

# Alpaca Securities LLC - Held NMS Stocks and Options Order Routing Public Report

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2nd Quarter, 2022

April 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	41.86	13.84	22.01	22.29

## 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)
Virtu Americas, LLC (NITE)	46.82	41.02	43.79	41.91	64.46	2,277.78	20.0000	803.79	20.0000	1,221.45	19.9686	763.86	8.0152
Citadel Securities LLC (CDRG)	34.73	40.20	38.53	39.30	17.58	1,622.37	14.5343	618.79	17.4990	1,038.28	18.0978	-232.54	-8.9473
Jane Street Capital, LLC (JNST)	13.86	15.34	6.64	12.79	16.63	851.72	20.0000	121.88	20.0000	373.26	20.0000	366.18	14.8938
UBS Securities LLC (UBSS)	4.59	3.45	11.03	6.00	1.34	187.50	19.5953	168.57	16.6502	144.42	16.4827	33.69	17.0592

## Material Aspects:

Virtu Americas, LLC (NITE):

Alpaca Securities receives revenue from third party liquidity providers based on the order flow execution received at each destination. While rebate rates are substantially similar amongst the liquidity providers they may vary based on order characteristics (such as price of execution, marketability and other characteristics). Alpaca does not negotiate with venues over rates as a condition of a venue receiving its order flow. There is a potential conflict inherent to a market maker such as Virtu both paying for order flow and providing price improvement, as the potential source of funds for each is the same, namely the anticipated profit the market maker seeks to earn from executing or facilitating the execution of Alpaca Securities LLC customer orders. Accordingly, from such anticipated profit, a market maker such as Virtu can (i) forgo a portion of such anticipated profit to provide price improvement; (ii) forgo a portion of such anticipated profit to pay for order flow; or (iii) retain a larger portion of anticipated profit and not provide (or provide less) price improvement or not provide (or provide less) payment for order flow. A market maker's (such as Virtu's) anticipated profit must be allocated among these three sub-categories, such that an increased allocation to any one subcategory will result in a decreased allocation to one or more of the other categories.

Citadel Securities LLC (CDRG):

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## April 2022

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### 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	52.24	9.71	18.43	19.63

#### 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)
Virtu Americas, LLC (NITE)	49.56	45.58	42.01	44.20	68.91	38,883.20	18.0173	5,189.81	14.0381	8,780.94	11.8964	5,971.55	4.8715
Citadel Securities LLC (CDRG)	35.77	37.31	43.61	42.70	21.31	25,407.97	14.3839	3,445.95	8.9806	6,855.23	9.6143	-3,667.72	-9.6783
Jane Street Capital, LLC (JNST)	12.71	14.79	10.94	11.35	9.34	10,948.64	15.6406	1,248.58	12.9726	2,651.57	13.9957	1,602.36	9.6500
UBS Securities LLC (UBSS)	1.96	2.32	3.44	1.76	0.44	1,585.79	14.4507	227.97	7.5282	255.64	8.7089	94.35	11.9288

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April 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
0.00	0.00	0.00	0.00	0.00

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)

Material Aspects:

May 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	37.94	16.15	24.18	21.73

Venues

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Virtu Americas, LLC (NITE)	51.07	43.82	48.64	48.62	68.27	2,692.60	20.0000	1,272.25	20.0000	1,896.17	19.9213	1,687.00	14.0490
Citadel Securities LLC (CDRG)	28.70	33.12	32.36	39.29	6.48	1,748.13	17.1811	622.92	14.7188	1,336.58	17.3777	-67.80	-5.9446
Jane Street Capital, LLC (JNST)	17.58	19.77	17.43	8.39	24.08	1,214.67	20.0000	455.95	20.0000	328.32	20.0000	796.97	18.8126

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UBS Securities LLC (UBSS)	2.65	3.29	1.56	3.70	1.17	195.20	19.3206	18.00	8.8061	130.98	18.0590	38.72	18.8914

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May 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	51.09	11.91	19.05	17.94

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)
Virtu Americas, LLC (NITE)	51.00	46.54	42.14	47.54	73.29	32,321.09	17.0134	6,426.62	16.0182	7,539.06	10.4166	7,128.90	6.7838

