William Blair Sell Side - Held NMS Stocks and Options Order Routing Public Report

33.79% 33.30%

32.91%

Virtu Americas LLC (NITE)

Wall Street Access (VNDM)

33.38% 33.45%

33.16%

60.00% 19.00%

21.00%

31.50%

28.08%

54.17% 33.33%

12.50%

Generation Date: 2022-10-25 10:49:17.223 GMT -0400

Generation Date: 2022-10-25 : Year: 2022	10:49:17.223 GMT -0400 Quarter: 3												
July 2022				S&P 500 Stocks									
Summary		Marketable Limit Orders as	Non-Marketable Limit Orders										
	Market Orders as Percent of Non-	Percent of Non-Directed	as Percent of Non-Directed										
Percent of All Orders 100 00%		Orders 0.22%	Orders 1.58%	Non-Directed Orders 0.12%									
Venues - Non Directed Orders	S												
				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 Non-Marketable Limit Orders	Net Payment Paid/Received	Net Payment Paid/Received Other Orders (cents per
Venue	Non-Directed Orders (%)		Marketable Limit Orders (%)	(%)	Other Orders (%)	for Market Orders (USD)	hundred shares)	(USD)	(cents per hundred shares)	(USD)	(cents per hundred shares)		hundred shares)
Virtu Americas LLC (NITE)	33.77%	33.77%	18.75%	37.72%	11.11%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	33.18%	33.22%	37.50%	28.95%	44.44%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities LLC (CDRG)	33.05%	33.01%	43.75%	33.33%	44.44%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
July 2022				Non-S&P 500 Stocks									
Summary				NOTIFICAT DOU STOCKS									
Non Diseased Orders	s Market Orders as Percent of Non-		Non-Marketable Limit Orders as Percent of Non-Directed	Other Orders as Percent of									
Percent of All Orders	Directed Orders	Orders		Non-Directed Orders									
100.00%	95.97%	0.70%	3.21%	0.12%									
Venues - Non Directed Orders	s												
							Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received		Net Payment Paid/Received
				Non-Marketable Limit Orders			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 (%)	Marketable 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)
Citadel Securities LLC (CDRG)	33.96%	33.71%	53.45%	37.59%	20.00%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	33.24%	33.41%	18.97%	31.20%	40.00%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas LLC (NITE)	32.80%	32.88%	27.59%	31.20%	40.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
July 2022				Option Contracts									
Summary													
Non-Directed Orders as	s Market Orders as Percent of Non-	Percent of Non-Directed	Non-Marketable Limit Orders as Percent of Non-Directed	Other Orders as Percent of									
Percent of All Orders 100.00%		Orders 5.13%	Orders 27.50%	Non-Directed Orders 0.54%									
		3.13%	27.30%	0.34%									
Venues - Non Directed Orders	s												
										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 (USD)	Marketable Limit Orders (cents per hundred shares)	Non-Marketable Limit Orders (USD)	Non-Marketable Limit Orders (cents per hundred shares)	Net Payment Paid/Received Other Orders (USD)	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
Material Aspects:													
	n Blair did not receive payment for or Blair did not receive payment for orde												
	lair did not receive payment for orde												
National Financial Services LLC	C - William Blair did not receive paym	ent for order flow from NFSC I	for these trades										
August 2022				S&P 500 Stocks									
Summary		Marketable Limit Orders as	Non-Marketable Limit Orders										
Non-Directed Orders as Percent of All Orders	Market Orders as Percent of Non- Directed Orders	Percent of Non-Directed	as Percent of Non-Directed										
Percent of All Orders 100.00%		Orders 0.20%	Orders 1.17%	Non-Directed Orders 0.43%									
Venues - Non Directed Orders	_												
venues - Non Directed Orders	S												
				Non-Marketable Limit Orders		Not Daymont Daid/Rossiyad	Net Payment Paid/Received for Market Orders (cents per	Net Payment Paid/Received Marketable Limit Orders	Net Payment Paid/Received	Net Payment Paid/Received Non-Marketable Limit Orders	Net Payment Paid/Received	Not Daymont Baid/Received	Net Payment Paid/Received Other Orders (cents per
Venue	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	(%)	Other Orders (%)				(cents per hundred shares)		(cents per hundred shares)	Other Orders (USD)	hundred shares)
Citadel Securities LLC (CDRG)	33.59%	33.57%	34.78%	35.04%	32.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
				35.04%					0.0000	U	0.0000	U	
Wall Street Access (VNDM) Virtu Americas LLC (NITE)	33.38% 33.03%	33.38% 33.04%	26.09% 39.13%	35.04% 29.93%	32.00% 36.00%	0	0.0000			0	0.0000	0	0.0000
,	33.03%	33.04%	39.13%	29.93%	36.00%	0	0.0000	U	0.0000	U	0.0000	0	0.0000
August 2022				Non-S&P 500 Stocks									
Summary			Non-Marketable Limit Orders										
Non-Directed Orders as Percent of All Orders	s Market Orders as Percent of Non- birected Orders		as Percent of Non-Directed	Other Orders as Percent of Non-Directed Orders									
100.00%		0.71%	2.70%	0.17%									
Venues - Non Directed Orders	•												
Non Directed Orders													
				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 Non-Marketable Limit Orders	Net Payment Paid/Received	Net Payment Paid/Received Other Orders (cents per
Venue	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	(%)	Other Orders (%)		hundred shares)		(cents per hundred shares)		(cents per hundred shares)		hundred shares)
Citadel Securities LLC (CDRG)	33.79%	33.38%	60.00%	40.42%	54.17%	0	0.0000	0	0.0000	0	0.0000	0	0.0000

