FIRSTRADE SECURITIES INC. - Held NMS Stocks and Options Order Routing Public Report

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3rd Quarter, 2022

July 2022

S&P 500 Stocks

Summary

| | Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|---|--|--|--|---|
| I | 100.00 | 27.31 | 6.06 | 48.57 | 18.06 |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 98.00 | 98.95 | 97.66 | 97.03 | 99.26 | 12,402.29 | 15.0000 | 4,408.96 | 15.0000 | 8,944.84 | 14.9989 | 2,614.77 | 10.1393 |

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade receives payment from Citadel Securities, LLC for directing order flow of listed equities. Citadel Securities, LLC provides to Firstrade \$.000225 per share for stocks less than \$5.00, and \$0.0015 per share for stocks greater than or equal to \$5.00. Orders that have shares priced less than \$1.00 receive no payment. Firstrade's arrangement with Citadel Securities, LLC, is not based, in any respect, on volume thresholds. Firstrade receives payment from Apex Clearing order flow of listed equities and calculated monthly for Apex routes to Citadel. Apex Clearing Corporation provides to Firstrade monthly tiered payments as follows: (a) 1-40,000,000 shares, \$0.00040/share @ 50% of amount received by Apex; (b) 125,000,001 and above, \$0.00010/share @ 80% of amount received by Apex; (c) 125,000,001 and above, \$0.00010/share @ 80% of amount received by Apex; (b) 10w to Apex Clearing during Q3 2022.

July 2022

Non-S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|--|--|--|---|
| 100.00 | 27.26 | 9.69 | 44.48 | 18.57 |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 98.53 | 98.71 | 96.88 | 98.32 | 99.61 | 81,518.59 | 13.3507 | 43,022.81 | 7.4654 | 57,881.95 | 9.6853 | 9,714.41 | 5.0336 |

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July 2022

Options

Summary

| | Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|---|--|--|--|---|
| I | 100.00 | 7.63 | 11.79 | 57.65 | 22.92 |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 51.35 | 51.25 | 45.48 | 46.15 | 67.48 | 52,671.43 | 37.4233 | 138,809.68 | 39.9200 | 99,300.96 | 37.9634 | 18,522.09 | 11.9580 |
| Wolverine Execution Services, LLC | 41.86 | 44.55 | 48.16 | 48.51 | 20.98 | 41,639.52 | 43.3731 | 122,519.50 | 46.5114 | 123,706.00 | 46.0624 | 19,801.72 | 42.8219 |
| Volant Execution | 6.73 | 4.12 | 6.04 | 5.32 | 11.50 | 1,878.80 | 40.0000 | 13,939.20 | 40.0000 | 14,556.00 | 40.0000 | 16,210.00 | 40.0000 |

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade receives payment from Citadel Securities, LLC for directing order flow of listed options. Citadel Securities, LLC provides to Firstrade \$0.40 per contract for options contracts with spreads of one penny and \$0.80 per contract for options contracts with spreads of five cents or higher. Firstrade's arrangement with Citadel Securities, LLC, is not based, in any respect, on volume thresholds. Firstrade receives payment from Apex Clearing Corporation for directing order flow of listed options under a fully disclosed clearing agreement for Apex routes to Citadel. Apex Clearing Corporation provides to Firstrade 50% of the amount Apex receives at an execution rate of \$0.03 per contract on all options trades. Firstrade directed less than 5% of options flow to Apex Clearing during Q3 2022.

Wolverine Execution Services, LLC:

Firstrade receives payment from Wolverine Execution Services, LLC for directing order flow of listed options. Wolverine Execution Services, LLC provides to Firstrade \$0.40 per contract for options contracts with spreads of one penny and \$0.80 per contract for options contracts with spreads of five cents or higher. Firstrade's arrangement with Wolverine Execution Services, LLC, is not based, in any respect, on volume thresholds. Firstrade receives payment from Apex Clearing Corporation flow of listed options flow do pton for directing order flow of listed options flow to dept for a greenment for Apex routes to Wolverine. Apex Clearing Corporation provides to Firstrade 50% of the amount Apex receives at an execution rate of \$0.03 per contract on all options trades. Firstrade directed less than \$5% of options flow to Apex Clearing Q3 2025.

