

Spiderrock EXS, LLC - Held NMS Stocks and Options Order Routing Public Report

Generated on Mon Oct 25 2021 05:19:40 GMT-0500 (Central Daylight Time)

3rd Quarter, 2021

July 2021

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
0.50	0.00	88.02	11.98	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE ARCA (ARCX)	23.70	0.00	22.26	30.90	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATS OPTIONS EXCHANGE (BATS)	4.25	0.00	5.10	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATY OPTIONS EXCHANGE (BATY)	2.32	0.00	2.79	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGA OPTIONS EXCHANGE (EDGA)	4.45	0.00	5.35	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGX OPTIONS EXCHANGE (EDGX)	7.98	0.00	8.79	3.92	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
INVESTORS EXCHANGE (IEGX)	4.87	0.00	5.85	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE MKT LLC (XASE)	11.35	0.00	9.43	20.91	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ - ALL MARKETS (XNAS)	26.94	0.00	26.22	30.52	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC. (XNYS)	9.36	0.00	11.23	0.06	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ OMX	0.32	0.00	0.39	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	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)
BX (XBOS)													

Material Aspects:

NYSE ARCA (ARCX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATS OPTIONS EXCHANGE (BATS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATY OPTIONS EXCHANGE (BATY):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGA OPTIONS EXCHANGE (EDGA):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGX OPTIONS EXCHANGE (EDGX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

INVESTORS EXCHANGE (IEXG):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE MKT LLC (XASE):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ - ALL MARKETS (XNAS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NEW YORK STOCK EXCHANGE, INC. (XNYS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX (XBOS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

July 2021

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
0.76	0.01	88.02	11.98	0.00

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
NYSE ARCA (ARCX)	26.89	0.00	22.43	34.31	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATS OPTIONS EXCHANGE (BATS)	3.03	0.00	4.99	0.11	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATY OPTIONS EXCHANGE (BATY)	1.75	0.00	2.88	0.07	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGA OPTIONS EXCHANGE (EDGA)	2.56	0.00	4.24	0.06	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGX OPTIONS EXCHANGE (EDGX)	8.69	0.00	11.59	4.47	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
INVESTORS EXCHANGE (IEGX)	3.57	0.00	5.93	0.06	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE MKT LLC (XASE)	14.62	0.00	9.20	23.22	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ OMX BX (XBOS)	0.40	0.00	0.67	0.01	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ - ALL MARKETS (XNAS)	27.97	0.00	24.16	34.43	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC. (XNYS)	7.55	0.00	12.53	0.14	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000

Material Aspects:

NYSE ARCA (ARCX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATS OPTIONS EXCHANGE (BATS):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATY OPTIONS EXCHANGE (BATY):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGA OPTIONS EXCHANGE (EDGA):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGX OPTIONS EXCHANGE (EDGX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

INVESTORS EXCHANGE (IEGX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE MKT LLC (XASE):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX (XBOS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ - ALL MARKETS (XNAS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NEW YORK STOCK EXCHANGE, INC. (XNYS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

