AMERITAS INVESTMENT COMPANY, LLC - Held NMS Stocks and Options Order Routing Public Report

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4th Quarter, 2024

October 2024

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 | 97.67 | 0.49 | 0.81 | 1.03 |

| 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 (CDRG) | 33.60 | 35.04 | 69.23 | 3.25 | 39.13 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 21.95 | 23.32 | 15.38 | 2.44 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 19.09 | 19.74 | 7.69 | 0.81 | 60.87 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 16.01 | 17.13 | 0.00 | 0.81 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 2.73 | 0.00 | 0.00 | 52.03 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 1.79 | 0.00 | 0.00 | 34.15 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| HRT FINANCIAL LP (HRTF) | 1.54 | 1.65 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 1.20 | 1.28 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.85 | 0.92 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.77 | 0.82 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Citadel Securities LLC (CDRG): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

 $\label{eq:VIRTU Americas, LLC (NITE):} [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]$

Jane Street Capital, LLC (JNST): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

New York Stock Exchange (NYSE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NASDAQ Execution Services, LLC (NSDQ): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

HRT FINANCIAL LP (HRTF): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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October 2024

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 | 98.68 | 0.44 | 0.57 | 0.31 |

| 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 (CDRG) | 33.74 | 34.57 | 35.14 | 1.08 | 36.36 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 20.51 | 20.94 | 5.41 | 2.16 | 63.64 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 20.30 | 20.81 | 24.32 | 2.16 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC | 17.80 | 18.29 | 21.62 | 0.54 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| (JNST) | | | | | | | | | | | | | |
| Two Sigma Securities, LLC (SOHO) | 1.63 | 1.68 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| HRT FINANCIAL LP (HRTF) | 1.27 | 1.32 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 1.10 | 0.00 | 0.00 | 43.78 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 1.06 | 1.09 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.89 | 0.92 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Cboe EDGX US Equities Exchange (EDGX) | 0.51 | 0.00 | 0.00 | 20.54 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Citadel Securities LLC (CDRG): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

 $\label{eq:HRTFINANCIAL LP (HRTF):} [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]$

New York Stock Exchange (NYSE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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 $\label{eq:constraint} \begin{array}{l} \mbox{Cboe EDGX US Equities Exchange (EDGX):} \\ \mbox{[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]} \end{array}$

October 2024

Options

Summary

| Non-Directed Orders as % of All Orders | Market Orders as % of Non-Directed Orders | Marketable Limit Orders as % of Non- Directed Orders | Non-Marketable Limit Orders as % of Non- Directed Orders | Other Orders as % of Non-Directed Orders |
|---|--|--|--|---|
| 100.00 | 28.57 | 11.11 | 52.38 | 7.94 |

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 (CDRG) | 53.03 | 77.78 | 42.86 | 38.89 | 80.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Dash Financial Technologies LLC (DASH) | 22.73 | 0.00 | 42.86 | 30.56 | 20.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Wolverine Execution Services LLC (WEXX) | 13.64 | 0.00 | 0.00 | 25.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Susquehanna Capital Group (SUSQ) | 6.06 | 16.67 | 14.29 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Morgan Stanley & Company LLC (MSCO) | 4.55 | 5.56 | 0.00 | 5.56 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Material Aspects:

Citadel Securities LLC (CDRG):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Dash Financial Technologies LLC (DASH): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Wolverine Execution Services LLC (WEXX): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Susquehanna Capital Group (SUSQ): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Morgan Stanley & Company LLC (MSCO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

November 2024

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 | 98.96 | 0.07 | 0.61 | 0.36 |

