# Goldman Sachs & Co. LLC - Held NMS Stocks and Options Order Routing Public Report

Generated on Tue Jan 31 2023 20:53:35 GMT-0500 (Eastern Standard Time)

## 4th Quarter, 2022

### 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>0.02</td>
<td>1.25</td>
<td>8.68</td>
<td>65.25</td>
<td>24.80</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>New York Stock Exchange LLC. (NYSE)</td>
<td>22.27</td>
<td>2.91</td>
<td>3.82</td>
<td>69.34</td>
<td>23.91</td>
<td>-14.04</td>
<td>-2.1400</td>
<td>-662.28</td>
<td>42.04</td>
<td>10.6900</td>
</tr>
<tr>
<td>NASDAQ OMX PSX (PSX)</td>
<td>10.64</td>
<td>0.00</td>
<td>0.00</td>
<td>98.96</td>
<td>1.03</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.0000</td>
<td>-5.41</td>
<td>-17.5500</td>
</tr>
<tr>
<td>CBOE BZX Exchange (BATS)</td>
<td>9.95</td>
<td>0.00</td>
<td>11.47</td>
<td>76.39</td>
<td>12.12</td>
<td>0.00</td>
<td>0.0000</td>
<td>-1,990.80</td>
<td>-29.4600</td>
<td>473.64</td>
</tr>
<tr>
<td>NYSE Arca, Inc. (ARCA)</td>
<td>5.98</td>
<td>0.00</td>
<td>6.06</td>
<td>82.25</td>
<td>11.67</td>
<td>0.00</td>
<td>0.0000</td>
<td>-371.81</td>
<td>-29.9900</td>
<td>78.61</td>
</tr>
<tr>
<td>Members Exchange (MEMX)</td>
<td>5.30</td>
<td>0.00</td>
<td>0.00</td>
<td>99.31</td>
<td>0.68</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.0000</td>
<td>-10.20</td>
<td>-28.3500</td>
</tr>
<tr>
<td>NASDAQ OMX BX. (BOSE)</td>
<td>5.15</td>
<td>0.00</td>
<td>43.55</td>
<td>20.87</td>
<td>35.56</td>
<td>0.00</td>
<td>0.0000</td>
<td>9.02</td>
<td>2.4100</td>
<td>-987.12</td>
</tr>
<tr>
<td>Investors Exchange LLC (IEXG)</td>
<td>4.21</td>
<td>0.00</td>
<td>13.22</td>
<td>27.91</td>
<td>58.86</td>
<td>0.00</td>
<td>0.0000</td>
<td>-86.89</td>
<td>-6.4800</td>
<td>-4.16</td>
</tr>
<tr>
<td>CBOE EDGA Exchange (EDGA)</td>
<td>3.47</td>
<td>0.00</td>
<td>19.83</td>
<td>42.64</td>
<td>37.51</td>
<td>0.00</td>
<td>0.0000</td>
<td>125.80</td>
<td>18.7300</td>
<td>-1,092.44</td>
</tr>
<tr>
<td>CBOE BYX Exchange (BATY)</td>
<td>2.07</td>
<td>0.00</td>
<td>2.89</td>
<td>52.62</td>
<td>44.47</td>
<td>0.00</td>
<td>0.0000</td>
<td>3.55</td>
<td>1.8300</td>
<td>-23.51</td>
</tr>
</tbody>
</table>
Material Aspects:
New York Stock Exchange LLC. (NYSE):
The Firm is a Market Maker and Supplemental Liquidity Market Maker in equities on the NYSE. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

NYSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the NYSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

The Nasdaq Stock Market LLC. (XNAS):
The Firm is a Market Maker on XNAS in equities. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

XNAS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting XNAS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

NASDAQ OMX PSX (PSX):
PSX has a tiered pricing/payment schedule. For detailed information, please see the exchanges public website:
https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-equity-7
Information reflecting PSX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

CBOE BZX Exchange (BATS):
BATS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the BATS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

NYSE Arca, Inc. (ARCA):
ARCA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting ARCA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

Members Exchange (MEMX):
An investment entity affiliate of GSCO has a minority, non-controlling ownership interest in MEMX. MEMX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://info.memxtrading.com/fee-schedule/
Information reflecting MEMX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

NASDAQ OMX BX. (BOSE):
BOSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the BOSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

CBOE EDGA Exchange (EDGA):
EDGA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the EDGA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