0.0000

0.0000

0.0000

William Blair Sell Side - Held NMS Stocks and Options Order Routing Public Report

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Year: 2022 Quarter: 3 Credit Suisse Securities (USA)

LLC (FBCO)	0.01%	0.01%	0.00%	0.00%	0.00%	0	-11.0854	0	0.0000	0	0.0000	0	0.0000

August 2022				Option Contracts
Summary				
		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
Percent of All Orders	Directed Orders	Orders	Orders	Non-Directed Orders
100.00%	62.78%	8.26%	27.36%	1.60%

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
				Non-Marketable Limit Orders		Net Payment Paid/Received f	or 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 (%)	Marketable 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

Material Aspects:

Citadel Securities LLC - William Blair did not receive payment for order flow from CDRG for these trades.

Citable Securities LLC - William Blair did not receive payment for order flow from CDRG for these trades.

Virtl Americas LCC - William Blair did not receive payment for order flow from NITE for these trades.

Vall Street Access - William Blair did not receive payment for order flow from NVDM for these trades.

Vall Street Access - William Blair did not receive payment for order flow from NVDM for these trades.

Antonnal Financia Services LLC - William Blair did not receive payment for order flow from NVSC for these trades

Credit Suisse Securities (USA) LLC - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by FBCO are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable. FBCO may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee.

September 2022 Summary				S&P 500 Stock
		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
Percent of All Orders	Directed Orders	Orders	Orders	Non-Directed Orde
100.00%	98.50%	0.37%	1.07%	0.06

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
			No	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 (%)	Marketable 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)
Virtu Americas LLC (NITE)	35.44%	35.40%	26.92%	42.67%	25.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities LLC (CDRG)	35.32%	35.30%	53.85%	29.33%	50.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	29.24%	29.29%	19.23%	28.00%	25.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000

September 2022				Non-S&P 500 Stocks
Summary				
		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
Percent of All Orders	Directed Orders	Orders	Orders	Non-Directed Orders
100.00%	95.97%	0.83%	3.08%	0.12%

Venues - Non Directed Orders

Venue	Non-Directed Orders (%)	Market Orders (%)	N Marketable Limit Orders (%)	ion-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders (USD)					Net Payment Paid/Received s Non-Marketable Limit Orders (cents per hundred shares)		Net Payment Paid/Received Other Orders (cents per hundred shares)
Citadel Securities LLC (CDRG)	35.85%	35.57%	53.52%	39.54%	50.00%	0	0.0000		0.0000		0.0000	0	0.0000
Virtu Americas LLC (NITE)	34.93%	35.09%		32.32%	20.00%	0	0.0000	Č	0.0000	Č	0.0000	0	0.0000
Wall Street Access (VNDM)	29.22%	29.34%	18.31%	28.14%	30.00%	0	0.0000	c	0.0000	C	0.0000	0	0.0000

September 2022			Option Contracts
Summary			
	Marketable Limit Orders as	Non-Marketable Limit Orders	
Non-Directed Orders as Market Orders as Percent of No	 Percent of Non-Directed 	as Percent of Non-Directed	Other Orders as Percent of
Percent of All Orders Directed Orde	s Orders	Orders	Non-Directed Orders
100.00% 67.13	6 9.07%	23.10%	0.70%

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
				Non-Marketable Limit Orders		Net Payment Paid/Received	for Market Orders (cents per	Marketable Limit Orders	Marketable Limit Orders N	Ion-Marketable Limit Orders	Non-Marketable Limit Orders	Net Payment Paid/Received	Other Orders (cents per
Venue	Non-Directed Orders (%)	Market Orders (%) N	Marketable 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

Citadel Securities LLC - William Blair did not receive payment for order flow from CDRG for these trades.

Virtu Americas LLC - William Blair did not receive payment for order flow from NTE for these trades.

Wall Street Access - William Blair did not receive payment for order flow from VDRD for these trades.

National Financial Services LLC - William Blair did not receive payment for order flow from NFSC for these trades.