William Blair Sell Side - Held NMS Stocks and Options Order Routing Public Report Generation Date: 2021-10-28 12:58:29.850 GMT-0400 Year: 2021

ear:	2021	Quarter: 3

July 2021 Summary				S&P 500 Stocks									
· ·	Market Orders as Percent of Non-		Non-Marketable Limit Orders as Percent of Non-Directed	Other Orders as Percent of									
Percent of All Orders 100.00%	Directed Orders 95.47%	Orders 0.24%	Orders 3.27%	Non-Directed Orders									
Venues - Non Directed Orders													
				Non-Marketable Limit Orders		Net Payment Paid/Received	for Market Orders (cents per	Marketable Limit Orders	Net Payment Paid/Received Marketable Limit Orders	Non-Marketable Limit Orders	Non-Marketable Limit Orders		Net Payment Paid/Received Other Orders (cents per
Venue Citadel Securities LLC (CDRG)	Non-Directed Orders (%)		Marketable Limit Orders (%)	(%)	Other Orders (%)	for Market Orders (USD)	hundred shares)	()	(cents per hundred shares)	()	(cents per hundred shares)	Other Orders (USD)	hundred shares)
Virtu Americas LLC (NITE)	34.04% 34.01%	33.84% 34.12%	28.57% 57.14%	40.93% 27.98%	32.79% 37.70%	0.0000 0.0000	0.0000 0.0000	0	0.0000 0.0000	0	0.0000 0.0000	0	0.0000 0.0000
Wall Street Access (VNDM)	31.95%	32.05%	14.29%	31.09%	29.51%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
July 2021 Summary				Non-S&P 500 Stocks									_
Non-Directed Orders as I Percent of All Orders 100.00%	Market Orders as Percent of Non- Directed Orders 88.23%		Non-Marketable Limit Orders as Percent of Non-Directed Orders 9.32%	Other Orders as Percent of Non-Directed Orders 0.37%									
Venues - Non Directed Orders													
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 Marketable Limit Orders (USD)	Net Payment Paid/Received Marketable Limit Orders (cents per hundred shares)	Non-Marketable Limit Orders	Net Payment Paid/Received Non-Marketable Limit Orders (cents per hundred shares)	Net Payment Paid/Received Other Orders (USD)	Net Payment Paid/Received Other Orders (cents per hundred shares)
Citadel Securities LLC (CDRG)	34 70%	34 20%	42.86%	37 35%	41 18%	0,0000	0.0000	(032)	0.0000	0	0,000	0.000	0.0000
Virtu Americas LLC (NITE)	33.38%	33.40%	33.86%	33.92%	11.76%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	31.92%	32.39%	23.28%	28.72%	47.06%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
July 2021 Summary				Option Contracts									
	Market Orders as Percent of Non- Directed Orders 65.52%		Non-Marketable Limit Orders as Percent of Non-Directed Orders 20.65%	Other Orders as Percent of Non-Directed Orders 1.35%									
Venues - Non Directed Orders													
venues non priceted orders							Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received		Net Payment Paid/Received
Venue	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders (USD)	for Market Orders (cents per hundred shares)	Marketable Limit Orders	Marketable Limit Orders (cents per hundred shares)	Non-Marketable Limit Orders	Non-Marketable Limit Orders (cents per hundred shares)		Other Orders (cents per hundred shares)
National Financial Services LLC (NFSC)	100.00%	100.00%	100.00%	100.00%	100.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
August 2021 Summary				S&P 500 Stocks									
Percent of All Orders	Market Orders as Percent of Non- Directed Orders	Percent of Non-Directed Orders	Non-Marketable Limit Orders as Percent of Non-Directed Orders	Non-Directed Orders									
100.00%	96.57%	0.55%	2.81%	0.08%									
Venues - Non Directed Orders													
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)	Marketable Limit Orders	Net Payment Paid/Received Marketable Limit Orders (cents per hundred shares)	Non-Marketable Limit Orders	Net Payment Paid/Received Non-Marketable Limit Orders (cents per hundred shares)	Net Payment Paid/Received Other Orders (USD)	Net Payment Paid/Received Other Orders (cents per hundred shares)
Citadel Securities LLC (CDRG)	33.61%	33.63%	41.38%	32.21%	0.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas LLC (NITE)	33.55%	33.61%	17.24%	34.23%	50.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	32.84%	32.75%	41.38%	33.56%	50.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
August 2021 Summary				Non-S&P 500 Stocks									
Non-Directed Orders as I Percent of All Orders 100.00%	Market Orders as Percent of Non- Directed Orders 85.16%		Non-Marketable Limit Orders as Percent of Non-Directed Orders 11.50%	Other Orders as Percent of Non-Directed Orders 0.23%									
Venues - Non Directed Orders													
				Non-Marketable Limit Orders		Net Payment Paid/Received	for Market Orders (cents per	Marketable Limit Orders	Net Payment Paid/Received Marketable Limit Orders	Non-Marketable Limit Orders	Non-Marketable Limit Orders	Net Payment Paid/Received	Net Payment Paid/Received Other Orders (cents per
Venue Citadel Securities LLC (CDRG)	Non-Directed Orders (%)		Marketable Limit Orders (%)	(%)	Other Orders (%)	for Market Orders (USD)	hundred shares)		(cents per hundred shares)		(cents per hundred shares)		hundred shares)
	34.59%	34.08%	37.75%	37.07%	55.56%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM) Virtu Americas LLC (NITE)	32.87% 32.52%	33.32% 32.60%	28.11% 34.14%	30.87% 31.96%	33.33% 11.11%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
CPEM	0.01%	0.00%	0.00%	0.11%	0.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
August 2021 Summary			Non-Marketable Limit Orders	Option Contracts									
Non-Directed Orders as I Percent of All Orders	Market Orders as Percent of Non- Directed Orders		Non-Marketable Limit Orders as Percent of Non-Directed Orders										