CBOE BYX Exchange (BATY):
BATY has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the BATY's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx
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>0.03</td>
<td>1.40</td>
<td>8.46</td>
<td>55.06</td>
<td>35.06</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 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>New York Stock Exchange LLC. (NYSE)</td>
<td>16.34</td>
<td>2.55</td>
<td>2.88</td>
<td>70.38</td>
<td>24.18</td>
<td>-47.70</td>
<td>-2.1300</td>
<td>-1,578.70</td>
<td>91.48</td>
<td>4,7200</td>
<td>-312.53</td>
</tr>
<tr>
<td>The Nasdaq Stock Market LLC. (NASDAQ)</td>
<td>16.25</td>
<td>2.77</td>
<td>19.37</td>
<td>53.82</td>
<td>33.02</td>
<td>-79.04</td>
<td>-3.5500</td>
<td>-2,143.65</td>
<td>1,128.65</td>
<td>10.7400</td>
<td>-1,217.45</td>
</tr>
<tr>
<td>NYSE Arca, Inc. (ARCA)</td>
<td>12.75</td>
<td>2.40</td>
<td>3.82</td>
<td>56.03</td>
<td>37.72</td>
<td>-201.01</td>
<td>-15.0000</td>
<td>-1,120.30</td>
<td>246.19</td>
<td>10.6500</td>
<td>-1,352.28</td>
</tr>
<tr>
<td>CBOE BZX Exchange (BATS)</td>
<td>9.63</td>
<td>0.11</td>
<td>13.04</td>
<td>62.95</td>
<td>23.88</td>
<td>-7.73</td>
<td>-7.5000</td>
<td>-6,184.72</td>
<td>949.22</td>
<td>-7.1400</td>
<td>-4,297.94</td>
</tr>
<tr>
<td>NASDAQ OMX PSX (PSX)</td>
<td>7.42</td>
<td>0.00</td>
<td>0.00</td>
<td>98.51</td>
<td>1.48</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.00</td>
<td>-10.67</td>
<td>-12.6000</td>
</tr>
<tr>
<td>NASDAQ OMX BX. (BOSE)</td>
<td>6.71</td>
<td>0.00</td>
<td>34.58</td>
<td>18.21</td>
<td>47.20</td>
<td>0.00</td>
<td>0.0000</td>
<td>42.32</td>
<td>3.2500</td>
<td>-420.45</td>
<td>-29.9400</td>
</tr>
<tr>
<td>CBOE EDGA Exchange (EDGA)</td>
<td>4.81</td>
<td>0.00</td>
<td>17.34</td>
<td>32.52</td>
<td>50.12</td>
<td>0.00</td>
<td>0.0000</td>
<td>353.99</td>
<td>16,9300</td>
<td>-376.39</td>
<td>-27,1800</td>
</tr>
<tr>
<td>Investors Exchange LLC (IESG)</td>
<td>4.36</td>
<td>0.00</td>
<td>9.75</td>
<td>31.95</td>
<td>58.29</td>
<td>0.00</td>
<td>0.0000</td>
<td>-121.38</td>
<td>-7.0300</td>
<td>-7.72</td>
<td>-0.6600</td>
</tr>
<tr>
<td>Members Exchange (MEMX)</td>
<td>4.20</td>
<td>0.00</td>
<td>0.00</td>
<td>97.23</td>
<td>2.76</td>
<td>0.00</td>
<td>0.0000</td>
<td>0.00</td>
<td>0.0000</td>
<td>-89.77</td>
<td>-27,4100</td>
</tr>
<tr>
<td>CBOE IEX Exchange (IATX)</td>
<td>3.05</td>
<td>0.00</td>
<td>2.21</td>
<td>45.56</td>
<td>52.22</td>
<td>0.00</td>
<td>0.0000</td>
<td>10.39</td>
<td>1.7700</td>
<td>-240.51</td>
<td>-19,0900</td>
</tr>
</tbody>
</table>

Material Aspects:

New York Stock Exchange LLC. (NYSE):

The Firm is a Market Maker and Supplemental Liquidity Market Maker in equities on the NYSE. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

NYSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the NYSE's tiered pricing/payment schedule, as applicable to GS CO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/usa_equities_rate_card_202210.xlsx
The Nasdaq Stock Market LLC. (XNAS):
The Firm is a Market Maker on XNAS in equities. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

XNAS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting XNAS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

NYSE Arca, Inc. (ARCA):

ARCA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting ARCA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

CBOE BZX Exchange (BATS):

BATS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the BATS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

NASDAQ OMX PSX (PSX):

PSX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting PSX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

NASDAQ OMX BX. (BOSE):

BOSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the BOSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

CBOE EDGA Exchange (EDGA):

EDGA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the EDGA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

Members Exchange (MEMX):

An investment entity affiliate of GSCO has a minority, non-controlling ownership interest in MEMX. MEMX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://info.memxtrading.com/fee-schedule/

Information reflecting MEMX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

CBOE BYX Exchange (BATY):

BATY has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the BATY's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202210.xlsx

---

**October 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>
</table>

---
<table>
<thead>
<tr>
<th>Venues - 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(US$)</th>
<th>Net Payment Paid/Received for Market Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(US$)</th>
<th>Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Other Orders(US$)</th>
<th>Net Payment Paid/Received for Other Orders(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSE Arca, Inc. (PCOE)</td>
<td>73.86</td>
<td>96.01</td>
<td>67.92</td>
<td>31.77</td>
<td>0.28</td>
<td>-14,742.19</td>
<td>-91.0800</td>
<td>-31,0800</td>
<td>-52,4900</td>
<td>106,754.78</td>
<td>41,3200</td>
</tr>
<tr>
<td>CBOE BZX Options Exchange (BATO)</td>
<td>64.2</td>
<td>10.00</td>
<td>84.27</td>
<td>0.00</td>
<td>0.00</td>
<td>-131,011.65</td>
<td>-56,3900</td>
<td>21,052.40</td>
<td>18.7100</td>
<td>-95,35</td>
<td>-38,9100</td>
</tr>
<tr>
<td>NASDAQ Options Market LLC (NDOE)</td>
<td>5.81</td>
<td>0.00</td>
<td>88.14</td>
<td>0.01</td>
<td>0.00</td>
<td>-77,888.34</td>
<td>-49,5300</td>
<td>10,431.71</td>
<td>20,0900</td>
<td>-103.77</td>
<td>-29,2300</td>
</tr>
<tr>
<td>Nasdaq ISLE, LLC (ISLE)</td>
<td>3.18</td>
<td>0.54</td>
<td>89.82</td>
<td>7.4500</td>
<td>0.61</td>
<td>-14,837.06</td>
<td>-39,9800</td>
<td>4,370.24</td>
<td>9.3100</td>
<td>22,319.99</td>
<td>22,5400</td>
</tr>
<tr>
<td>CBOE Options Exchange (XCOB)</td>
<td>2.80</td>
<td>1.39</td>
<td>63.52</td>
<td>33.1000</td>
<td>21.71</td>
<td>-21,995.61</td>
<td>-25,5000</td>
<td>-31,766.02</td>
<td>-26,6500</td>
<td>-10,170.67</td>
<td>-19,2400</td>
</tr>
<tr>
<td>NYSE American LLC (AMEX)</td>
<td>1.49</td>
<td>0.61</td>
<td>78.06</td>
<td>0.00</td>
<td>12.93</td>
<td>-485.62</td>
<td>-1.7500</td>
<td>-730.22</td>
<td>-2.6200</td>
<td>-1,068.75</td>
<td>-6,1300</td>
</tr>
<tr>
<td>NASDAQ BX Options (XBOX)</td>
<td>1.30</td>
<td>0.63</td>
<td>36.64</td>
<td>37.6900</td>
<td>55.55</td>
<td>20,450.10</td>
<td>23,9800</td>
<td>-305.55</td>
<td>-1,0100</td>
<td>5,296.00</td>
<td>49,7700</td>
</tr>
<tr>
<td>CBOE EDGIO Exchange (EDGIO)</td>
<td>1.09</td>
<td>0.66</td>
<td>23.47</td>
<td>11.61</td>
<td>23.47</td>
<td>-1,228.58</td>
<td>-1,6300</td>
<td>-813.99</td>
<td>-3,3900</td>
<td>3,524.11</td>
<td>33,6300</td>
</tr>
<tr>
<td>Nasdaq PHLX, LLC (PHLX)</td>
<td>1.01</td>
<td>0.84</td>
<td>49.66</td>
<td>23.9800</td>
<td>10.63</td>
<td>-2,165.63</td>
<td>-7.7700</td>
<td>-847.59</td>
<td>-3,2400</td>
<td>-721.51</td>
<td>-2,5500</td>
</tr>
<tr>
<td>NASDAQ BX Options (NBBO)</td>
<td>0.95</td>
<td>0.00</td>
<td>25.36</td>
<td>0.02</td>
<td>0.00</td>
<td>-48,786.34</td>
<td>-37,6500</td>
<td>6,108.17</td>
<td>22,4900</td>
<td>121.68</td>
<td>55,5600</td>
</tr>
</tbody>
</table>