July 2021

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
98.74	0.00	88.02	11.98	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE ARCA OPTIONS (ARCO)	44.61	0.00	45.60	37.78	0.00	0.00	0.0000	67,306.33	24.7632	107,840.88	24.2830	0.00	0.0000
CBOE BATO OPTIONS EXCHANGE (BATO)	5.24	0.00	5.04	6.84	0.00	0.00	0.0000	76,981.35	50.4796	11,523.98	45.0155	0.00	0.0000
ISE GMNI EXCHANGE (GMNI)	1.05	0.00	0.41	5.85	0.00	0.00	0.0000	6,802.22	49.6512	1,412.05	26.6425	0.00	0.0000
ISE MERCURY, LLC (MCRY)	0.00	0.00	0.00	0.00	0.00	0.00	0.0000	281.10	8.0314	24.10	0.0000	0.00	0.0000
MIAX PEARL, LLC (MPRL)	1.32	0.00	0.70	6.01	0.00	0.00	0.0000	16,902.86	50.1569	8,621.08	58.6468	0.00	0.0000
NASDAQ OMX BX OPTIONS (XBXO)	0.04	0.00	0.04	0.01	0.00	0.00	0.0000	15,315.47	45.9924	232.81	58.2025	0.00	0.0000
CBOE GLOBAL MARKETS INC. (XCBO)	0.44	0.00	0.35	0.00	0.00	0.00	0.0000	12,763.91	53.8562	3,987.25	38.3389	0.00	0.0000
ISE (XISE)	0.54	0.00	0.52	0.60	0.00	0.00	0.0000	18,379.08	31.6881	8,727.60	40.9746	0.00	0.0000
NASDAQ OPTIONS MARKET (XNDQ)	5.12	0.00	5.15	4.91	0.00	0.00	0.0000	47,715.78	45.1000	21,588.25	58.0329	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)
NYSE AMEX OPTIONS (AMXO)	10.20	0.00	11.57	0.02	0.00	0.00	0.0000	6,874.35	32.8916	1,608.52	19.3798	0.00	0.0000
CBOE EDGO OPTIONS EXCHANGE (EDGO)	0.03	0.00	0.04	0.00	0.00	0.00	0.0000	1,635.32	23.3617	93.89	46.9450	0.00	0.0000
MIAX EMERALD, LLC (EMLD)	0.84	0.00	0.37	4.32	0.00	0.00	0.0000	3,799.55	52.0486	1,841.67	34.1050	0.00	0.0000
NASDAQ OMX PHLX (XPHL)	6.53	0.00	7.41	0.03	0.00	0.00	0.0000	7,315.62	40.6423	2,592.56	30.5007	0.00	0.0000
BOX OPTIONS EXCHANGE (XBOX)	3.77	0.00	4.27	0.00	0.00	0.00	0.0000	5,222.95	40.8043	1,011.70	59.5118	0.00	0.0000
MIAX XMIO, LLC (XMIO)	5.29	0.00	5.99	0.01	0.00	0.00	0.0000	3,908.53	39.8830	589.23	14.0293	0.00	0.0000

Material Aspects:

NYSE ARCA OPTIONS (ARCO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATO OPTIONS EXCHANGE (BATO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE GMNI EXCHANGE (GMNI):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE MERCURY, LLC (MCRY):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX PEARL, LLC (MPRL):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX OPTIONS (XBXO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE GLOBAL MARKETS INC. (XCBO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE (XISE):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OPTIONS MARKET (XNDQ):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE AMEX OPTIONS (AMXO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGO OPTIONS EXCHANGE (EDGO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept

payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX EMERALD, LLC (EMLD):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX PHLX (XPHL):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

BOX OPTIONS EXCHANGE (XBOX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX XMIO, LLC (XMIO):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

August 2021

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
0.58	0.00	86.87	13.13	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE ARCA (ARCX)	21.16	0.00	19.34	28.26	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATS OPTIONS EXCHANGE (BATS)	9.54	0.00	9.47	9.84	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATY OPTIONS EXCHANGE (BATY)	2.08	0.00	2.61	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGA OPTIONS EXCHANGE (EDGA)	4.73	0.00	5.94	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGX OPTIONS EXCHANGE (EDGX)	6.51	0.00	7.51	2.56	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
INVESTORS EXCHANGE (IEGX)	5.38	0.00	6.74	0.01	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE MKT LLC (XASE)	11.90	0.00	9.69	20.56	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ OMX	0.28	0.00	0.35	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	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)
BX (XBOS)													
NASDAQ - ALL MARKETS (XNAS)	24.61	0.00	23.85	27.61	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC. (XNYS)	9.62	0.00	12.07	0.02	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000

Material Aspects:

NYSE ARCA (ARCX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATS OPTIONS EXCHANGE (BATS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATY OPTIONS EXCHANGE (BATY):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGA OPTIONS EXCHANGE (EDGA):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGX OPTIONS EXCHANGE (EDGX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

INVESTORS EXCHANGE (IEXG):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE MKT LLC (XASE):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX (XBOS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ - ALL MARKETS (XNAS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NEW YORK STOCK EXCHANGE, INC. (XNYS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