Venue -Non-Market Marketable Non-Other Net Payment Net Payment Paid/ Net Payment Net Payment Paid/ Marketable **Received for Market** Non-directed Directed Orders Limit Orders Orders Paid/Received for Received for Received for Received for Non-Received for Non-Paid/Received for Received for Other Order Flow Orders (%) (%) (%) Limit Orders (%) Market Orders(cents per Marketable Limit Marketable Limit Marketable Limit Marketable Limit Other Orders(cents per (%) Orders(USD) hundred shares) Orders(USD) Orders(cents per Orders(USD) Orders(cents per Orders(USD) hundred shares) hundred shares) hundred shares) Citadel 38.38 39.12 0.00 5.56 80.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 Securities LLC (CDRG) VIRTU 19.12 19.52 100.00 1.39 20.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 Americas, LLC (NITE) Jane Street 17.29 17.78 0.00 1.39 0.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 Capital, LLC (JNST) G1 Execution 16.84 17.31 0.00 1.39 0.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 Services, LLC (ETMM) 0 HRT 2.50 2.57 0.00 0.00 0.00 0 0.0000 0 0.0000 0 0.0000 0.0000 FINANCIAL LP (HRTF) Two Sigma 1.90 1.92 0.00 1.39 0.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 Securities, LLC (SOHO) NASDAQ 0.95 0.00 0.00 37.50 0.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 Execution Services, LLC (NSDQ) 0.0000 StoneX 0.91 0.94 0.00 0.00 0.00 0 0 0.0000 0 0.0000 0 0.0000 Financial INC. (INTL) New York 0.00 0.00 36.11 0.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 0.91 Stock Exchange (NYSE) **UBS** Securities 0.56 0.58 0.00 0.00 0.00 0 0.0000 0 0.0000 0 0.0000 0 0.0000 LLC (UBSS)

Material Aspects:

Venues

Citadel Securities LLC (CDRG): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

 $\label{eq:linear} Jane Street Capital, LLC (JNST): \\ [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]$

G1 Execution Services, LLC (ETMM): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

HRT FINANCIAL LP (HRTF): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NASDAQ Execution Services, LLC (NSDQ): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

StoneX Financial INC. (INTL): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).] New York Stock Exchange (NYSE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

November 2024

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 | 98.83 | 0.58 | 0.43 | 0.17 |

| 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 (CDRG) | 37.53 | 37.75 | 34.29 | 11.90 | 33.33 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 19.99 | 20.03 | 22.86 | 2.38 | 66.67 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 19.43 | 19.62 | 14.29 | 4.76 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 15.85 | 16.01 | 11.43 | 2.38 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| HRT FINANCIAL LP (HRTF) | 2.13 | 2.15 | 2.86 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 1.95 | 1.96 | 2.86 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.99 | 1.01 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.94 | 0.95 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Instinet BlockCross (BLKX) | 0.57 | 0.52 | 8.57 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| New York Stock Exchange (NYSE) | 0.35 | 0.00 | 2.86 | 42.86 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Citadel Securities LLC (CDRG): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

HRT FINANCIAL LP (HRTF): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

StoneX Financial INC. (INTL): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Instinet BlockCross (BLKX): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

New York Stock Exchange (NYSE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

November 2024

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 | 51.61 | 9.68 | 37.10 | 1.61 |

| 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 (CDRG) | 52.46 | 62.50 | 40.00 | 43.48 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Dash Financial Technologies LLC (DASH) | 19.67 | 18.75 | 20.00 | 21.74 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Susquehanna Capital Group (SUSQ) | 11.48 | 12.50 | 40.00 | 0.00 | 100.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Wolverine Execution Services LLC (WEXX) | 11.48 | 0.00 | 0.00 | 30.43 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|---|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Morgan Stanley & Company LLC (MSCO) | 4.92 | 6.25 | 0.00 | 4.35 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Citadel Securities LLC (CDRG):

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Dash Financial Technologies LLC (DASH): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

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Morgan Stanley & Company LLC (MSCO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