Material Aspects:

NASDAQ Non-Directed Orders (NDOE)

NASDAQ has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the NASDAQ's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

Information reflecting the NASDAQ's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/usa_option_rate_card_202210.xlsx
Information reflecting the NDOE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

Nasdaq ISE, LLC (ISE):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

ISE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://listingcenter.nasdaq.com/rulebook/ise/rules/ise-options-

Information reflecting the ISDE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

CBOE Options Exchange (XCBO):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

XCBO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/options/membership/fee_schedule/xcbo/

Information reflecting the XCBO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

NYSE American LLC (AMEX):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

AMEX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://www.nyse.com/publicidocs/nyse/markets/american-options/NYSE_American_Options_Fee_Schedule.pdf

Information reflecting the AMEX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

NASDAQ BX Options (XBOX):
XBOX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://boxoptions.com/regulatory/fee-schedule/

Information reflecting the XBOX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

CBOE EDGO Exchange (EDGO):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

EDGO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/options/membership/fee_schedule/edgo/

Information reflecting the EDGO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

Nasdaq PHLX, LLC (PHLX):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

PHLX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-equity-7

Information reflecting the PHLX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

NASDAQ BX Options (NBXO):
NBXO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://listingcenter.nasdaq.com/rulebook/bx/rules/bx-options-

Information reflecting the NBXO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202210.xlsx

November 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>0.02</td>
<td>2.05</td>
<td>20.94</td>
<td>37.55</td>
<td>39.43</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(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Market Orders(USD)</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>NASDAQ OMX BX. (BOSE)</td>
<td>11.26</td>
<td>0.00</td>
<td>54.29</td>
<td>14.64</td>
<td>31.06</td>
<td>0.00</td>
<td>0.0000</td>
<td>5.51</td>
<td>1.2200</td>
<td>-127.80</td>
<td>-29.8100</td>
</tr>
<tr>
<td>Investors Exchange LLC (IEXI)</td>
<td>7.19</td>
<td>0.00</td>
<td>21.90</td>
<td>24.20</td>
<td>54.78</td>
<td>0.00</td>
<td>0.0000</td>
<td>-105.98</td>
<td>-8.0800</td>
<td>-1.87</td>
<td>-0.4400</td>
</tr>
<tr>
<td>CBOE BZX Exchange (BATS)</td>
<td>6.06</td>
<td>0.00</td>
<td>36.66</td>
<td>30.81</td>
<td>32.51</td>
<td>0.00</td>
<td>0.0000</td>
<td>-1,763.72</td>
<td>-29.4300</td>
<td>287.68</td>
<td>22.3500</td>
</tr>
<tr>
<td>CBOE EDGA Exchange (EDGA)</td>
<td>5.43</td>
<td>0.00</td>
<td>27.37</td>
<td>44.32</td>
<td>28.29</td>
<td>0.00</td>
<td>0.0000</td>
<td>147.71</td>
<td>19.2000</td>
<td>-62.49</td>
<td>-29.7900</td>
</tr>
<tr>
<td>NYSE Arca, Inc. (ARCA)</td>
<td>4.32</td>
<td>0.00</td>
<td>17.34</td>
<td>49.52</td>
<td>33.13</td>
<td>0.00</td>
<td>0.0000</td>
<td>-289.03</td>
<td>-30.0000</td>
<td>61.33</td>
<td>28.1800</td>
</tr>
<tr>
<td>CBOE BXY Exchange (Baty)</td>
<td>2.94</td>
<td>0.00</td>
<td>4.00</td>
<td>56.66</td>
<td>39.32</td>
<td>0.00</td>
<td>0.0000</td>
<td>2.69</td>
<td>1.9800</td>
<td>-58.67</td>
<td>-19.9700</td>
</tr>
<tr>
<td>CBOE EDGX Exchange (EDGX)</td>
<td>2.57</td>
<td>0.00</td>
<td>25.25</td>
<td>38.12</td>
<td>36.62</td>
<td>0.00</td>
<td>0.0000</td>
<td>-402.85</td>
<td>-30.0000</td>
<td>57.05</td>
<td>15.8300</td>
</tr>
<tr>
<td>Nasdaq PHLX, LLC (XPHL)</td>
<td>2.21</td>
<td>0.00</td>
<td>36.91</td>
<td>30.13</td>
<td>32.95</td>
<td>0.00</td>
<td>0.0000</td>
<td>-304.59</td>
<td>-30.0000</td>
<td>29.70</td>
<td>31.8200</td>
</tr>
</tbody>
</table>

