

Charles Schwab - Held NMS Stocks and Options Order Routing Public Report

Generated on Mon Jan 25 2021 09:44:55 GMT-0500 (Eastern Standard Time)

4th Quarter, 2020

October 2020

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
99.65	52.85	4.81	33.81	8.53

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 Execution Services	30.36	31.61	30.06	27.05	35.90	244,200.84	8.8085	54,630.73	8.9860	370,002.48	29.9183	33,072.54	9.9530
Virtu Americas, LLC	28.50	27.98	25.49	26.13	42.90	226,828.12	8.9903	51,494.17	9.0000	225,864.27	30.0000	18,854.96	4.4579
G1 Execution Services, LLC	22.67	23.27	25.56	23.98	12.08	184,457.68	9.0000	38,769.68	9.0000	212,931.59	30.0000	28,382.23	13.3212
UBS Securities, LLC	13.60	12.58	14.04	16.64	7.64	82,376.85	8.9999	39,154.89	9.1709	106,837.99	27.6927	22,060.72	13.4538
Two Sigma Securities, LLC	4.18	4.53	4.81	4.29	1.24	41,606.64	9.0000	9,586.32	9.0000	37,769.08	28.2129	1,735.21	9.0000
Cboe EDGX Exchange, Inc.	0.39	0.04	0.03	1.04	0.15	-0.30	-0.0043	-2,145.97	-28.2131	7,507.02	26.6356	0.00	0.0000
Nasdaq Execution Services, LLC	0.30	0.00	0.01	0.87	0.08	0.00	0.0000	-14.88	-30.0000	6,490.68	33.0000	-49.56	-19.3171

Material Aspects:

Citadel Execution Services:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Virtu Americas, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

G1 Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

UBS Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Two Sigma Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Cboe EDGX Exchange, Inc.:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Nasdaq Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

October 2020

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
99.41	48.77	6.35	34.79	10.09

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 Execution Services	29.59	30.09	29.96	27.17	35.24	689,614.43	8.2340	206,543.06	7.1744	814,808.31	26.8378	97,136.71	7.6595
Virtu Americas, LLC	27.81	25.72	25.70	26.33	44.35	636,775.91	8.2775	194,840.44	7.3083	727,439.73	26.6826	37,551.06	2.1609
G1 Execution Services, LLC	23.51	25.41	25.44	23.92	11.71	559,319.53	8.3921	155,257.56	7.4356	745,029.26	26.6040	71,555.83	12.2109
UBS Securities, LLC	14.10	13.77	13.96	16.52	7.44	232,130.10	8.3476	126,830.28	7.8311	336,259.26	22.6235	61,550.05	11.9033
Two Sigma Securities, LLC	4.29	4.94	4.86	4.20	1.09	114,005.00	8.3277	34,790.55	7.2725	118,395.42	24.9826	5,841.64	8.5883
Cboe EDGX Exchange, Inc.	0.40	0.06	0.07	1.04	0.09	-0.67	-0.0044	-10,411.95	-25.0957	19,392.07	22.8422	0.00	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)
Citadel Execution Services	35.14	33.29	34.23	33.81	38.74	1,038,727.20	34.2349	843,638.80	35.3964	1,053,372.90	36.4288	709,366.90	29.7116
Global Execution Brokers LP	30.23	29.98	30.05	29.64	31.45	1,350,445.25	35.9426	388,527.13	34.3847	1,063,292.85	38.0296	757,506.07	36.7572
Wolverine Execution Services, LLC	18.26	19.34	18.65	20.09	14.34	586,180.40	35.4614	440,255.10	37.4041	690,697.00	40.2142	407,067.20	36.0991
Dash Financial Technologies, LLC	9.17	12.85	11.95	10.34	4.36	429,962.00	32.9652	258,177.40	34.0082	346,865.60	34.8941	124,047.76	35.5471
Morgan Stanley & Co., LLC	7.20	4.55	5.12	6.11	11.11	161,505.10	39.5241	162,416.30	42.6647	206,138.20	44.9350	269,492.80	35.9324

Material Aspects:

Citadel Execution Services:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Global Execution Brokers LP:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Wolverine Execution Services, LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Dash Financial Technologies, LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue. Dash has agreements with unaffiliated market makers, designed to facilitate liquidity provision and price improvement opportunities to Dash's retail equity option clients.