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Citadel Securities LLC (CDRG)	30.91	31.15	39.59	39.66	15.17	18,087.12	14.2221	3,428.40	9.0966	4,775.76	7.9087	-1,866.15	-8.5791
Jane Street Capital, LLC (JNST)	15.19	18.95	13.09	10.50	10.86	11,808.96	15.2627	2,182.10	17.5094	2,303.76	14.4094	2,181.12	14.0067
UBS Securities LLC (UBSS)	2.89	3.36	5.18	2.30	0.68	2,140.99	15.6117	370.64	7.5138	273.86	7.8313	164.46	16.7609

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May 2022

Options  
Summary

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0.00	0.00	0.00	0.00	0.00

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)
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Material Aspects:

June 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	54.31	13.00	23.53	9.16

Venues

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Virtu Americas, LLC (NITE)	42.44	39.02	39.53	42.42	66.88	2,600.54	20.0000	630.52	19.9999	1,218.97	19.9011	600.69	15.9854
Citadel Securities LLC (CDRG)	32.39	29.53	47.62	40.04	8.00	1,939.01	19.7017	555.43	14.6221	1,074.98	18.5927	11.89	2.6453
Jane Street Capital, LLC (JNST)	17.82	21.03	9.48	13.06	22.84	1,401.45	20.0000	151.15	20.0000	377.16	20.0000	248.03	19.3275
UBS Securities LLC (UBSS)	7.36	10.43	3.37	4.47	2.28	688.62	19.8151	30.24	11.2350	112.15	17.3639	22.43	17.5413

Material Aspects:

Virtu Americas, LLC (NITE):  
 Alpaca Securities receives revenue from third party liquidity providers based on the order flow execution received at each destination. While rebate rates are substantially similar amongst the liquidity providers they may vary based on order characteristics (such as price of execution, marketability and other characteristics). Alpaca does not negotiate with venues over rates as a condition of a venue receiving its order flow. There is a potential conflict inherent to a market maker such as Virtu both paying for order flow and providing price improvement, as the potential source of funds for each is the same, namely the anticipated profit the market maker seeks to earn from executing or facilitating the execution of Alpaca Securities LLC customer orders. Accordingly, from such anticipated profit, a market maker such as Virtu can (i) forgo a portion of such anticipated profit to provide price improvement; (ii) forgo a portion of such anticipated profit to pay for order flow; or (iii) retain a larger portion of anticipated profit and not provide (or provide less) price improvement or not provide (or provide less) payment for order flow. A market maker's (such as Virtu's) anticipated profit must be allocated among these three sub-categories, such that an increased allocation to any one subcategory will result in a decreased allocation to one or more of the other categories.

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Jane Street Capital, LLC (JNST):

Alpaca Securities receives revenue from third party liquidity providers based on the order flow execution received at each destination. While rebate rates are substantially similar amongst the liquidity providers they may vary based on order characteristics (such as price of execution, marketability and other characteristics). Alpaca does not negotiate with venues over rates as a condition of a venue receiving its order flow. There is a potential conflict inherent to a market maker such as Jane Street both paying for order flow and providing price improvement, as the potential source of funds for each is the same, namely the anticipated profit the market maker seeks to earn from executing or facilitating the execution of Alpaca Securities LLC customer orders. Accordingly, from such anticipated profit, a market maker such as Jane Street can (i) forgo a portion of such anticipated profit to provide price improvement; (ii) forgo a portion of such anticipated profit to pay for order flow; or (iii) retain a larger portion of anticipated profit and not provide (or provide less) price improvement or not provide (or provide less) payment for order flow. A market maker's (such as Jane Street's) anticipated profit must be allocated among these three sub-categories, such that an increased allocation to any one subcategory will result in a decreased allocation to one or more of the other categories.

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June 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	50.22	16.21	23.35	10.22

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)
Virtu Americas, LLC (NITE)	42.95	38.81	38.85	41.68	72.64	27,430.56	15.3868	8,550.42	14.8458	9,549.08	10.7242	4,599.35	6.7718
Citadel Securities LLC (CDRG)	28.77	26.19	39.08	33.72	13.73	16,281.61	13.5326	4,563.87	7.8770	6,275.16	8.7109	-1,115.43	-8.6854
Jane Street Capital, LLC (JNST)	20.58	27.24	14.36	14.05	12.60	17,701.00	14.1439	3,088.35	14.5048	3,471.05	11.5647	1,271.31	10.7950
UBS Securities LLC (UBSS)	7.71	7.76	7.70	10.54	1.03	4,217.60	11.8384	682.26	5.9740	732.75	3.2544	115.54	11.9714

Material Aspects:

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Jane Street Capital, LLC (JNST):

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June 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
0.00	0.00	0.00	0.00	0.00

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)
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Material Aspects: