Popular Securities Report for the Quarter Ending June 30, 2020 April 2020

Summary Statistics		Venues Receiving Significant Percentage of Total Non-Directed Orders
Non-Directed Orders as Percentage of All		Citadel Securities LLC
Orders 1	.00.00	Types of Orders Routed to Venue:
Market Orders as Percentage of Non-		Non-Directed Orders (%)
Directed Orders	87.39	Market Orders (%)
Marketable Limit Orders as Percentage of		Marketable Limit Orders (%)
Non-Directed Orders	2.24	Non-Marketable Limit Orders(%)
Non-Marketable Limit Orders as		Other Orders (%)
Percentage of Non-Directed	10.22	Net Payment Paid/Received for Market Orders(USD)
Other Order as Percentage of Non-		Net Payment Paid/Received for Market Orders(cents per
Directed Orders	0.14	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)
ı		Net Payment Paid/Received for Other Orders(cents per hundred

S&P 500

Interactive Brokers LLC

shares)

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	25.42
Market Orders (%)	29.50
Marketable Limit Orders (%)	5.88
Non-Marketable Limit Orders(%)	3.81
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

56.45 59.63 64.71 35.24 100.00

0.0000

0.0000

0.0000

0.0000

NASDAQ Execution Services, LLC Types of Orders Routed to Venue: Non-Directed Orders (%) 6.26 0.00 Market Orders (%) 0.00 Marketable Limit Orders (%) Non-Marketable Limit Orders(%) 45.71 0.00 Other Orders (%) Net Payment Paid/Received for Market Orders(USD) 0 Net Payment Paid/Received for Market Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Marketable Limit Orders (USD) 0 Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) 0 Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Other Orders(USD) 0 Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000 The Chicago Board Options Stock Exchange Types of Orders Routed to Venue: Non-Directed Orders (%) 6.00 Market Orders (%) 5.75 Marketable Limit Orders (%) 5.88 Non-Marketable Limit Orders(%) 7.62 Other Orders (%) 0.00 Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per 0.0000 hundred shares) Net Payment Paid/Received for Marketable Limit Orders (USD) Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents 0.0000 per hundred shares) Net Payment Paid/Received for Other Orders(USD) Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000

S&P 500

Instinet Blo

Instinet BlockCross	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	3.78
Market Orders (%)	4.19
Marketable Limit Orders (%)	11.76
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000
VIRTU Americas LLC	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.78
Market Orders (%)	0.31
Marketable Limit Orders (%)	5.88
Non-Marketable Limit Orders(%)	2.86
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0.00
Net Payment Paid/Received for Market Orders(cents per	· ·
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0.0000
Net Payment Paid/Received for Marketable Limit Orders(cents	O
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0.0000
N - P - 1/P - 1/C N - N - 1 - 1 1 - 1/C - 1 1 1 1 1 1 1 1 1 1	U

Net Payment Paid/Received for Non-Marketable Limit Orders(cents

Net Payment Paid/Received for Other Orders(cents per hundred

Net Payment Paid/Received for Other Orders(USD)

0.0000

0.0000

0

per hundred shares)

shares)

Cboe EDGX US Equities Exchange Types of Orders Routed to Venue: Non-Directed Orders (%) 0.39 0.00 Market Orders (%) Marketable Limit Orders (%) 0.00 Non-Marketable Limit Orders(%) 2.86 0.00 Other Orders (%) Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Marketable Limit Orders (USD) Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents 0.0000 per hundred shares) Net Payment Paid/Received for Other Orders(USD) Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000 **UBS Securities, LLC** Types of Orders Routed to Venue: Non-Directed Orders (%) 0.26 Market Orders (%) 0.16 Marketable Limit Orders (%) 5.88 Non-Marketable Limit Orders(%) 0.00 Other Orders (%) 0.00 Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Marketable Limit Orders (USD) 0 Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) 0 Net Payment Paid/Received for Non-Marketable Limit Orders(cents

0.0000

0.0000

0

per hundred shares)

shares)

Net Payment Paid/Received for Other Orders(USD)