Volant Execution:

Firstrade receives payment from Volant Execution, LLC for directing order flow of listed options. Volant Execution, LLC provides to Firstrade \$0.40 per contract for options contracts with spreads of one penny and \$0.80 per contract for options contracts with spreads of five cents or higher. Firstrade's arrangement with Volant Execution, LLC, is not based, in any respect, on volume thresholds. While the arrangement is intended to help ensure successful execution of orders, this execution may involve the use of auctions or other exchange functionality and routing to third party brokers or market makers, which may result in certain cases, in price improvement or execution quality.

August 2022

S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|--|--|--|---|
| 100.00 | 28.68 | 6.09 | 48.63 | 16.60 |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 97.71 | 98.69 | 96.75 | 96.83 | 98.97 | 17,125.42 | 15.0000 | 4,993.95 | 15.0000 | 10,166.52 | 14.9959 | 2,386.97 | 9.3309 |

Material Aspects:

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August 2022

Non-S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|--|--|--|---|
| 100.00 | 28.56 | 9.21 | 43.50 | 18.72 |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 98.08 | 98.33 | 96.16 | 97.68 | 99.54 | 120,036.09 | 13.2202 | 56,620.85 | 8.2481 | 62,137.29 | 9.5648 | 12,508.66 | 4.7270 |

Material Aspects:

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August 2022

Options

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|--|--|--|---|
| 100.00 | 7.83 | 12.05 | 56.59 | 23.53 |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 64.88 | 61.69 | 60.76 | 63.39 | 71.63 | 63,605.59 | 36.0057 | 211,964.88 | 42.2265 | 159,567.74 | 39.9766 | 39,254.57 | 18.2422 |
| Wolverine Execution Services, LLC | 26.89 | 32.83 | 29.54 | 28.84 | 18.87 | 32,321.25 | 41.9261 | 91,272.50 | 43.3284 | 86,882.28 | 43.7787 | 22,707.12 | 44.4514 |
| Volant Execution | 8.10 | 5.39 | 9.18 | 7.69 | 9.46 | 3,332.80 | 44.0206 | 29,606.40 | 45.7850 | 27,892.80 | 45.5118 | 20,649.20 | 42.8114 |

Material Aspects:

CITADEL SECURITIES LLC

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September 2022

S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders | | |
|---|--|--|--|---|--|--|
| 100.00 | 27.91 | 6.33 | 49.06 | 16.70 | | |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 97.23 | 98.26 | 96.29 | 96.33 | 98.53 | 12,533.13 | 15.0000 | 4,882.17 | 15.0000 | 11,976.91 | 14.9932 | 3,324.05 | 10.0030 |

Material Aspects:

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September 2022

Non-S&P 500 Stocks

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|--|--|--|---|
| 100.00 | 28.31 | 9.04 | 44.55 | 18.10 |

Venues

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|---------------------------------------|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 98.06 | 98.25 | 96.60 | 97.62 | 99.55 | 101,891.95 | 13.3393 | 43,083.99 | 8.5301 | 58,883.99 | 10.6832 | 11,973.34 | 5.3384 |

Material Aspects:

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September 2022

Options

Summary

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|---|--|--|--|---|--|--|
| 100.00 | 7.74 | 13.11 | 54.39 | 24.76 | | |

Venues

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| CITADEL SECURITIES LLC | 68.21 | 64.48 | 66.56 | 66.56 | 73.87 | 47,749.29 | 36.4432 | 199,418.07 | 41.4485 | 145,839.93 | 38.1395 | 26,753.58 | 11.3067 |
| Wolverine Execution Services, LLC | 24.33 | 29.76 | 25.54 | 25.82 | 18.71 | 28,014.62 | 42.4393 | 72,525.88 | 42.4178 | 75,306.32 | 42.3884 | 31,743.48 | 40.9092 |
| Volant Execution | 7.36 | 5.66 | 7.48 | 7.56 | 7.38 | 3,726.40 | 44.3408 | 25,809.20 | 44.7013 | 29,570.80 | 49.0704 | 17,850.40 | 41.7661 |

Material Aspects:

CITADEL SECURITIES LLC

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Volant Execution:

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