August 2021

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
1.50	0.00	86.87	13.13	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE ARCA (ARCX)	24.55	0.00	20.70	27.84	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATY OPTIONS EXCHANGE (BATY)	1.07	0.00	2.32	0.02	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGX OPTIONS EXCHANGE (EDGX)	10.15	0.00	10.38	9.98	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ OMX BX (XBOS)	0.22	0.00	0.47	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ - ALL MARKETS (XNAS)	26.19	0.00	24.49	27.67	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC. (XNYS)	5.48	0.00	11.33	0.56	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATS OPTIONS EXCHANGE (BATS)	13.71	0.00	10.12	16.75	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGA OPTIONS EXCHANGE (EDGA)	1.85	0.00	4.02	0.02	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
INVESTORS EXCHANGE (IEXG)	2.64	0.00	5.74	0.03	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE MKT LLC (XASE)	12.58	0.00	9.20	15.46	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000

Material Aspects:

NYSE ARCA (ARCX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATY OPTIONS EXCHANGE (BATY):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGX OPTIONS EXCHANGE (EDGX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX (XBOS):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ - ALL MARKETS (XNAS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NEW YORK STOCK EXCHANGE, INC. (XNYS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATS OPTIONS EXCHANGE (BATS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGA OPTIONS EXCHANGE (EDGA):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

INVESTORS EXCHANGE (IEXG):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE MKT LLC (XASE):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

August 2021

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
97.92	0.00	86.87	13.13	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE AMEX OPTIONS (AMXO)	11.52	0.00	13.21	0.07	0.00	0.00	0.0000	7,801.59	36.4560	2,511.50	20.9292	0.00	0.0000
NYSE ARCA OPTIONS (ARCO)	44.24	0.00	45.48	37.39	0.00	0.00	0.0000	84,083.62	25.4722	123,545.20	24.3583	0.00	0.0000
CBOE BATO OPTIONS EXCHANGE (BATO)	6.02	0.00	5.60	9.26	0.00	0.00	0.0000	104,463.09	50.8584	17,633.15	42.0839	0.00	0.0000
CBOE EDGO OPTIONS EXCHANGE (EDGO)	0.04	0.00	0.04	0.00	0.00	0.00	0.0000	1,975.51	28.6306	181.49	36.2980	0.00	0.0000
MIAX EMERALD, LLC (EMLD)	1.58	0.00	1.03	5.45	0.00	0.00	0.0000	8,083.43	42.3216	25,878.13	42.2845	0.00	0.0000
ISE GMNI EXCHANGE	0.33	0.00	0.23	1.07	0.00	0.00	0.0000	5,690.72	50.8100	1,220.38	33.8994	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)
(GMNI)													
MIAX PEARL, LLC (MPRL)	1.51	0.00	0.63	7.80	0.00	0.00	0.0000	15,988.14	49.3461	5,792.44	41.0811	0.00	0.0000
BOX OPTIONS EXCHANGE (XBOX)	4.27	0.00	4.91	0.00	0.00	0.00	0.0000	4,002.30	43.9813	915.20	61.0133	0.00	0.0000
NASDAQ OMX BX OPTIONS (XBXO)	0.17	0.00	0.20	0.01	0.00	0.00	0.0000	17,335.66	46.4763	895.64	47.1389	0.00	0.0000
CBOE GLOBAL MARKETS INC. (XCBO)	0.87	0.00	0.41	0.02	0.00	0.00	0.0000	14,215.18	49.0179	4,279.87	39.9988	0.00	0.0000
ISE (XISE)	0.33	0.00	0.36	0.11	0.00	0.00	0.0000	15,049.06	25.7249	8,225.31	38.9825	0.00	0.0000
MIAX XMIO, LLC (XMIO)	5.85	0.00	6.71	0.02	0.00	0.00	0.0000	2,585.27	39.7734	930.37	17.2291	0.00	0.0000
NASDAQ OPTIONS MARKET (XNDQ)	1.41	0.00	0.95	4.65	0.00	0.00	0.0000	63,799.77	48.1145	35,236.11	61.7095	0.00	0.0000
NASDAQ OMX PHLX (XPHL)	7.03	0.00	8.06	0.05	0.00	0.00	0.0000	7,491.95	40.4970	2,391.21	31.8828	0.00	0.0000
ISE MERCURY, LLC (MCRY)	0.00	0.00	0.00	0.00	0.00	0.00	0.0000	234.15	9.0058	86.50	86.5000	0.00	0.0000

