, and may be reviewed at any time by accessing the "Disclaimer" posted on the web page where the Reports are made available.