

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

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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	1,645.4530	10.0130	49.5560	10.0000	94.7980	0.0000	263.2500	10.0000
Pershing LLC (PERX)	5.84	1.15	65.29	20.58	4.68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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.

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
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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	7,042.0620	16.8345	3,933.1780	26.8406	363.6770	0.0000	311.7340	10.5055
Pershing LLC (PERX)	9.77	3.57	36.39	14.10	12.88	-377.3640	-8.7578	0.0000	0.0000	0.0000	0.0000	-337.4566	-7.0285
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	0.0000	-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 \$0.0027 per share (for fee code 3, V, B, Y) and \$0.003 per share (for fee code SS) and was charged fees of \$0.0028 per share (for fee code RT), \$0.0029 per share (for fee code RX) and \$0.003 per share (for fee codes W, 6, 7, BB, MT). 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	1,024.5790	11.0387	65.7130	10.0000	91.2390	0.0000	48.9080	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	9,397.7750	18.0274	560.7830	12.8204	456.8320	0.0000	387.7750	35.3245
Pershing LLC (PERX)	13.39	2.86	66.41	26.06	18.26	-1,265.1353	-12.1701	-393.5711	-3.1673	-0.0663	0.0000	-647.3298	-4.1864

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	839.3110	10.3066	68.6700	10.0000	73.8480	0.0000	21.0980	10.0000
Pershing LLC (PERX)	11.08	3.51	52.31	39.26	5.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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.

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	7,197.5870	16.5989	530.3120	9.5939	556.1270	0.0000	34.7320	10.0000
Pershing LLC (PERX)	16.09	2.71	66.09	33.49	23.08	-670.4204	-8.5241	-1.7160	-0.0138	0.0000	0.0000	-5.7135	-0.0701

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.