Material Aspects:

NYSE AMEX OPTIONS (AMXO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE ARCA OPTIONS (ARCO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATO OPTIONS EXCHANGE (BATO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGO OPTIONS EXCHANGE (EDGO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX EMERALD, LLC (EMLD):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE GMNI EXCHANGE (GMNI):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX PEARL, LLC (MPRL):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

BOX OPTIONS EXCHANGE (XBOX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX OPTIONS (XBXO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE GLOBAL MARKETS INC. (XCBO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE (XISE):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX XMIO, LLC (XMIO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OPTIONS MARKET (XNDQ):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX PHLX (XPHL):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE MERCURY, LLC (MCRY):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

September 2021

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
0.73	0.00	83.20	16.80	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE ARCA (ARCX)	23.36	0.00	20.72	31.55	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATS OPTIONS EXCHANGE (BATS)	10.22	0.00	9.83	11.43	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATY OPTIONS EXCHANGE (BATY)	1.83	0.00	2.41	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGA OPTIONS EXCHANGE (EDGA)	3.38	0.00	4.47	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGX OPTIONS EXCHANGE	5.87	0.00	6.83	2.89	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	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)
(EDGX)													
INVESTORS EXCHANGE (IEXG)	4.90	0.00	6.48	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE MKT LLC (XASE)	11.73	0.00	9.56	18.45	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ - ALL MARKETS (XNAS)	26.65	0.00	25.34	30.69	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC. (XNYS)	9.02	0.00	11.92	0.02	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ OMX BX (XBOS)	0.27	0.00	0.36	0.00	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000

Material Aspects:

NYSE ARCA (ARCX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATS OPTIONS EXCHANGE (BATS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATY OPTIONS EXCHANGE (BATY):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGA OPTIONS EXCHANGE (EDGA):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGX OPTIONS EXCHANGE (EDGX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

INVESTORS EXCHANGE (IEXG):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE MKT LLC (XASE):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ - ALL MARKETS (XNAS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NEW YORK STOCK EXCHANGE, INC. (XNYS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX (XBOS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

September 2021

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
1.38	0.00	83.20	16.80	0.00

Venues

Venue - Non-Directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE ARCA (ARCX)	24.10	0.00	21.07	30.26	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATS OPTIONS EXCHANGE (BATS)	10.15	0.00	9.90	10.72	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE BATY OPTIONS EXCHANGE (BATY)	1.83	0.00	2.74	0.05	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGA OPTIONS EXCHANGE (EDGA)	2.60	0.00	3.90	0.06	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
CBOE EDGX OPTIONS EXCHANGE (EDGX)	7.51	0.00	9.91	2.81	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
INVESTORS EXCHANGE (IEXG)	3.55	0.00	5.31	0.11	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NYSE MKT LLC (XASE)	14.33	0.00	10.22	22.57	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ OMX BX (XBOS)	0.40	0.00	0.60	0.01	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NASDAQ - ALL MARKETS (XNAS)	26.16	0.00	24.26	30.11	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000
NEW YORK STOCK EXCHANGE, INC. (XNYS)	7.02	0.00	10.52	0.18	0.00	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000

Material Aspects:

NYSE ARCA (ARCX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATS OPTIONS EXCHANGE (BATS):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATY OPTIONS EXCHANGE (BATY):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGA OPTIONS EXCHANGE (EDGA):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGX OPTIONS EXCHANGE (EDGX):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

INVESTORS EXCHANGE (IEXG):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE MKT LLC (XASE):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX (XBOS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ - ALL MARKETS (XNAS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NEW YORK STOCK EXCHANGE, INC. (XNYS):
Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

September 2021

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
97.89	0.00	83.20	16.80	0.00

