SAFRA SECURITIES LLC - Held NMS Stocks and Options Order Routing Public Report

Generated on Mon Nov 09 2026 16:47:20 GMT-0500 (Eastern Standard Time)

2nd Quarter, 2026

April 2026

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	80.84	4.33	8.70	6.12

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)	94.02	98.76	34.71	78.60	95.32	1,642.7880	9.9968	49.5560	10.0000	104.5160	10.0000	271.2370	10.0000
Pershing LLC (PERX)	5.84	1.15	65.29	20.58	4.68	-19.0781	-18.0033	-64.7867	-18.0033	-13.5943	-18.0033	-5.7791	-18.0033

Material Aspects:

Citadel Securities LLC (CDRG):
For traditional equity orders routed to Citadel, SSL receives one-tenth of a cent per share for held order flow during regular market hours in equities priced greater than one dollar per share; for algorithmic equity orders routed to Citadel, SSL is charged $0.0012 per share.

Pershing LLC (PERX):
For traditional equity orders routed to Pershing LLC, SSL is charged one-tenth of a cent per share; for algorithmic equity orders routed to Pershing, SSL is charged between one-tenth of a cent and $0.0018 per share, depending on the algorithm selected.

April 2026

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

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	61.72	10.23	19.51	8.54

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 Securities LLC (CDRG)	84.11	96.43	40.51	71.48	76.14	3,061.8220	7.3195	373.4380	2.5462	597.8950	8.1818	413.0560	9.7636
Pershing LLC (PERX)	9.77	3.57	36.39	14.10	12.88	-622.7590	-14.4530	-2,177.4422	-17.4538	-187.3530	-16.7790	-731.9202	-15.2444
CBOE EDGA US Equites Exchange (EDGA)	5.76	0.00	22.78	12.94	10.61	0.0000	0.0000	-2,665.2064	-25.3209	-486.2720	-29.9887	-400.2324	-23.9660

Material Aspects:

Citadel Securities LLC (CDRG):
For traditional equity orders routed to Citadel, SSL receives one-tenth of a cent per share for held order flow during regular market hours in equities priced greater than one dollar per share; for algorithmic equity orders routed to Citadel, SSL is charged $0.0012 per share.

Pershing LLC (PERX):
For traditional equity orders routed to Pershing LLC, SSL is charged one-tenth of a cent per share; for algorithmic equity orders routed to Pershing, SSL is charged between one-tenth of a cent and $0.0018 per share, depending on the algorithm selected.

CBOE EDGA US Equites Exchange (EDGA):
For equity orders routed to EDGA, SSL may receive rebates or be charged fees depending on whether the order adds liquidity or removes liquidity from the exchange. These fees may be affected by aggregating trading volumes. For the quarter, SSL received rebates of $0.00270 per share (for fee codes 3, Y, V) and $0.00300 per share (for fee code SS) and was charged fees of $0.00280 per share (for fee code RT), $0.00290 per share (for fee code RX), $0.00299 per share (for fee code 6), $0.00300 per share (for fee codes W, BB, N, MT, 7), 0.00303 per share (for fee code 7), $0.00301 per share (for fee code W), and $0.00320 (for fee code 6). Please visit https://www.cboe.com/us/equities/membership/fee_schedule/edga/ for the most updated schedule and a discussion of the rebates/fees by EDGA.

April 2026

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	4.25	22.25	58.30	15.20

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)
MEMX LLC OPTIONS (MXOP)	19.51	0.00	0.00	32.96	1.96	0.0000	0.0000	0.0000	0.0000	-542.2500	-25.0000	-97.7500	-25.0000

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)
NYSE ARCA OPTIONS (ARCO)	18.38	0.00	0.00	26.07	20.94	0.0000	0.0000	0.0000	0.0000	-2,006.7500	-25.0000	-104.7500	-25.0000
Citadel Securities LLC (OPCT)	18.26	100.00	29.95	10.15	9.39	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO)	14.46	0.00	34.09	11.58	0.78	0.0000	0.0000	-1,387.7500	-25.0000	-788.2500	-25.0000	-8.2500	-25.0000
MIAX EMERALD, LLC (EMLD)	6.93	0.00	0.67	9.08	9.78	0.0000	0.0000	-17.5000	-25.0000	-243.5000	-25.0000	-39.5000	-25.0000
CBOE BZX OPTIONS EXCHANGE (BATO)	5.77	0.00	0.00	8.21	6.46	0.0000	0.0000	0.0000	0.0000	-87.5000	-25.0000	-95.7500	-25.0000
ISE MERCURY, LLC (MCRY)	3.93	0.00	4.41	0.00	19.37	0.0000	0.0000	-281.7500	-25.0000	0.0000	0.0000	-219.7500	-25.0000
BOX OPTIONS EXCHANGE (XBOX)	2.86	0.00	11.90	0.36	0.00	0.0000	0.0000	-454.2500	-25.0000	-11.0000	-25.0000	0.0000	0.0000

Material Aspects:

MEMX LLC OPTIONS (MXOP):
With respect to option orders routed to MEMX LLC OPTIONS, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

NYSE ARCA OPTIONS (ARCO):
With respect to option orders routed to NYSE ARCA OPTIONS, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

Citadel Securities LLC (OPCT):
With respect to options, Citadel acts as an options market maker.

MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO):
With respect to option orders routed to MIAMI INTERNATIONAL SECURITIES EXCHANGE, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

MIAX EMERALD, LLC (EMLD):
With respect to option orders routed to MIAX EMERALD, LLC, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

CBOE BZX OPTIONS EXCHANGE (BATO):
With respect to option orders routed to CBOE BZX OPTIONS EXCHANGE, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

ISE MERCURY, LLC (MCRY):
With respect to option orders routed to ISE MERCURY, LLC, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

BOX OPTIONS EXCHANGE (XBOX):
With respect to option orders routed to BOX OPTIONS EXCHANGE, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

May 2026

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	80.58	2.84	9.69	6.89

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)	95.18	98.56	59.09	75.56	98.13	904.0640	9.7403	65.7130	10.0000	103.7570	10.0000	60.6680	10.0000

Material Aspects:

Citadel Securities LLC (CDRG):
For traditional equity orders routed to Citadel, SSL receives one-tenth of a cent per share for held order flow during regular market hours in equities priced greater than one dollar per share; for algorithmic equity orders routed to Citadel, SSL is charged $0.0012 per share.

May 2026

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	65.66	7.82	19.69	6.53

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 (CDRG)	86.49	97.14	32.82	73.64	81.74	3,261.5900	6.2566	375.3230	8.5805	477.4690	9.3534	156.3260	6.9224
Pershing LLC (PERX)	13.39	2.86	66.41	26.06	18.26	-1,384.6124	-13.3194	-2,036.4512	-16.3888	-304.9504	-18.0018	-2,235.0121	-14.4542

Material Aspects:

Citadel Securities LLC (CDRG):
For traditional equity orders routed to Citadel, SSL receives one-tenth of a cent per share for held order flow during regular market hours in equities priced greater than one dollar per share; for algorithmic equity orders routed to Citadel, SSL is charged $0.0012 per share.

Pershing LLC (PERX):
For traditional equity orders routed to Pershing LLC, SSL is charged one-tenth of a cent per share; for algorithmic equity orders routed to Pershing, SSL is charged between one-tenth of a cent and $0.0018 per share, depending on the algorithm selected.

May 2026

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	3.51	17.27	66.51	12.71

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 (OPCT)	21.86	100.00	49.89	9.81	25.23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEMX LLC OPTIONS (MXOP)	21.67	0.00	0.00	32.29	1.52	0.0000	0.0000	0.0000	0.0000	-365.7500	-25.0000	-43.0000	-25.0000
NYSE ARCA OPTIONS (ARCO)	19.00	0.00	0.00	25.32	17.02	0.0000	0.0000	0.0000	0.0000	-1,264.7500	-25.0000	-17.0000	-25.0000
MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO)	15.49	0.00	33.33	14.52	0.61	0.0000	0.0000	-479.7500	-25.0000	-834.2500	-25.0000	-2.5000	-25.0000
MIAX EMERALD, LLC (EMLD)	6.64	0.00	0.22	8.71	6.38	0.0000	0.0000	-0.5000	-25.0000	-84.7500	-25.0000	-24.5000	-25.0000
CBOE BZX OPTIONS EXCHANGE (BATO)	5.33	0.00	0.00	7.43	3.04	0.0000	0.0000	0.0000	0.0000	-69.5000	-25.0000	-49.7500	-25.0000
ISE MERCURY, LLC (MCRY)	3.79	0.00	1.34	0.00	27.96	0.0000	0.0000	-28.7500	-25.0000	0.0000	0.0000	-150.5000	-25.0000

Material Aspects:

Citadel Securities LLC (OPCT):
With respect to options, Citadel acts as an options market maker.