Morgan Stanley & Co., LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

November 2020

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
99.72	54.18	4.84	32.33	8.66

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)
---------------------------------	-------------------------	-------------------	-----------------------------	---------------------------------	------------------	--	---	--	---	--	---	---	--

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 Execution Services	30.29	31.34	29.93	27.15	35.67	249,395.33	8.8797	50,805.86	8.9554	343,112.73	29.8269	33,405.67	9.0713
Virtu Americas, LLC	27.92	27.20	24.71	25.67	42.65	222,780.06	8.9902	48,293.15	9.0000	227,120.34	30.0000	22,496.10	4.4830
G1 Execution Services, LLC	22.96	23.78	25.61	24.06	12.20	190,025.54	9.0000	38,143.34	9.0000	214,383.24	30.0000	30,518.98	13.9131
UBS Securities, LLC	13.74	12.94	14.01	16.64	7.81	84,566.11	8.5666	43,502.56	8.7376	109,978.60	26.5874	26,282.05	12.8115
Two Sigma Securities, LLC	4.27	4.69	4.83	4.27	1.31	42,129.21	9.0003	8,981.76	9.0001	37,193.23	28.4001	4,779.45	12.2306
Cboe EDGX Exchange, Inc.	0.43	0.05	0.91	1.06	0.19	-0.46	-0.0066	-3,626.19	-27.8332	7,945.47	25.4530	0.00	0.0000
Nasdaq Execution Services, LLC	0.39	0.00	0.01	1.15	0.17	0.00	0.0000	-34.05	-29.9472	9,118.76	33.0000	-68.05	-24.9065

Material Aspects:

Citadel Execution Services:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Virtu Americas, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

G1 Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

UBS Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Two Sigma Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Cboe EDGX Exchange, Inc.:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Nasdaq Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

November 2020

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
99.48	49.03	6.24	34.13	10.59

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 Execution Services	29.73	30.12	30.12	27.25	35.67	773,398.35	7.9644	232,429.44	7.2591	949,800.31	25.9262	121,772.93	6.9652
Virtu Americas, LLC	27.26	24.99	24.99	25.53	44.72	690,745.43	7.9804	216,653.23	7.2766	811,028.90	25.9886	45,299.49	2.0114
G1 Execution Services, LLC	23.59	25.75	25.52	24.01	11.14	631,307.15	8.2020	174,192.23	7.6194	864,701.35	26.0902	86,787.86	12.6638
UBS Securities, LLC	14.19	14.03	14.15	16.62	7.15	270,257.38	7.8163	161,741.96	7.5289	399,232.60	20.8521	77,177.51	11.6871
Two Sigma Securities, LLC	4.37	5.08	4.98	4.26	1.11	133,401.71	8.0028	40,775.96	7.4435	135,042.11	25.1887	10,544.32	11.2942
Choe EDGX Exchange, Inc.	0.44	0.03	0.24	1.16	0.11	-0.98	-0.0147	-4,068.20	-25.8311	27,028.70	26.5408	0.00	0.0000
Nasdaq Execution Services, LLC	0.41	0.00	0.01	1.18	0.10	0.00	0.0000	-95.39	-29.8629	28,109.82	31.0221	-284.73	-23.0126

Material Aspects:

Citadel Execution Services:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Virtu Americas, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

G1 Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

UBS Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Two Sigma Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Cboe EDGX Exchange, Inc.:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Nasdaq Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

November 2020

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	16.46	6.73	49.96	26.86

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 Execution Services	34.51	33.19	33.13	33.00	38.48	1,055,349.60	35.0790	877,755.90	36.9997	1,089,087.50	37.7254	708,244.20	31.4374
Global Execution Brokers LP	30.27	30.02	29.96	29.53	31.85	1,362,269.01	37.0693	390,508.04	35.3284	1,176,084.12	39.2736	736,739.25	37.5852
Wolverine Execution Services, LLC	18.54	19.01	19.42	20.60	14.20	633,833.40	36.9347	488,478.70	39.6640	778,024.40	41.4637	402,412.20	36.8774
Dash Financial Technologies, LLC	9.23	12.79	11.86	10.34	4.32	444,359.20	33.6379	272,159.50	35.0464	371,840.50	35.4765	116,850.54	35.4012
Morgan Stanley & Co., LLC	7.45	4.99	5.63	6.52	11.14	182,974.70	42.0366	192,404.10	46.1748	238,973.10	45.5014	261,926.50	35.9809

Material Aspects:

Citadel Execution Services:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Global Execution Brokers LP:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Wolverine Execution Services, LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Dash Financial Technologies, LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue. Dash has agreements with unaffiliated market makers, designed to facilitate liquidity provision and price improvement opportunities to Dash's retail equity option clients.