Venues

Venue - Non-directed Order Flow	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/Received for Market Orders(cents per hundred shares)	Net Payment Paid/Received for Marketable Limit Orders(USD)	Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/Received for Other Orders(cents per hundred shares)
NYSE ARCA OPTIONS (ARCO)	46.09	0.00	48.36	36.59	0.00	0.00	0.0000	69,967.75	20.5304	137,780.66	22.4362	0.00	0.0000
CBOE BATO OPTIONS EXCHANGE (BATO)	6.24	0.00	5.50	10.25	0.00	0.00	0.0000	30,516.48	17.3883	8,341.28	27.6201	0.00	0.0000
CBOE EDGO OPTIONS EXCHANGE (EDGO)	0.06	0.00	0.06	0.01	0.00	0.00	0.0000	1,907.45	17.0308	124.67	11.3336	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)
MIAX EMERALD, LLC (EMLD)	1.83	0.00	1.07	5.76	0.00	0.43	0.4300	1,372.31	10.7212	1,209.13	8.2817	0.00	0.0000
ISE GMNI EXCHANGE (GMNI)	0.37	0.00	0.25	1.04	0.00	0.00	0.0000	1,281.04	13.0718	297.71	8.2697	0.00	0.0000
MIAX PEARL, LLC (MPRL)	2.12	0.00	0.74	9.19	0.00	0.00	0.0000	1,854.91	6.5777	829.40	6.6887	0.00	0.0000
BOX OPTIONS EXCHANGE (XBOX)	3.48	0.00	4.20	0.03	0.00	0.00	0.0000	971.10	7.1933	213.55	6.8887	0.00	0.0000
NASDAQ OMX BX OPTIONS (XBOX)	0.99	0.00	1.14	0.29	0.00	0.00	0.0000	3,771.02	5.2889	719.76	4.7353	0.00	0.0000
CBOE GLOBAL MARKETS INC. (XCBO)	1.12	0.00	0.46	0.04	0.00	0.00	0.0000	3,022.24	8.8370	1,586.16	11.8370	0.00	0.0000
ISE (XISE)	0.43	0.00	0.48	0.15	0.00	0.37	0.0617	2,321.58	3.3213	635.31	2.6582	0.00	0.0000
NASDAQ OPTIONS MARKET (XNDQ)	1.68	0.00	0.94	5.47	0.00	0.00	0.0000	35,078.75	28.8240	31,973.31	50.9941	0.00	0.0000
NASDAQ OMX PHLX (XPHL)	5.70	0.00	6.86	0.06	0.00	0.00	0.0000	1,875.49	8.6032	1,467.60	18.1185	0.00	0.0000
NYSE AMEX OPTIONS (AMXO)	9.67	0.00	11.66	0.03	0.00	0.00	0.0000	2,649.15	11.4188	1,236.30	12.7454	0.00	0.0000
ISE MERCURY, LLC (MCRY)	0.02	0.00	0.02	0.01	0.00	0.00	0.0000	108.25	2.1650	17.05	8.5250	0.00	0.0000
MIAX XMIO, LLC (XMIO)	4.68	0.00	5.65	0.01	0.00	36.04	18.0200	1,225.43	18.2900	526.04	10.7355	0.00	0.0000

Material Aspects:

NYSE ARCA OPTIONS (ARCO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE BATO OPTIONS EXCHANGE (BATO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE EDGO OPTIONS EXCHANGE (EDGO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX EMERALD, LLC (EMLD):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE GMNI EXCHANGE (GMNI):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX PEARL, LLC (MPRL):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

BOX OPTIONS EXCHANGE (XBOX):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX BX OPTIONS (XBXO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

CBOE GLOBAL MARKETS INC. (XCBO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE (XISE):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OPTIONS MARKET (XNDQ):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NASDAQ OMX PHLX (XPHL):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

NYSE AMEX OPTIONS (AMXO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

ISE MERCURY, LLC (MCRY):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access

MIAX XMIO, LLC (XMIO):

Note regarding Payment for Order Flow Practices The Firm, in its efforts to seek best execution, routes client orders to national securities exchanges, alternative trading systems (ATSs), including electronic communications networks (ECNs) and other market centers. The Firm may accept payment for order flow for these client orders from the executing broker who is responsible for market access