Net Payment Paid/Received for Other Orders(cents per hundred

Cboe BZX US Equities Exchange Types of Orders Routed to Venue: 0.26 Non-Directed Orders (%) 0.00 Market Orders (%) Marketable Limit Orders (%) 0.00 Non-Marketable Limit Orders(%) 1.90 0.00 Other Orders (%) Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Marketable Limit Orders (USD) Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents 0.0000 per hundred shares) Net Payment Paid/Received for Other Orders(USD) Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000 **G1** Execution Services, LLC Types of Orders Routed to Venue: Non-Directed Orders (%) 0.13 Market Orders (%) 0.16 Marketable Limit Orders (%) 0.00 Non-Marketable Limit Orders(%) 0.00 Other Orders (%) 0.00 Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Marketable Limit Orders (USD) 0 Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) 0 Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Other Orders(USD) 0

Net Payment Paid/Received for Other Orders(cents per hundred

0.0000

shares)

Non-Directed Orders as Percentage of All	
Orders	100.00
Market Orders as Percentage of Non-	
Directed Orders	84.18
Marketable Limit Orders as Percentage of	
Non-Directed Orders	5.15
Non-Marketable Limit Orders as	
Percentage of Non-Directed Orders	9.77
Other Orders as Percentage of Non-	
Directed Orders	0.91

Citadel Securities LLC

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	60.85
Market Orders (%)	64.15
Marketable Limit Orders (%)	55.95
Non-Marketable Limit Orders(%)	44.61
Other Orders (%)	58.33
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Interactive Brokers LLC

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	18.50
Market Orders (%)	20.74
Marketable Limit Orders (%)	13.10
Non-Marketable Limit Orders(%)	8.33
Other Orders (%)	16.67
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

The Chicago Board Options Stock Exchange	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	11.61
Market Orders (%)	12.13
Marketable Limit Orders (%)	5.95
Non-Marketable Limit Orders(%)	10.29
Other Orders (%)	25.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000
· · · · · · · · · · · · · · · · · · ·	
NASDAO Evacution Samileas II.C	
NASDAQ Execution Services, LLC	
Types of Orders Routed to Venue:	2.76
Types of Orders Routed to Venue: Non-Directed Orders (%)	3.76
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%)	0.00
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%)	0.00 0.00
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%)	0.00 0.00 26.47
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%)	0.00 0.00 26.47 0.00
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%) Net Payment Paid/Received for Market Orders(USD)	0.00 0.00 26.47
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%) Net Payment Paid/Received for Market Orders(cents per	0.00 0.00 26.47 0.00
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%) Net Payment Paid/Received for Market Orders (cents per hundred shares)	0.00 0.00 26.47 0.00 0
Types of Orders Routed to Venue: 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)	0.00 0.00 26.47 0.00
Types of Orders Routed to Venue: 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	0.00 0.00 26.47 0.00 0
Types of Orders Routed to Venue: 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)	0.00 0.00 26.47 0.00 0
Types of Orders Routed to Venue: 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)	0.00 0.00 26.47 0.00 0
Types of Orders Routed to Venue: 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(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents	0.00 0.00 26.47 0.00 0 0.0000 0
Types of Orders Routed to Venue: 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)	0.00 0.00 26.47 0.00 0 0.0000
Types of Orders Routed to Venue: 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(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents	0.00 0.00 26.47 0.00 0 0.0000 0
Types of Orders Routed to Venue: 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)	0.00 0.00 26.47 0.00 0 0.0000 0
Types of Orders Routed to Venue: 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(USD)	0.00 0.00 26.47 0.00 0 0.0000 0

S&P 500

Instinet Blo

Instinet BlockCross	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	2.99
Market Orders (%)	2.46
Marketable Limit Orders (%)	17.86
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000
Cboe EDGX US Equities Exchange	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.56
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	3.92
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000

Net Payment Paid/Received for Marketable Limit Orders (USD) Net Payment Paid/Received for Marketable Limit Orders(cents

Net Payment Paid/Received for Other Orders(USD)

Net Payment Paid/Received for Non-Marketable Limit Orders(USD)