### Material Aspects:

The Nasdaq Stock Market LLC. (XNAS):

The Firm is a Market Maker on XNAS in equities. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

XNAS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-7

Information reflecting XNAS’s tiered pricing/payment schedule, as applicable to GSOC, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

New York Stock Exchange LLC. (NYSE):

The Firm is a Market Maker and Supplemental Liquidity Market Maker in equities on the NYSE. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.
NYSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the NYSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

NASDAQ OMX BX (BOSE):

BOSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the BOSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE BZX Exchange (BATS):

BATS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the BATS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE EDGA Exchange (EDGA):

EDGA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the EDGA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

NYSE Arca, Inc. (ARCA):

ARCA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting ARCA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE BYX Exchange (Baty):

Baty has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the Baty's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE EDGX Exchange (EDGX):

EDGX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the EDGX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

Nasdaq PHLX, LLC (XPHL):

XPHL has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-equity-7

Information reflecting the XPHL's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

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>
<tbody>
<tr>
<td>0.02</td>
<td>1.63</td>
<td>12.56</td>
<td>42.04</td>
<td>43.76</td>
</tr>
</tbody>
</table>
### Venues

<table>
<thead>
<tr>
<th>Venue</th>
<th>Non-directed Order Flow</th>
<th>Non-Directed Orders (%)</th>
<th>Market Orders (%)</th>
<th>Marketable Limit 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 Market Orders(cents per hundred shares)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSE Arca, Inc. (ARCA)</td>
<td>19.82</td>
<td>1.57</td>
<td>3.50</td>
<td>47.71</td>
<td>47.19</td>
<td>-480.53</td>
<td>-15.0000</td>
<td>-857.35</td>
</tr>
<tr>
<td>New York Stock Exchange LLC (NYSE)</td>
<td>14.56</td>
<td>4.33</td>
<td>7.47</td>
<td>54.24</td>
<td>33.94</td>
<td>-68.83</td>
<td>-2.4700</td>
<td>-888.97</td>
</tr>
<tr>
<td>NASDAQ OMX BX (BOSE)</td>
<td>8.61</td>
<td>0.00</td>
<td>33.40</td>
<td>24.75</td>
<td>41.83</td>
<td>0.00</td>
<td>0.0000</td>
<td>57.54</td>
</tr>
<tr>
<td>CBOE BX (BATS)</td>
<td>8.39</td>
<td>0.24</td>
<td>21.71</td>
<td>33.49</td>
<td>44.55</td>
<td>-14.03</td>
<td>-7.5000</td>
<td>-5,738.46</td>
</tr>
<tr>
<td>Investors Exchange LLC (iEX)</td>
<td>6.74</td>
<td>0.00</td>
<td>10.45</td>
<td>35.94</td>
<td>53.60</td>
<td>0.00</td>
<td>0.0000</td>
<td>-160.98</td>
</tr>
<tr>
<td>CBOE EDGA Exchange (EDGA)</td>
<td>6.24</td>
<td>0.00</td>
<td>18.39</td>
<td>39.47</td>
<td>42.13</td>
<td>0.00</td>
<td>0.0000</td>
<td>483.57</td>
</tr>
<tr>
<td>CBOE BYX Exchange (BYX)</td>
<td>3.79</td>
<td>0.00</td>
<td>2.70</td>
<td>55.33</td>
<td>41.95</td>
<td>0.00</td>
<td>0.0000</td>
<td>-26.26</td>
</tr>
<tr>
<td>CBOE EDGX Exchange (EDGX)</td>
<td>3.54</td>
<td>0.00</td>
<td>16.49</td>
<td>44.32</td>
<td>39.17</td>
<td>0.00</td>
<td>0.0000</td>
<td>-1,130.74</td>
</tr>
<tr>
<td>Nasdaq PHLX, LLC (PHLX)</td>
<td>3.38</td>
<td>0.00</td>
<td>21.74</td>
<td>34.14</td>
<td>44.10</td>
<td>0.00</td>
<td>0.0000</td>
<td>-1,126.72</td>
</tr>
</tbody>
</table>

### Material Aspects:

**NYSE Arca, Inc. (ARCA):**

ARCA has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website:


Information reflecting ARCA’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: [https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx](https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx)

The Nasdaq Stock Market LLC. (XNAS):

The Firm is a Market Maker on XNAS in equities. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

XNAS has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website:


Information reflecting XNAS’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: [https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx](https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx)

New York Stock Exchange LLC. (NYSE):

The Firm is a Market Maker and Supplemental Liquidity Maker in equities on the NYSE. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

NYSE has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website:


Information reflecting the NYSE’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: [https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx](https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx)
NASDAQ OMX BX (BOSE):
BOSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the BOSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE BZX Exchange (BATS):
BATS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the BATS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE EDGA Exchange (EDGA):
EDGA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the EDGA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE BYX Exchange (BATY):
BATY has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the BATY's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

CBOE EDGX Exchange (EDGX):
EDGX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the EDGX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

NASDAQ PHXL, LLC (XPHL):
XPHL has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
https://listingcenter.nasdaq.com/rulebook/phl/quotes/phl-equity-7
Information reflecting the XPHL's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202211.xlsx

---

**November 2022**

**Options**

<p>| Summary |
|-------------------|-------------------|-------------------|-------------------|-------------------|</p>
<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>0.06</td>
<td>0.22</td>
<td>11.18</td>
<td>58.89</td>
<td>29.69</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 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>NYSE Arca, Inc. (PCOE)</td>
<td>45.05</td>
<td>0.04</td>
<td>0.82</td>
<td>63.05</td>
<td>36.07</td>
<td>-14,861.39</td>
<td>-33,2000</td>
<td>-29,131.75</td>
<td>77,488.42</td>
<td>25,6100</td>
</tr>
<tr>
<td>CBOE BZX</td>
<td>19.09</td>
<td>0.00</td>
<td>12.07</td>
<td>87.89</td>
<td>0.02</td>
<td>0.0000</td>
<td>0.0000</td>
<td>-129,346.66</td>
<td>56,1000</td>
<td>23,786.15</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>
<td>Net Payment Paid/Received for Market Orders(USD)</td>
<td>Net Payment Paid/Received for Market Orders(cents per hundred shares)</td>
<td>Net Payment Paid/Received for Marketable Limit Orders(USD)</td>
<td>Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)</td>
<td>Net Payment Paid/Received for Non-Marketable Limit Orders(USD)</td>
<td>Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------</td>
<td>------------------</td>
<td>-----------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Options Exchange (BATO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASDAQ Options Market LLC (NDDE)</td>
<td>9.61</td>
<td>0.00</td>
<td>13.28</td>
<td>86.67</td>
<td>0.03</td>
<td>0.00</td>
<td>0.0000</td>
<td>-115,799.95</td>
<td>-52,280.00</td>
<td>13,347.84</td>
</tr>
<tr>
<td>CBOE Options Exchange (XCBO)</td>
<td>7.58</td>
<td>1.42</td>
<td>12.71</td>
<td>21.84</td>
<td>64.02</td>
<td>-17,223.86</td>
<td>-13.7400</td>
<td>-31,735.00</td>
<td>-25,1400</td>
<td>-24,219.70</td>
</tr>
<tr>
<td>Nasdaq ISE, LLC (ISDE)</td>
<td>4.66</td>
<td>0.69</td>
<td>7.27</td>
<td>9.01</td>
<td>83.01</td>
<td>5,744.86</td>
<td>1.7800</td>
<td>-19,885.10</td>
<td>-39,4100</td>
<td>5,456.68</td>
</tr>
<tr>
<td>NASDAQ BX Options (XBOX)</td>
<td>2.71</td>
<td>0.39</td>
<td>66.01</td>
<td>10.32</td>
<td>23.27</td>
<td>2,947.50</td>
<td>50.5300</td>
<td>34,035.90</td>
<td>24,1600</td>
<td>-340.00</td>
</tr>
<tr>
<td>NYSE American LLC (AMEX)</td>
<td>2.03</td>
<td>0.56</td>
<td>23.24</td>
<td>12.80</td>
<td>63.39</td>
<td>-10.50</td>
<td>-0.1400</td>
<td>-1,336.92</td>
<td>-2,6200</td>
<td>-826.72</td>
</tr>
<tr>
<td>NASDAQ BX Options (NXDO)</td>
<td>1.79</td>
<td>0.00</td>
<td>75.58</td>
<td>24.29</td>
<td>0.11</td>
<td>0.00</td>
<td>0.0000</td>
<td>-65,709.06</td>
<td>-40,9100</td>
<td>7,750.33</td>
</tr>
<tr>
<td>Nasdaq PHLX, LLC (PHLX)</td>
<td>1.66</td>
<td>0.94</td>
<td>15.15</td>
<td>15.92</td>
<td>67.97</td>
<td>-5.97</td>
<td>0.0000</td>
<td>-5,535.03</td>
<td>-12,6400</td>
<td>-991.33</td>
</tr>
<tr>
<td>CBOE EDGIO Exchange (EDGIO)</td>
<td>1.60</td>
<td>0.74</td>
<td>29.42</td>
<td>16.21</td>
<td>53.61</td>
<td>2,341.33</td>
<td>4.6500</td>
<td>867.64</td>
<td>-969.92</td>
<td>3,9900</td>
</tr>
</tbody>
</table>

**Material Aspects:**

**NYSE Arca, Inc. (PCOE):**

PCOE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf

Information reflecting the PCOE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

**CBOE BX Options Exchange (BATO):**

BATO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the BATO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

**NASDAQ Options Market LLC (NDDE):**

NDDE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the NDDE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

**CBOE Options Exchange (XCBO):**

Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

XCBO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the XCBO’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

Nasdaq ISIE, LLC (ISIE):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

ISIE has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website: https://listingcenter.nasdaq.com/rulebook/isie/rules/isie-options-7

Information reflecting the ISIE’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

NASDAQ BX Options (XBOX):
XBOX has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website: https://boxoptions.com/regulatory/fee-schedule/

Information reflecting the XBOX’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

NYSE American LLC (AMEX):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

AMEX has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website: https://www.nyse.com/publicdocs/nyse/markets/american-options/NYSE_American_Options_Fee_Schedule.pdf

Information reflecting the AMEX’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

NASDAQ BX Options (NBIXO):
NBIXO has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website: https://listingcenter.nasdaq.com/rulebook/bx/rules/bx-options-7

Information reflecting the NBIXO’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

Nasdaq PHLX, LLC (PHLX):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

PHLX has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website: https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-equity-7

Information reflecting the PHLX’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

CBOE EDGO Exchange (EDGO):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

EDGO has a tiered pricing/payment schedule. For detailed information, please see the exchange’s public website: https://markets.cboe.com/us/options/membership/fee_schedule/edgo/

Information reflecting the EDGO’s tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202211.xlsx

December 2022

S&P 500 Stocks

<table>
<thead>
<tr>
<th>Summary</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>0.02</td>
<td>1.45</td>
<td>24.35</td>
<td>38.89</td>
<td>35.29</td>
</tr>
</tbody>
</table>
### Venues

<table>
<thead>
<tr>
<th>Venue</th>
<th>Non-directed Orders (%)</th>
<th>Marketable Limit Orders (%)</th>
<th>Net Payment Paid/Received for Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Market Orders(USD)</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>NASDAQ OMX BX. (BOSE)</td>
<td>12.21</td>
<td>0.00</td>
<td>64.93</td>
<td>13.80</td>
<td>21.26</td>
<td>0.00</td>
<td>0.0000</td>
<td>6.44</td>
</tr>
<tr>
<td>Investors Exchange LLC (BEX)</td>
<td>6.35</td>
<td>0.00</td>
<td>22.86</td>
<td>27.40</td>
<td>49.72</td>
<td>0.00</td>
<td>0.0000</td>
<td>-129.54</td>
</tr>
<tr>
<td>CBOE EDGA Exchange (EDGA)</td>
<td>5.61</td>
<td>0.00</td>
<td>30.32</td>
<td>41.81</td>
<td>72.85</td>
<td>0.00</td>
<td>0.0000</td>
<td>191.40</td>
</tr>
<tr>
<td>CBOE BZX Exchange (BATS)</td>
<td>4.86</td>
<td>0.00</td>
<td>44.89</td>
<td>22.96</td>
<td>32.13</td>
<td>0.00</td>
<td>0.0000</td>
<td>-2,383.79</td>
</tr>
<tr>
<td>NYSE Arca. Inc. (ARCA)</td>
<td>4.31</td>
<td>0.00</td>
<td>17.24</td>
<td>54.13</td>
<td>28.62</td>
<td>0.00</td>
<td>0.0000</td>
<td>-445.41</td>
</tr>
<tr>
<td>CBOE BYX Exchange (Baty)</td>
<td>3.11</td>
<td>0.00</td>
<td>4.63</td>
<td>58.35</td>
<td>37.00</td>
<td>0.00</td>
<td>0.0000</td>
<td>3.11</td>
</tr>
<tr>
<td>CBOE EDGX Exchange (EDGX)</td>
<td>2.39</td>
<td>0.00</td>
<td>27.04</td>
<td>35.16</td>
<td>37.79</td>
<td>0.00</td>
<td>0.0000</td>
<td>-608.00</td>
</tr>
<tr>
<td>Nasdaq PHX, LLC (XPHL)</td>
<td>2.21</td>
<td>0.00</td>
<td>38.40</td>
<td>29.36</td>
<td>32.22</td>
<td>0.00</td>
<td>0.0000</td>
<td>-330.81</td>
</tr>
</tbody>
</table>

### Material Aspects:

The Nasdaq Stock Market LLC. (XNAS):

The Firm is a Market Maker on XNAS in equities. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

XNAS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://listingcenter.nasdaq.com/rulebook/nasdaq/rules/nasdaq-equity-

Information reflecting XNAS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

New York Stock Exchange LLC. (NYSE):

The Firm is a Market Maker and Supplemental Liquidity Market Maker in equities on the NYSE. Accordingly, the Firm may share directly in any profits generated from the execution of client orders by the Firm on the exchange, including those that are routed to the exchange.

NYSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://www.nyse.com/publicdocs/nyse/markets/nyse/NYSE_Price_List.pdf

Information reflecting the NYSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

NASDAQ OMX BX. (BOSE):

BOSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://listingcenter.nasdaq.com/rulebook/bs/rules/be-equity-

Information reflecting the BOSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx
CBOE EDGA Exchange (EDGA):

EDGA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/equities/membership/fee_schedule/edga/

Information reflecting the EDGAs tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

CBOE BZX Exchange (BATY):

BATY has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/equities/membership/fee_schedule/bzx/

Information reflecting the BATYS tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

NYSE Arca, Inc. (ARCA):

ARCA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://www.nyse.com/publicdocs/nyse/markets/nyse-arca/NYSE_Arca_Marketplace_Fees.pdf

Information reflecting ARCA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

CBOE BBYX Exchange (BATY):

BATY has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/equities/membership/fee_schedule/bbyx/

Information reflecting the BATYS tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

CBOE EDGX Exchange (EDGX):

EDGX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/equities/membership/fee_schedule/edgx/

Information reflecting the EDGX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

Nasdaq PHXL, LLC (XPHL):

XPHL has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-equity-7

Information reflecting the XPHL's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

### 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>0.03</td>
<td>1.09</td>
<td>16.86</td>
<td>38.48</td>
<td>43.55</td>
</tr>
</tbody>
</table>

#### Venues

<table>
<thead>
<tr>
<th>Venue - Non-directed Order Flow</th>
<th>Non-Directed Orders (%)</th>
<th>Market (%)</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 Non-Marketable Limit Orders(USD)</th>
<th>Net Payment Paid/Received for Other 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(cents per hundred shares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYSE Arca, Inc. (ARCA)</td>
<td>21.97</td>
<td>1.38</td>
<td>5.75</td>
<td>44.49</td>
<td>48.36</td>
<td>-239.25</td>
<td>-15,0000</td>
<td>116.71</td>
<td>-2,062.37</td>
<td>-19,0500</td>
</tr>
<tr>
<td>The Nasdaq</td>
<td>18.20</td>
<td>1.94</td>
<td>20.67</td>
<td>33.07</td>
<td>44.30</td>
<td>-59.76</td>
<td>-1,8500</td>
<td>296.69</td>
<td>-4,0300</td>
<td>-1,877.70</td>
</tr>
</tbody>
</table>