December 2024

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 | 98.17 | 0.26 | 0.68 | 0.90 |

| 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 (CDRG) | 35.88 | 36.32 | 50.00 | 10.87 | 38.10 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 20.25 | 20.89 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 18.53 | 18.55 | 0.00 | 2.17 | 57.14 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 16.22 | 16.60 | 50.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| HRT FINANCIAL LP (HRTF) | 3.87 | 3.99 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

| Venue - Non-directed Order Flow | Non- Directed Orders (%) | Market Orders (%) | Marketable Limit Orders (%) | Non- Marketable Limit Orders (%) | Other Orders (%) | Net Payment Paid/Received for Market Orders(USD) | Net Payment Paid/ Received for Market Orders(cents per hundred shares) | Net Payment Paid/ Received for Marketable Limit Orders(USD) | Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/ Received for Non- Marketable Limit Orders(USD) | Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares) | Net Payment Paid/Received for Other Orders(USD) | Net Payment Paid/ Received for Other Orders(cents per hundred shares) |
|--|--------------------------------|-------------------------|-----------------------------------|---|------------------------|---|---|--|--|---|---|--|--|
| Two Sigma Securities, LLC (SOHO) | 2.35 | 2.43 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 1.09 | 0.00 | 0.00 | 56.52 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.71 | 0.69 | 0.00 | 0.00 | 4.76 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.29 | 0.30 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Cboe EDGX US Equities Exchange (EDGX) | 0.25 | 0.00 | 0.00 | 13.04 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Citadel Securities LLC (CDRG):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

HRT FINANCIAL LP (HRTF): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NASDAQ Execution Services, LLC (NSDQ): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

 $\label{eq:constraint} \begin{array}{l} \mbox{Cboe EDGX US Equities Exchange (EDGX):} \\ \mbox{[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]} \end{array}$

December 2024

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 | 98.56 | 0.61 | 0.58 | 0.25 |

| 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 (CDRG) | 34.96 | 35.59 | 20.00 | 3.03 | 50.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Jane Street Capital, LLC (JNST) | 18.61 | 18.96 | 20.00 | 1.01 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| G1 Execution Services, LLC (ETMM) | 17.81 | 18.09 | 27.50 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| VIRTU Americas, LLC (NITE) | 17.12 | 17.28 | 17.50 | 3.03 | 50.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| HRT FINANCIAL LP (HRTF) | 4.68 | 4.79 | 2.50 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Two Sigma Securities, LLC (SOHO) | 2.61 | 2.68 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Instinet BlockCross (BLKX) | 1.27 | 1.22 | 12.50 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| NASDAQ Execution Services, LLC (NSDQ) | 0.75 | 0.00 | 0.00 | 44.44 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| UBS Securities, LLC (UBSS) | 0.69 | 0.70 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| StoneX Financial INC. (INTL) | 0.67 | 0.69 | 0.00 | 0.00 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Material Aspects: Citadel Securities LLC (CDRG):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Jane Street Capital, LLC (JNST): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

G1 Execution Services, LLC (ETMM): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

VIRTU Americas, LLC (NITE): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

HRT FINANCIAL LP (HRTF): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Two Sigma Securities, LLC (SOHO): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Instinet BlockCross (BLKX):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

NASDAQ Execution Services, LLC (NSDQ): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

UBS Securities, LLC (UBSS): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

StoneX Financial INC. (INTL): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

December 2024

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 | 30.43 | 4.35 | 56.52 | 8.70 |

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 (CDRG) | 48.48 | 71.43 | 0.00 | 47.83 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Dash Financial Technologies LLC (DASH) | 36.36 | 28.57 | 100.00 | 34.78 | 50.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Wolverine Execution Services LLC (WEXX) | 12.12 | 0.00 | 0.00 | 17.39 | 0.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |
| Susquehanna Capital Group (SUSQ) | 3.03 | 0.00 | 0.00 | 0.00 | 50.00 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 | 0 | 0.0000 |

Material Aspects:

Citadel Securities LLC (CDRG):

[Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Dash Financial Technologies LLC (DASH): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

Wolverine Execution Services LLC (WEXX): [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]

 $\label{eq:suspectation} Susquehanna Capital Group (SUSQ): \\ [Insert discussion of the material aspects of the relationship with this venue pursuant to rule 606(a)(1)(iv).]$