Net Payment Paid/Received for Non-Marketable Limit Orders(cents

Net Payment Paid/Received for Other Orders(cents per hundred

0.0000

0.0000

0.0000

0

0

per hundred shares)

per hundred shares)

shares)

VIRTU Americas LLC

shares)

VIRTU Americas LLC	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.56
Market Orders (%)	0.26
Marketable Limit Orders (%)	4.76
Non-Marketable Limit Orders(%)	0.49
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000
G1 Execution Services, LLC Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.42
Market Orders (%)	0.18
Marketable Limit Orders (%)	2.38
Non-Marketable Limit Orders(%)	0.98
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

0.0000

Cboe BZX US Equities Exchange Types of Orders Routed to Ver

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.35
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	2.45
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

New York Stock Exchange

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.21
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	1.47
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Non-Directed Orders as Percentage of All	
Orders	100.00
Market Orders as Percentage of Non-	
Directed Orders	44.00
Marketable Limit Orders as Percentage of	
Non-Directed Orders	12.00
Non-Marketable Limit Orders as	
Percentage of Non-Directed Orders	33.00
Other Orders as Percentage of Non-	
Directed Orders	11.00

Option Contracts

Citadel Securities LLC

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	55.45
Market Orders (%)	38.64
Marketable Limit Orders (%)	83.33
Non-Marketable Limit Orders(%)	79.41
Other Orders (%)	18.18
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Cboe Options Exchange

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	16.83
Market Orders (%)	20.45
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	72.73
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Option Contracts

Interactiv

per hundred shares)

per hundred shares)

shares)

Interactive Brokers LLC	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	10.89
Market Orders (%)	25.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000
Citigroup Global Markets, Inc.	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	7.92
Market Orders (%)	9.09
Marketable Limit Orders (%)	8.33
Non-Marketable Limit Orders(%)	8.82
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
	0.0000

Net Payment Paid/Received for Non-Marketable Limit Orders(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents

Net Payment Paid/Received for Other Orders(cents per hundred

Net Payment Paid/Received for Other Orders(USD)

0.0000

0.0000

0.0000

0

0

Option Contracts

Dash Financial Technologies LLC

Types of Orders Routed to Venue: Non-Directed Orders (%) 4.95 Market Orders (%) 2.27 0.00 Marketable Limit Orders (%) Non-Marketable Limit Orders(%) 11.76 Other Orders (%) 0.00 Net Payment Paid/Received for Market Orders(USD) 0 Net Payment Paid/Received for Market Orders(cents per 0.0000 hundred shares) Net Payment Paid/Received for Marketable Limit Orders (USD) 0 Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Other Orders(USD) Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000

Susquehanna Capital Group

Types of Orders Routed to Venue: Non-Directed Orders (%) 2.97 Market Orders (%) 4.55 Marketable Limit Orders (%) 0.00 Non-Marketable Limit Orders(%) 0.00 Other Orders (%) 9.09 Net Payment Paid/Received for Market Orders(USD) 0 Net Payment Paid/Received for Market Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Marketable Limit Orders (USD) 0 Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) 0 Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Other Orders(USD) 0 Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000

Option Contracts

Morgan Stanley & Company LLC

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.99
Market Orders (%)	0.00
Marketable Limit Orders (%)	8.33
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Popular Securities Report for the Quarter Ending June 30, 2020 May 2020