Morgan Stanley & Co., LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

December 2020

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
99.77	56.12	4.78	31.56	7.54

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 Execution Services	31.08	32.02	30.36	27.32	40.32	244,557.53	8.8804	52,488.89	8.8727	316,895.37	29.7790	47,642.02	9.8959
Virtu Americas, LLC	26.73	26.75	24.17	24.83	36.12	216,986.51	8.9877	45,355.13	9.0000	210,201.42	30.0000	16,880.91	4.8608
G1 Execution Services, LLC	22.66	23.09	25.32	23.82	13.02	193,589.98	9.0000	40,042.40	9.0000	217,049.60	30.0000	28,613.75	13.8698
UBS Securities, LLC	13.99	13.05	14.46	16.87	8.66	92,922.82	8.9999	43,648.72	9.1295	118,186.65	28.1209	24,688.94	13.7245
Two Sigma Securities, LLC	4.68	5.03	5.38	4.70	1.57	46,724.50	9.0003	9,531.72	9.0041	43,974.58	28.5240	4,186.12	11.5826
Cboe EDGX Exchange, Inc.	0.54	0.07	0.28	1.50	0.21	-4.04	-0.0232	-8,717.96	-29.2589	7,539.41	14.5043	0.00	0.0000
Nasdaq Execution Services, LLC	0.31	0.00	0.03	0.96	0.11	0.00	0.0000	-17.89	-30.0000	7,757.47	33.0000	-73.35	-15.0428

Material Aspects:

Citadel Execution Services:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Virtu Americas, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

G1 Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

UBS Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Two Sigma Securities, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Cboe EDGX Exchange, Inc.:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Nasdaq Execution Services, LLC:

As detailed above, Schwab receives rebates from liquidity providers and certain exchanges based upon the order flow executed at each destination. Some orders require us to pay associated transaction costs, but most orders result in rebates. Rebate rates are substantially similar among the various securities exchanges and liquidity providers, although they vary based upon order characteristics (e.g. price of the security, marketability). Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

December 2020

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
99.51	48.80	6.47	34.65	10.08

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 Execution Services	30.46	30.44	30.58	27.54	40.55	884,999.23	7.9543	283,021.19	7.5508	1,108,003.61	26.0547	170,281.36	6.6512
Virtu Americas, LLC	26.21	24.42	24.59	25.19	39.43	774,616.11	7.9321	258,892.03	7.3215	932,653.83	26.2408	44,021.11	1.8911
G1 Execution Services, LLC	23.12	25.22	24.61	23.38	11.07	709,141.17	8.0923	207,854.24	7.5876	981,742.82	26.0924	87,747.18	12.2234
UBS Securities, LLC	14.56	14.36	14.64	16.90	7.43	330,608.82	8.0964	202,419.35	7.8764	534,712.82	23.4400	95,728.02	12.8900
Two Sigma Securities, LLC	4.78	5.53	5.37	4.61	1.30	160,492.92	7.9646	53,152.05	7.5617	169,174.39	24.4041	12,773.43	10.8981
Cboe EDGX Exchange, Inc.	0.54	0.03	0.17	1.45	0.14	-0.70	-0.0087	-4,068.88	-21.7557	39,560.68	26.9871	0.00	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)
Citadel Execution Services	34.56	33.14	33.47	33.16	38.25	1,266,694.60	35.3797	1,076,442.90	37.0739	1,190,027.20	38.8423	874,350.60	31.3632
Global Execution Brokers LP	30.25	29.99	29.70	29.49	31.94	1,618,516.27	38.1778	462,230.88	35.2019	1,322,597.48	40.4547	942,888.13	37.8935
Wolverine Execution Services, LLC	18.53	18.96	19.44	20.65	14.24	753,897.80	37.2724	569,277.90	39.9138	836,174.50	42.0317	500,368.80	37.3156
Dash Financial Technologies, LLC	8.70	12.34	11.05	9.53	4.30	517,726.80	33.5595	303,120.20	35.1062	383,624.60	35.6760	143,473.15	35.4826
Morgan Stanley & Co., LLC	7.95	5.57	6.34	7.17	11.28	220,686.90	37.8017	212,368.40	42.3993	249,441.10	40.4532	327,967.30	36.7152

Material Aspects:

Citadel Execution Services:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Global Execution Brokers LP:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Wolverine Execution Services, LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.

Dash Financial Technologies, LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue. Dash has agreements with unaffiliated market makers, designed to facilitate liquidity provision and price improvement opportunities to Dash's retail equity option clients.

Morgan Stanley & Co., LLC:

As detailed above, Charles Schwab receives payment for routing listed option order flow to market makers. Any difference in average net per contract payments paid by market makers is due to the various type of orders and respective quantities they handle. Schwab will not bid out its order flow among venues nor negotiate over rates of payment as a condition for sending more order flow to a market venue.