

# SSCO - Held NMS Stocks and Options Order Routing Public Report

Generated on Mon Mar 24 2025 11:23:50 GMT-0400 (Eastern Daylight Time)

3rd Quarter, 2024

July 2024

S&P 500 Stocks  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	59.67	14.40	13.56	12.37

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)	90.32	98.27	70.11	68.62	99.20	1,526.1210	60.0000	271.6330	10.0000	155.2320	10.0000	272.9880	60.0000
Pershing LLC (PERX)	9.54	1.65	29.55	31.02	0.80	-27.9500	-13.0000	0.0000	0.0000	0.0000	0.0000	-7.8247	-13.0000

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.

July 2024

Non-S&P 500 Stocks  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	55.03	10.49	19.16	15.31

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)	88.73	96.97	79.21	77.49	79.70	3,109.6380	60.0000	1,035.0610	10.0000	1,486.0940	10.0000	1,542.2940	60.0000
Pershing LLC (PERX)	7.28	3.03	16.81	20.09	0.00	-189.8000	-13.0000	-252.1662	-13.0000	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.

-----

July 2024

Options  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	8.37	32.21	17.97	41.44

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)	46.59	100.00	14.04	100.00	37.86	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NYSE ARCA OPTIONS (ARCA)	15.64	0.00	0.00	0.00	37.75	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-856.7500	-25.0000
CBOE GLOBAL MARKETS INC. (CBOE)	10.08	0.00	22.41	0.00	6.93	0.0000	0.0000	-421.2500	-25.9231	0.0000	0.0000	-33.0000	-25.0000
ISE MERCURY, LLC (MCRY)	9.71	0.00	30.00	0.00	0.14	0.0000	0.0000	-479.0000	-25.0000	0.0000	0.0000	-1.5000	-25.0000
BOX OPTIONS EXCHANGE (XBOX)	5.92	0.00	16.31	0.00	1.62	0.0000	0.0000	-235.0000	-25.0000	0.0000	0.0000	-10.0000	-25.0000
CBOE EDGX OPTIONS EXCHANGE (EDGX)	4.58	0.00	7.21	0.00	5.45	0.0000	0.0000	-100.2500	-25.0000	0.0000	0.0000	-233.0000	-25.0000

Material Aspects:

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

NYSE ARCA OPTIONS (ARCA):  
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.

CBOE GLOBAL MARKETS INC. (CBOE):  
With respect to option orders routed to CBOE GLOBAL MARKETS INC, 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.

CBOE EDGX OPTIONS EXCHANGE (EDGX):  
With respect to option orders routed to CBOE EDGX 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.

August 2024

S&P 500 Stocks  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	64.53	9.27	12.18	14.02

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)	90.07	96.12	83.14	62.85	90.45	1,254.2120	10.0000	319.8520	10.0000	191.5070	10.0000	192.7690	60.0000
Pershing LLC (PERX)	9.10	3.80	16.86	37.15	3.98	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-29.9884	-13.0000

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.

August 2024

Non-S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	60.26	8.90	16.00	14.84

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)	88.35	97.33	87.94	75.55	65.90	3,550.0400	60.0000	1,709.1000	60.0000	963.5070	10.0000	2,358.6290	60.0000
CBOE EDGA U.S. EQUITIES EXCHANGE (EDGA)	5.98	0.00	6.46	5.51	30.49	0.0000	0.0000	-606.1140	-26.5112	-346.2000	-30.0000	-796.5600	-29.7577
Pershing LLC (PERX)	5.56	2.67	5.60	18.94	2.84	-706.3706	-12.8300	-170.2000	-10.0000	-55.0000	-10.0000	-520.7995	-13.0000

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.

CBOE EDGA U.S. EQUITIES 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 \$0.0014 per share (for fee code 6, W, BB, N), \$0.0016 per share (for fee code 6, W, BB, N) 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 3, 4, 7, B, V, Y). Please visit [https://www.cboe.com/us/equities/membership/fee\\_schedule/edga/](https://www.cboe.com/us/equities/membership/fee_schedule/edga/) for the most updated schedule and a discussion of the rebates/fees by EDGA.

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.