		May 2020	
Summary Statistics		Venues:	
Non-Directed Orders as Percentage of All		Citadel Securities LLC	
Orders	100.00	Types of Orders Routed to Venue:	
Market Orders as Percentage of Non-		Non-Directed Orders (%)	91.82
Directed Orders	81.28	Market Orders (%)	97.67
Marketable Limit Orders as Percentage of		Marketable Limit Orders (%)	89.66
Non-Directed Orders	4.16	Non-Marketable Limit Orders(%)	64.60
Non-Marketable Limit Orders as		Other Orders (%)	100.00
Percentage of Non-Directed	12.00	Net Payment Paid/Received for Market Orders(USD)	0
Other Order as Percentage of Non-		Net Payment Paid/Received for Market Orders(cents per	
Directed Orders	2.56	hundred shares)	0.0000
		Net Payment Paid/Received for Marketable Limit Orders (USD)	0
		Net Payment Paid/Received for Marketable Limit Orders(cents	
		per hundred shares)	0.0000
		Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
		Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
		per hundred shares)	0.0000
		Net Payment Paid/Received for Other Orders(USD)	0
		Net Payment Paid/Received for Other Orders (cents per hundred shares)	0.0000
		NASDAQ Execution Services, LLC	
		Types of Orders Routed to Venue:	
		Non-Directed Orders (%)	5.80
		Market Orders (%)	0.00
		Marketable Limit Orders (%)	0.00
		Non-Marketable Limit Orders(%)	34.51
		Other Orders (%)	0.00
		Net Payment Paid/Received for Market Orders(USD)	0
		Net Payment Paid/Received for Market Orders(cents per	
		hundred shares)	0.0000
		Net Payment Paid/Received for Marketable Limit Orders (USD)	0
	- 1	Net Payment Paid/Received for Marketable Limit Orders(cents	
	- 1	per hundred shares)	0.0000
	- 1	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
	- 1	Net Payment Paid/Received for Non-Marketable Limit Orders(cents	-
	- 1	per hundred shares)	0.0000
		Not Decree at Dail (Decree at face Other Onders (USD)	

shares)

Net Payment Paid/Received for Other Orders(USD)

Net Payment Paid/Received for Other Orders(cents per hundred

0.0000

S&P 500

Instinet BlockCross

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	1.34
Market Orders (%)	1.17
Marketable Limit Orders (%)	10.34
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

The Chicago Board Options Stock Exchange Types of Orders Routed to Venue:

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.89
Market Orders (%)	1.17
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Cboe BZX US Equities Exchange Types of Orders Routed to Ver

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.15
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	0.88
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Non-Directed Orders as Percentage of All	
Orders	100.00
Market Orders as Percentage of Non-	
Directed Orders	81.44
Marketable Limit Orders as Percentage of	
Non-Directed Orders	4.82
Non-Marketable Limit Orders as	
Percentage of Non-Directed Orders	12.61
Other Orders as Percentage of Non-	
Directed Orders	1.13

S&P 500

Citade

el Securities LLC	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	92.27
Market Orders (%)	96.82
Marketable Limit Orders (%)	95.89
Non-Marketable Limit Orders(%)	73.49
Other Orders (%)	93.75
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000
DAQ Execution Services, LLC	
Types of Orders Routed to Venue:	

NASD

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	4.25
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	22.15
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

The Chicago Board Options Stock Exchange Types of Orders Routed to Venue:

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	1.61
Market Orders (%)	1.63
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	1.68
Other Orders (%)	6.25
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Instinet BlockCross Types of Orders Routed to Ve

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	1.35
Market Orders (%)	1.55
Marketable Limit Orders (%)	4.11
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Choe BZX US Equities Exchange Types of Orders Routed to Venue:

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.52
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	2.68
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Non-Directed Orders as Percentage of All	
Orders	100.00
Market Orders as Percentage of Non-	
Directed Orders	27.91
Marketable Limit Orders as Percentage of	
Non-Directed Orders	22.09
Non-Marketable Limit Orders as	
Percentage of Non-Directed Orders	40.70
Other Orders as Percentage of Non-	
Directed Orders	9.30

Option Contracts

Citadel Securities LLC

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	82.02
Market Orders (%)	87.50
Marketable Limit Orders (%)	78.95
Non-Marketable Limit Orders(%)	86.84
Other Orders (%)	50.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Dash Financial Technologies LLC

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	7.87
Market Orders (%)	4.17
Marketable Limit Orders (%)	15.79
Non-Marketable Limit Orders(%)	7.89
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Option Contracts