William Blair Sell Sic Generation Date: 2021-10-28 Gear: 2021	de - Held NMS Stocks and 8 12:58:29.850 GMT -0400 Quarter: 3	Options Order Routin	ng Public Report										
100.009		11.73%	23.40%	0.39%									
enues - Non Directed Orde	ers												
				Non-Marketable Limit Orders		Net Payment Paid/Received	Net Payment Paid/Received for Market Orders (cents per	Net Payment Paid/Received Marketable Limit Orders	Net Payment Paid/Received Marketable Limit Orders		Net Payment Paid/Received Non-Marketable Limit Orders	Net Payment Paid/Received	Net Payment Paid/Receive Other Orders (cents p
enue e	Non-Directed Orders (%) Market Orders (%)	Marketable Limit Orders (%)	(%)	Other Orders (%)	for Market Orders (USD)	hundred shares)	(USD)			(cents per hundred shares)	Other Orders (USD)	hundred share
lational Financial Services LC (NFSC)	100.009	6 100.00%	100.00%	100.00%	100.00%	0	0.0000	0	0.0000	0	0.0000	0	0.000
September 2021				S&P 500 Stocks									
ummary													
			Non-Marketable Limit Orders										
Percent of All Orders	as Market Orders as Percent of Non ers Directed Order		as Percent of Non-Directed Orders	Other Orders as Percent of Non-Directed Orders									
100.009				0.35%									
enues - Non Directed Orde	ers												
								Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received		Net Payment Paid/Receive
				Non-Marketable Limit Orders			for Market Orders (cents per	Marketable Limit Orders			Non-Marketable Limit Orders		Other Orders (cents pe
fenue firtu Americas LLC (NITE)	Non-Directed Orders (% 33.559		Marketable Limit Orders (%) 44.19%	(%) 29.31%	Other Orders (%) 21.05%	for Market Orders (USD)	hundred shares) 0.0000	(USD)		(USD)	(cents per hundred shares) 0.0000	Other Orders (USD)	hundred share: 0.000
					21.03/6	U		U		U		U	0.000
Vall Street Access (VNDM)	33.309	33.21%	25.58%	38.79%	42.11%	0	0.0000	0	0.0000	0	0.0000	0	0.000
itadel Securities LLC (CDRG)	i) 33.159	33.19%	30.23%	31.90%	36.84%	0	0.0000	0	0.0000	0	0.0000	0	0.000
September 2021				Non-S&P 500 Stocks									
uninui y		Marketable Limit Orders as	Non-Marketable Limit Orders										
Ion-Directed Orders as	Market Orders as Percent of Non-		as Percent of Non-Directed										
ercent of All Orders 100.009	Directed Orders 9% 86.769	Orders 2.99%	Orders 9.90%	Non-Directed Orders 0.35%									
enues - Non Directed Orde	ers												
							Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received		Net Payment Paid/Received
·	New Discreted Order, 400	Madest Orders (CC)		Non-Marketable Limit Orders	Out O-d (%)	Net Payment Paid/Received	for Market Orders (cents per hundred shares)	Marketable Limit Orders			Non-Marketable Limit Orders		Other Orders (cents per
enue	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	(%)	Other Orders (%)	for Market Orders (USD)	nunureu snares)	(USD)	(cents per hundred shares)	(USD)	(cents per hundred shares)	Other Orders (USD)	hundred shares)
itadel Securities LLC (CDRG)	34.369	33.89%	41.96%	36.20%	34.62%	0	0.0000	0	0.0000	0	0.0000	0	0.000
Vall Street Access (VNDM)	32.889	33.23%	29.02%	31.49%	19.23%	0	0.0000	0	0.0000	0	0.0000	0	0.000
'irtu Americas LLC (NITE)	32.759	6 32.88%	29.02%	32.30%	46.15%	0	0.0000	0	0.0000	0	0.0000	0	0.00

Percent of All Orders	Directed Orders	Orders	Orders	Non-Directed Orders									
100.00%	60.38%	11.61%	27.03%	0.98%									
Venues - Non Directed Orders													
							Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received		Net Payment Paid/Received
			Nor	n-Marketable Limit Orders		Net Payment Paid/Received	for Market Orders (cents per	Marketable Limit Orders	Marketable Limit Orders	Non-Marketable Limit Orders	Non-Marketable Limit Orders	Net Payment Paid/Received	Other Orders (cents per
Venue	Non-Directed Orders (%)	Market Orders (%) Marketa	able Limit Orders (%)	(%)	Other Orders (%)	for Market Orders (USD)	hundred shares)	(USD)	(cents per hundred shares)	(USD)	(cents per hundred shares)	Other Orders (USD)	hundred shares)
National Financial Services													
LLC (NFSC)	100.00%	100.00%	100.00%	100.00%	100.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000

Option Contracts

wurmary

Marketable Limit Orders as Non-Marketable Limit Orders

Non-Directed Orders as Market Orders as Percent of Non-Percent of Non-Directed as Percent of Non-Directed Other Orders as Percent of Non-Directed Orders as Percent of Non-Directed Other Orders as Percent of Non-Directed Orders as Percent of Non-Directed Other Orders as Percent of Non-Directed Other Orders as Percent of Non-Directed Orders as Non-Marketable Limit Orders

Virtu Americas LLC (NITE)
September 2021
Summary