MEMX LLC OPTIONS (MXOP):
With respect to option orders routed to MEMX LLC OPTIONS, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

NYSE ARCA OPTIONS (ARCO):
With respect to option orders routed to NYSE ARCA OPTIONS, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO):
With respect to option orders routed to MIAMI INTERNATIONAL SECURITIES EXCHANGE, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

MIAX EMERALD, LLC (EMLD):
With respect to option orders routed to MIAX EMERALD, LLC, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

CBOE BZX OPTIONS EXCHANGE (BATO):

With respect to option orders routed to CBOE BZX OPTIONS EXCHANGE, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

ISE MERCURY, LLC (MCRY):
With respect to option orders routed to ISE MERCURY, LLC, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

June 2026

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	74.74	5.69	13.05	6.52

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)	88.92	96.49	47.69	60.74	94.63	785.1960	9.6421	68.6700	10.0000	76.0680	10.0000	39.6410	10.0000
Pershing LLC (PERX)	11.08	3.51	52.31	39.26	5.37	-27.0446	-18.0033	-36.0930	-18.0033	-125.7152	-18.0033	-4.7529	-18.0033

Material Aspects:

Citadel Securities LLC (CDRG):
For traditional equity orders routed to Citadel, SSL receives one-tenth of a cent per share for held order flow during regular market hours in equities priced greater than one dollar per share; for algorithmic equity orders routed to Citadel, SSL is charged $0.0012 per share.

Pershing LLC (PERX):
For traditional equity orders routed to Pershing LLC, SSL is charged one-tenth of a cent per share; for algorithmic equity orders routed to Pershing, SSL is charged between one-tenth of a cent and $0.0018 per share, depending on the algorithm selected.

June 2026

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	63.78	8.77	21.48	5.95

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)	83.81	97.29	33.91	66.39	75.64	3,347.1320	7.7191	530.3120	9.5939	712.8090	9.8195	167.4770	10.0000
Pershing LLC (PERX)	16.09	2.71	66.09	33.49	23.08	-1,097.8219	-13.9583	-2,180.8114	-17.5683	-651.3954	-18.0033	-1,279.1337	-15.7048

Material Aspects:

Citadel Securities LLC (CDRG):
For traditional equity orders routed to Citadel, SSL receives one-tenth of a cent per share for held order flow during regular market hours in equities priced greater than one dollar per share; for algorithmic equity orders routed to Citadel, SSL is charged $0.0012 per share.

Pershing LLC (PERX):
For traditional equity orders routed to Pershing LLC, SSL is charged one-tenth of a cent per share; for algorithmic equity orders routed to Pershing, SSL is charged between one-tenth of a cent and $0.0018 per share, depending on the algorithm selected.

June 2026

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	4.79	17.55	64.79	12.88

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 (OPCT)	21.72	100.00	43.36	9.97	22.22	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEMX LLC OPTIONS (MXOP)	20.98	0.00	0.00	32.07	1.59	0.0000	0.0000	0.0000	0.0000	-301.5000	-25.0000	-36.0000	-25.0000
MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO)	19.59	0.00	37.30	20.08	0.32	0.0000	0.0000	-346.5000	-25.0000	-798.5000	-25.0000	-7.7500	-25.0000
NYSE ARCA OPTIONS (ARCO)	16.93	0.00	0.00	23.11	15.24	0.0000	0.0000	0.0000	0.0000	-856.2500	-25.0000	-65.5000	-25.0000
MIAX EMERALD, LLC (EMLD)	6.30	0.00	0.70	8.71	4.13	0.0000	0.0000	-1.7500	-25.0000	-55.0000	-25.0000	-20.5000	-25.0000
ISE MERCURY, LLC (MCRY)	4.50	0.00	1.17	0.00	33.33	0.0000	0.0000	-13.7500	-25.0000	0.0000	0.0000	-152.5000	-25.0000

Material Aspects:

Citadel Securities LLC (OPCT):
With respect to options, Citadel acts as an options market maker.

MEMX LLC OPTIONS (MXOP):
With respect to option orders routed to MEMX LLC OPTIONS, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

MIAMI INTERNATIONAL SECURITIES EXCHANGE (XMIO):
With respect to option orders routed to MIAMI INTERNATIONAL SECURITIES EXCHANGE, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

NYSE ARCA OPTIONS (ARCO):
With respect to option orders routed to NYSE ARCA OPTIONS, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

MIAX EMERALD, LLC (EMLD):
With respect to option orders routed to MIAX EMERALD, LLC, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.

ISE MERCURY, LLC (MCRY):
With respect to option orders routed to ISE MERCURY, LLC, SSL initially routed the order to Dash Financial Technologies LLC who subsequently routed to the exchange for execution; for this option order flow, SSL is charged by Dash Financial Technologies LLC $0.25 per filled contract with the exception of orders in SPX, VIX and RUT, for which it is charged $0.75 per filled contract.