Citigroup Global Markets, Inc.	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	5.62
Market Orders (%)	8.33
Marketable Limit Orders (%)	5.26
Non-Marketable Limit Orders(%)	5.26
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000
Susquehanna Capital Group Types of Orders Routed to Venue:	
Non-Directed Orders (%)	4.49
Market Orders (%)	0.00
Market Orders (%)	0.00
` ,	
Non-Marketahle Limit Orders(%)	0.00
Non-Marketable Limit Orders(%)	0.00 50.00
Other Orders (%)	
Other Orders (%) Net Payment Paid/Received for Market Orders(USD)	50.00
Other Orders (%) Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per	50.00 0
Other Orders (%) Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per hundred shares)	50.00
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)	50.00 0 0.0000
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	50.00 0 0.0000 0
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)	50.00 0 0.0000 0
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)	50.00 0 0.0000 0
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	50.00 0 0.0000 0
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)	50.00 0 0.0000 0 0.0000
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)	50.00 0 0.0000 0 0.0000 0
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)	50.00 0 0.0000 0 0.0000 0

Popular Securities Report for the Quarter Ending June 30, 2020

		June 2020	
Summary Statistics		Venues:	
Non-Directed Orders as Percentage of All		The Chicago Board Options Stock Exchange	
Orders	100.00	Types of Orders Routed to Venue:	
Market Orders as Percentage of Non-		Non-Directed Orders (%)	78.02
Directed Orders	84.47	Market Orders (%)	80.61
Marketable Limit Orders as Percentage of		Marketable Limit Orders (%)	63.41
Non-Directed Orders	5.03	Non-Marketable Limit Orders(%)	65.93
Non-Marketable Limit Orders as		Other Orders (%)	100.00
Percentage of Non-Directed	9.32	Net Payment Paid/Received for Market Orders(USD)	0
Other Order as Percentage of Non-		Net Payment Paid/Received for Market Orders(cents per	
Directed Orders	1.18	hundred shares)	0.0000
		Net Payment Paid/Received for Marketable Limit Orders (USD)	0
		Net Payment Paid/Received for Marketable Limit Orders(cents	
		per hundred shares)	0.0000
		Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
		Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
		per hundred shares)	0.0000
		Net Payment Paid/Received for Other Orders(USD)	0
		Net Payment Paid/Received for Other Orders(cents per hundred shares)	0.0000
		Citadel Securities LLC	
		Types of Orders Routed to Venue:	
		Non-Directed Orders (%)	14.42
		Market Orders (%)	15.14
		Marketable Limit Orders (%)	19.51
		Non-Marketable Limit Orders(%)	8.79
		Other Orders (%)	0.00
		Net Payment Paid/Received for Market Orders(USD)	0
		Net Payment Paid/Received for Market Orders(cents per	-
		hundred shares)	0.0000
		Net Payment Paid/Received for Marketable Limit Orders (USD)	0
		Net Payment Paid/Received for Marketable Limit Orders(cents	-
		per hundred shares)	0.0000
		Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
		Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
		per hundred shares)	0.0000
		Net Payment Paid/Received for Other Orders(USD)	0
		Net Payment Paid/Received for Other Orders(cents per hundred	

shares)

0.0000

S&P 500 Stocks

Instinet BlockCross

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	3.57
Market Orders (%)	3.23
Marketable Limit Orders (%)	17.07
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

NASDAQ Execution Services, LLC

2 Execution Services, LLC	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	2.88
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	23.08
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Citigroup Global Markets, Inc. Types of Orders Routed t

Гуреs of Orders Routed to Venue:	
Non-Directed Orders (%)	1.10
Market Orders (%)	1.02
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	2.20
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Non-Directed Orders as Percentage of All	
Orders	100.00
Market Orders as Percentage of Non-	
Directed Orders	80.78
Marketable Limit Orders as Percentage of	
Non-Directed Orders	4.63
Non-Marketable Limit Orders as	
Percentage of Non-Directed Orders	13.88
Other Orders as Percentage of Non-	
Directed Orders	0.71