---

**December 2022**

---

Non-S&P 500 Stocks
<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>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>Stock Market LLC. (XNAS)</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>
<tr>
<td>New York Stock Exchange LLC. (NYSE)</td>
<td>11.65</td>
<td>2.53</td>
<td>8.42</td>
<td>52.07</td>
<td>-29.76</td>
<td>-1.4700</td>
<td>-1,268.44</td>
<td>-20.7400</td>
<td>784.57</td>
<td>12.6300</td>
<td>-339.63</td>
<td>-19.6600</td>
</tr>
<tr>
<td>NASDAQ OMX BX. (BOSE)</td>
<td>9.58</td>
<td>0.00</td>
<td>43.82</td>
<td>18.81</td>
<td>0.00</td>
<td>0.0000</td>
<td>62.14</td>
<td>3.0400</td>
<td>-503.02</td>
<td>-29.8300</td>
<td>19.59</td>
<td>0.9500</td>
</tr>
<tr>
<td>CBOE BX Exchange (BATS)</td>
<td>7.45</td>
<td>0.50</td>
<td>27.60</td>
<td>28.79</td>
<td>-22.00</td>
<td>-7.8200</td>
<td>-7,797.02</td>
<td>-29.3300</td>
<td>-723.09</td>
<td>-13.2500</td>
<td>-4,965.99</td>
<td>-28.3300</td>
</tr>
<tr>
<td>Investors Exchange LLC (IXEG)</td>
<td>6.89</td>
<td>0.00</td>
<td>17.28</td>
<td>32.41</td>
<td>0.00</td>
<td>0.0000</td>
<td>-328.38</td>
<td>-9.0500</td>
<td>-23.34</td>
<td>-0.9200</td>
<td>-121.05</td>
<td>-2.7200</td>
</tr>
<tr>
<td>CBOE EDGA Exchange (EDGA)</td>
<td>6.36</td>
<td>0.00</td>
<td>24.21</td>
<td>36.36</td>
<td>0.00</td>
<td>0.0000</td>
<td>539.12</td>
<td>16.0800</td>
<td>-1,389.91</td>
<td>-29.2500</td>
<td>391.27</td>
<td>11.5300</td>
</tr>
<tr>
<td>CBOE BY Exchange (BYT)</td>
<td>3.64</td>
<td>0.00</td>
<td>3.68</td>
<td>56.26</td>
<td>0.00</td>
<td>0.0000</td>
<td>16.50</td>
<td>1.6800</td>
<td>-475.35</td>
<td>-8.4700</td>
<td>-302.78</td>
<td>-13.5500</td>
</tr>
<tr>
<td>Nasdaq PHLX, LLC (XPHL)</td>
<td>3.56</td>
<td>0.00</td>
<td>24.79</td>
<td>31.10</td>
<td>0.00</td>
<td>0.0000</td>
<td>-1,410.03</td>
<td>-30.0000</td>
<td>479.47</td>
<td>33.0000</td>
<td>-1,546.05</td>
<td>-28.6600</td>
</tr>
<tr>
<td>CBOE EDGX Exchange (EDGX)</td>
<td>3.48</td>
<td>0.00</td>
<td>19.14</td>
<td>40.16</td>
<td>0.00</td>
<td>0.0000</td>
<td>-1,763.97</td>
<td>-29.1200</td>
<td>92.52</td>
<td>7.7200</td>
<td>-809.84</td>
<td>-26.6800</td>
</tr>
</tbody>
</table>

**Material Aspects:**

**NYSE Arca, Inc. (ARCA):**

ARCA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting ARCA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

The Nasdaq Stock Market LLC. (XNAS):

The firm is a Market Maker on XNAS in equities. Accordingly, the firm may share directly in any profits generated from the execution of client orders by the firm on the exchange, including those that are routed to the exchange.

XNAS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting XNAS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

**New York Stock Exchange LLC. (NYSE):**

The firm is a Market Maker and Supplemental Liquidity Market Maker in equities on the NYSE. Accordingly, the firm may share directly in any profits generated from the execution of client orders by the firm on the exchange, including those that are routed to the exchange.

NYSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the NYSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

**NASDAQ OMX BX. (BOSE):**

BOSE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
Information reflecting the BSE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

CBOE BZX Exchange (BATS):

BATS has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/equities/membership/fee_schedule/bzx/

Information reflecting the BATS's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

CBOE EDGA Exchange (EDGA):

EDGA has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/equities/membership/fee_schedule/edga/

Information reflecting the EDGA's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

CBOE BYX Exchange (BATY):

BATY has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website: https://markets.cboe.com/us/equities/membership/fee_schedule/byx/

Information reflecting the BATY's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

Nasdaq PHLX LLC (XPHL):

XPHL has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

https://listingcenter.nasdaq.com/rulebook/phlx/rules/phlx-equity-7

Information reflecting the XPHL's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

CBOE EDGX Exchange (EDGX):

EDGX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:


Information reflecting the EDGX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_equities_rate_card_202212.xlsx