August 2024

Options

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	7.32	29.66	16.95	46.07

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)	40.86	100.00	15.91	99.30	25.88	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NYSE ARCA OPTIONS (ARCA)	22.33	0.00	0.00	0.35	48.43	0.0000	0.0000	0.0000	0.0000	-7.5000	-25.0000	-1,719.5000	-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)
ISE MERCURY, LLC (MCRY)	9.68	0.00	32.07	0.00	0.39	0.0000	0.0000	-491.7500	-25.0000	0.0000	0.0000	-5.2500	-25.0000
CBOE GLOBAL MARKETS INC. (CBOE)	7.20	0.00	16.53	0.00	4.99	0.0000	0.0000	-349.2500	-25.0000	0.0000	0.0000	-89.5000	-34.6899
CBOE EDGX OPTIONS EXCHANGE (EDGX)	5.32	0.00	10.00	0.00	5.12	0.0000	0.0000	-44.0000	-25.0000	0.0000	0.0000	-314.7500	-25.0000
MIAMI INTERNATIONAL SECURITIES EXCHANGE (MIAX)	5.32	0.00	10.61	0.00	4.73	0.0000	0.0000	-186.5000	-25.0000	0.0000	0.0000	-68.0000	-25.0000

Material Aspects:

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

NYSE ARCA OPTIONS (ARCA):  
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.

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.

CBOE GLOBAL MARKETS INC. (CBOE):  
With respect to option orders routed to CBOE GLOBAL MARKETS INC, 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 EDGX OPTIONS EXCHANGE (EDGX):  
With respect to option orders routed to CBOE EDGX 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.

MIAMI INTERNATIONAL SECURITIES EXCHANGE (MIAX):  
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.

September 2024

S&P 500 Stocks  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	72.34	5.87	8.30	13.50

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 Securities LLC (CDRG)	98.84	99.54	97.15	91.92	100.00	1,466.2660	60.0000	86.8110	10.0000	46.9450	10.0000	340.6150	60.0000

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.

September 2024

Non-S&P 500 Stocks  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non-Directed Orders	Non-Marketable Limit Orders as % of Non-Directed Orders	Other Orders as % of Non-Directed Orders
100.00	47.51	17.56	20.40	14.52

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)	79.16	99.83	52.24	60.09	70.84	2,577.2730	60.0000	1,145.8320	10.0000	443.2320	10.0000	910.2590	60.0000
Pershing LLC (PERX)	13.28	0.17	40.04	28.42	2.54	-12.7400	-13.0000	-3,028.8577	-15.6758	-969.1792	-16.0000	0.0000	0.0000
CBOE EDGA U.S. EQUITIES EXCHANGE (EDGA)	7.56	0.00	7.72	11.49	26.62	0.0000	0.0000	-1,624.1462	-26.6319	-999.0000	-30.0000	-720.5280	-29.7154

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 U.S. EQUITIES 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 \$0.0014 per share (for fee code 6, W, BB, N), \$0.0016 per share (for fee code 6, W, BB, N) 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 3, 4, 7, B, V, Y). Please visit [https://www.cboe.com/us/equities/membership/fee\\_schedule/edga/](https://www.cboe.com/us/equities/membership/fee_schedule/edga/) for the most updated schedule and a discussion of the rebates/fees by EDGA.

September 2024

Options  
Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	4.59	28.78	19.42	47.21

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)	39.69	100.00	10.50	100.00	26.60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NYSE ARCA OPTIONS (ARCA)	23.19	0.00	0.00	0.00	49.21	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-2,380.7500	-25.0000
ISE MERCURY, LLC (MCRY)	8.48	0.00	28.72	0.00	0.49	0.0000	0.0000	-452.2500	-25.0000	0.0000	0.0000	-11.5000	-25.0000
CBOE GLOBAL MARKETS INC. (CBOE)	7.26	0.00	18.58	0.00	4.06	0.0000	0.0000	-387.2500	-25.0000	0.0000	0.0000	-39.0000	-25.0000
CBOE EDGX OPTIONS EXCHANGE (EDGX)	6.10	0.00	14.34	0.00	4.18	0.0000	0.0000	-126.7500	-25.0000	0.0000	0.0000	-212.0000	-25.0000
BOX OPTIONS EXCHANGE (XBOX)	5.05	0.00	15.55	0.00	1.23	0.0000	0.0000	-394.7500	-25.0000	0.0000	0.0000	-11.0000	-25.0000
MIAMI INTERNATIONAL SECURITIES EXCHANGE (MIAX)	4.12	0.00	10.70	0.00	2.21	0.0000	0.0000	-115.7500	-25.0000	0.0000	0.0000	-27.0000	-25.0000

Material Aspects:

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

NYSE ARCA OPTIONS (ARCA):  
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.

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.

CBOE GLOBAL MARKETS INC. (CBOE):  
With respect to option orders routed to CBOE GLOBAL MARKETS INC, 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 EDGX OPTIONS EXCHANGE (EDGX):  
With respect to option orders routed to CBOE EDGX 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.

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.

MIAMI INTERNATIONAL SECURITIES EXCHANGE (MIAX):  
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.