The Chicago Board Options Stock Exchange

-	Types of Orders Routed to Venue:	
	Non-Directed Orders (%)	70.43
	Market Orders (%)	77.96
	Marketable Limit Orders (%)	63.01
	Non-Marketable Limit Orders(%)	44.25
	Other Orders (%)	88.89
	Net Payment Paid/Received for Market Orders(USD)	0
	Net Payment Paid/Received for Market Orders(cents per	
	hundred shares)	0.0000
	Net Payment Paid/Received for Marketable Limit Orders (USD)	0
	Net Payment Paid/Received for Marketable Limit Orders(cents	
	per hundred shares)	0.0000
	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
	Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
	per hundred shares)	0.0000
	Net Payment Paid/Received for Other Orders(USD)	0
	Net Payment Paid/Received for Other Orders(cents per hundred	
	shares)	0.0000

Citadel Securities LLC Types of Orders Routed to Ve

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	18.21
Market Orders (%)	18.42
Marketable Limit Orders (%)	16.44
Non-Marketable Limit Orders(%)	18.12
Other Orders (%)	11.11
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

NASDAQ Execution Services, LLC	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	
Market Orders (%)	5.50
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	0.00
Other Orders (%)	27.18
Net Payment Paid/Received for Market Orders(USD)	0.00
Net Payment Paid/Received for Market Orders(cents per	0
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0.0000
Net Payment Paid/Received for Marketable Limit Orders(cents	U
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	U
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0.0000
Net Payment Paid/Received for Other Orders(cents per hundred	U
shares)	0.0000
Citigroup Global Markets, Inc. Types of Orders Routed to Venue:	
	2 75
Types of Orders Routed to Venue:	2.75 1.72
Types of Orders Routed to Venue: Non-Directed Orders (%)	1.72
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%)	1.72 1.37
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%)	1.72 1.37 6.97
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%)	1.72 1.37 6.97 0.00
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%)	1.72 1.37 6.97
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%) Net Payment Paid/Received for Market Orders(USD)	1.72 1.37 6.97 0.00
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%) Net Payment Paid/Received for Market Orders(cents per	1.72 1.37 6.97 0.00 0
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%) Net Payment Paid/Received for Market Orders(cents per hundred shares)	1.72 1.37 6.97 0.00
Types of Orders Routed to Venue: Non-Directed Orders (%) Market Orders (%) Marketable Limit Orders (%) Non-Marketable Limit Orders(%) Other Orders (%) Net Payment Paid/Received for Market Orders(cents per hundred shares) Net Payment Paid/Received for Marketable Limit Orders (USD)	1.72 1.37 6.97 0.00 0
Types of Orders Routed to Venue: 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	1.72 1.37 6.97 0.00 0 0.0000 0
Types of Orders Routed to Venue: 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)	1.72 1.37 6.97 0.00 0
Types of Orders Routed to Venue: 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 Marketable Limit Orders(cents per hundred shares) Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	1.72 1.37 6.97 0.00 0 0.0000 0
Types of Orders Routed to Venue: 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(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents	1.72 1.37 6.97 0.00 0 0.0000 0 0.0000
Types of Orders Routed to Venue: 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(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares)	1.72 1.37 6.97 0.00 0 0.0000 0
Types of Orders Routed to Venue: 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)	1.72 1.37 6.97 0.00 0 0.0000 0 0.0000

Instinet BlockCross

	Types of Orders Routed to Venue:
2.40	Non-Directed Orders (%)
1.91	Market Orders (%)
	Marketable Limit Orders (%)
19.18	Non-Marketable Limit Orders(%)
0.00	Other Orders (%)
0.00	Net Payment Paid/Received for Market Orders(USD)
(Net Payment Paid/Received for Market Orders(cents per
0.0000	hundred shares)
0.0000	Net Payment Paid/Received for Marketable Limit Orders (USD)
O	Net Payment Paid/Received for Marketable Limit Orders(cents
0.0000	per hundred shares)
0.0000	Net Payment Paid/Received for Non-Marketable Limit Orders(USD)
U	Net Payment Paid/Received for Non-Marketable Limit Orders(cents
0.0000	per hundred shares)
0.0000	Net Payment Paid/Received for Other Orders(USD)
U	Net Payment Paid/Received for Other Orders(cents per hundred
0.0000	shares)
0.0000	