---

December 2022

Options

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>0.12</td>
<td>0.17</td>
<td>8.92</td>
<td>81.72</td>
<td>9.18</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>NYSE Arca, Inc. (PCOE)</td>
<td>66.53</td>
<td>0.02</td>
<td>0.37</td>
<td>93.07</td>
<td>6.53</td>
<td>-14,118.66</td>
<td>-29,8500</td>
<td>-24,860.86</td>
<td>-59,6000</td>
<td>68,114.64</td>
<td>25,8000</td>
<td>-7,842.06</td>
<td>-15,5100</td>
</tr>
<tr>
<td>CBOE BZX Options Exchange (BATO)</td>
<td>10.11</td>
<td>0.00</td>
<td>8.19</td>
<td>91.76</td>
<td>0.03</td>
<td>0.00</td>
<td>0.0000</td>
<td>-41,966.65</td>
<td>-68,2700</td>
<td>10,875.10</td>
<td>9.8200</td>
<td>-177.00</td>
<td>-19,8600</td>
</tr>
<tr>
<td>NASDAQ Options</td>
<td>7.45</td>
<td>0.00</td>
<td>15.86</td>
<td>84.10</td>
<td>0.03</td>
<td>0.00</td>
<td>0.0000</td>
<td>-78,635.43</td>
<td>-54,0100</td>
<td>12,480.03</td>
<td>22,5100</td>
<td>-111.03</td>
<td>-21,4300</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>Non-Marketable Limit Orders (%)</td>
<td>Other Orders (%)</td>
<td>Net Payment Paid/Received for Market Orders(USD)</td>
<td>Net Payment Paid/Received for Market Orders(cents per hundred shares)</td>
<td>Net Payment Paid/Received for Non-Marketable Limit Orders(USD)</td>
<td>Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)</td>
<td>Net Payment Paid/Received for Market Orders(USD)</td>
<td>Net Payment Paid/Received for Other Orders(USD)</td>
<td>Net Payment Paid/Received for Other Orders(cents per hundred shares)</td>
<td></td>
</tr>
<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>
<tr>
<td>Market LLC (NDOE)</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>
<tr>
<td>CBOE Options Exchange (XCBO)</td>
<td>3.33</td>
<td>2.73</td>
<td>19.29</td>
<td>25.20</td>
<td>52.75</td>
<td>-24,695.78</td>
<td>-26.9500</td>
<td>-32,125.87</td>
<td>-29.9400</td>
<td>-26,455.10</td>
<td>-25.9900</td>
<td>-14,283.65</td>
<td>-25.2600</td>
</tr>
<tr>
<td>NASDAQ BX Options (BATO)</td>
<td>2.15</td>
<td>0.44</td>
<td>75.05</td>
<td>12.27</td>
<td>12.22</td>
<td>4,169.80</td>
<td>47.8000</td>
<td>30,364.80</td>
<td>22.7800</td>
<td>-10.25</td>
<td>-0.0400</td>
<td>4,208.40</td>
<td>36.2400</td>
</tr>
<tr>
<td>MAIA PEARL LLC (MPRL)</td>
<td>2.06</td>
<td>0.00</td>
<td>72.68</td>
<td>27.17</td>
<td>0.14</td>
<td>0.00</td>
<td>0.0000</td>
<td>-138,609.86</td>
<td>-52.0200</td>
<td>-1,512.47</td>
<td>-4.0600</td>
<td>-687.99</td>
<td>-49.5300</td>
</tr>
<tr>
<td>Nasdaq ISE LLC (ISE)</td>
<td>1.66</td>
<td>1.24</td>
<td>15.26</td>
<td>20.06</td>
<td>63.41</td>
<td>5,627.20</td>
<td>17.4400</td>
<td>-15,018.47</td>
<td>-40.3500</td>
<td>3,816.29</td>
<td>10.1000</td>
<td>10,499.59</td>
<td>13.0500</td>
</tr>
<tr>
<td>NASDAQ BX Options (NBXO)</td>
<td>1.65</td>
<td>0.00</td>
<td>70.41</td>
<td>29.37</td>
<td>0.20</td>
<td>0.00</td>
<td>0.0000</td>
<td>-55,835.68</td>
<td>-40.0500</td>
<td>4,733.57</td>
<td>18.1600</td>
<td>-235.74</td>
<td>-26.3600</td>
</tr>
<tr>
<td>NYSE American LLC (AMEX)</td>
<td>1.14</td>
<td>0.80</td>
<td>33.51</td>
<td>22.02</td>
<td>43.65</td>
<td>0.00</td>
<td>0.0000</td>
<td>-2,349.75</td>
<td>-5.9700</td>
<td>-1,105.50</td>
<td>-3.2500</td>
<td>-1,046.46</td>
<td>-7.4500</td>
</tr>
<tr>
<td>CBOE EDGO Exchange (EDGO)</td>
<td>0.99</td>
<td>0.92</td>
<td>36.75</td>
<td>27.27</td>
<td>35.66</td>
<td>4,487.67</td>
<td>38.0900</td>
<td>-1,921.01</td>
<td>-2.4200</td>
<td>-1,132.90</td>
<td>-5.1700</td>
<td>3,636.18</td>
<td>22.0400</td>
</tr>
</tbody>
</table>

**Material Aspects:**

NYSE Arca, Inc. (PCOE):

PCOE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Fee_Schedule.pdf

Information reflecting the PCOE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

CBOE BX Options Exchange (BATO):

BATO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:


Information reflecting the BATO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

NASDAQ Options Market LLC (NDOE):

NDOE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:


Information reflecting the NDOE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

CBOE Options Exchange (XCBO):

Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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 to the extent.

XCBO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:


Information reflecting the XCBO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

NASDAQ BX Options (XBOX):

XBOX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

https://boxoptions.com/regulatory/fee-schedule/
Information reflecting the XBOM's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

MGX PEARL LLC (MPRL):
MPRL has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:
https://www.miaxoptions.com/fees/pearl

Information reflecting the MPRL's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

Nasdaq ISE, LLC (ISOE):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

ISOE has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the ISOE's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

NASDAQ BX Options (NBXO):
NBXO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the NBXO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

NYSE American LLC (AMEX):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

AMEX has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the AMEX's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx

CBOE EDGO Exchange (EDGO):
Pursuant to an exchange-sponsored marketing fee program, registered market-makers may receive payments from the exchange as a result of their 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.

EDGO has a tiered pricing/payment schedule. For detailed information, please see the exchange's public website:

Information reflecting the EDGO's tiered pricing/payment schedule, as applicable to GSCO, can be found at: https://www.goldmansachs.com/compliance-rule606/docs/us_options_rate_card_202212.xlsx