Cboe BZX US Equities Exchange

A GO Educies Exeriange	
Types of Orders Routed to Venue:	
Non-Directed Orders (%)	0.71
Market Orders (%)	0.00
Marketable Limit Orders (%)	0.00
Non-Marketable Limit Orders(%)	3.48
Other Orders (%)	0.00
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Non-Directed Orders as Percentage of All	
Orders	100.00
Market Orders as Percentage of Non-	
Directed Orders	28.97
Marketable Limit Orders as Percentage of	
Non-Directed Orders	16.55
Non-Marketable Limit Orders as	
Percentage of Non-Directed Orders	44.14
Other Orders as Percentage of Non-	
Directed Orders	10.34

Option Contracts

Cboe Options Exchange

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	62.84
Market Orders (%)	76.19
Marketable Limit Orders (%)	54.17
Non-Marketable Limit Orders(%)	59.70
Other Orders (%)	53.33
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Citadel Securities LLC

Types of Orders Routed to Venue:	
Non-Directed Orders (%)	16.22
Market Orders (%)	16.67
Marketable Limit Orders (%)	20.83
Non-Marketable Limit Orders(%)	14.93
Other Orders (%)	13.33
Net Payment Paid/Received for Market Orders(USD)	0
Net Payment Paid/Received for Market Orders(cents per	
hundred shares)	0.0000
Net Payment Paid/Received for Marketable Limit Orders (USD)	0
Net Payment Paid/Received for Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Non-Marketable Limit Orders(USD)	0
Net Payment Paid/Received for Non-Marketable Limit Orders(cents	
per hundred shares)	0.0000
Net Payment Paid/Received for Other Orders(USD)	0
Net Payment Paid/Received for Other Orders(cents per hundred	
shares)	0.0000

Option Contracts

Citigroup Global Markets, Inc. Types of Orders Routed to Venue: Non-Directed Orders (%) 11.49 Market Orders (%) 4.76 20.83 Marketable Limit Orders (%) Non-Marketable Limit Orders(%) 14.93 Other Orders (%) 0.00 Net Payment Paid/Received for Market Orders(USD) 0 Net Payment Paid/Received for Market Orders(cents per 0.0000 hundred shares) Net Payment Paid/Received for Marketable Limit Orders (USD) 0 Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Other Orders(USD) Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000 **Dash Financial Technologies LLC** Types of Orders Routed to Venue: 6.08 Non-Directed Orders (%) 2.38 Market Orders (%) 4.17 Marketable Limit Orders (%) 10.45 Non-Marketable Limit Orders(%) 0.00 Other Orders (%) 0 Net Payment Paid/Received for Market Orders(USD) Net Payment Paid/Received for Market Orders(cents per 0.0000 hundred shares) 0 Net Payment Paid/Received for Marketable Limit Orders (USD) Net Payment Paid/Received for Marketable Limit Orders(cents 0.0000 per hundred shares) 0 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) Net Payment Paid/Received for Non-Marketable Limit Orders(cents 0.0000 per hundred shares) 0 Net Payment Paid/Received for Other Orders(USD) Net Payment Paid/Received for Other Orders(cents per hundred 0.0000 shares)

Susquehanna Capital Group

Types of Orders Routed to Venue: Non-Directed Orders (%) 3.38 Market Orders (%) 0.00 Marketable Limit Orders (%) 0.00 Non-Marketable Limit Orders(%) 0.00 Other Orders (%) 33.33 Net Payment Paid/Received for Market Orders(USD) 0 Net Payment Paid/Received for Market Orders(cents per 0.0000 hundred shares) Net Payment Paid/Received for Marketable Limit Orders (USD) 0 Net Payment Paid/Received for Marketable Limit Orders(cents per hundred shares) 0.0000 Net Payment Paid/Received for Non-Marketable Limit Orders(USD) 0 Net Payment Paid/Received for Non-Marketable Limit Orders(cents 0.0000 per hundred shares) Net Payment Paid/Received for Other Orders(USD) 0 Net Payment Paid/Received for Other Orders(cents per hundred shares) 0.0000

