## William Blair Sell Side - Held NMS Stocks and Options Order Routing Public Report Generation Date: 2025-01-06 13:30:33.420 GMT-0400 Year: 2024

ear: 2024	Quarter: 4

This   State	0-1-1				C0.D 500 Ct  -									
March   Marc	October 2024				S&P 500 Stocks									
Marie	Summary		Marketable Limit Orders as	Non-Marketable Limit Orders										
This continue	Non-Directed Orders as Mar	rket Orders as Percent of Non-												
Second Content	100.00%	90.83%	2.96%	6.13%	0.08%									
Part	Vanues Non Directed Orders													
Second   S	venues non birected orders													
Second														
Marked   M														
Control   Cont														
Marie   100			Market Orders (%)	Marketable Limit Orders (%)	(%)					(cents per hundred shares)		(cents per hundred shares)	Other Orders (USD)	hundred shares)
Control   Cont	Wall Street Access (VNDM)												0	
This content	Virtu Americas LLC (NITE)				35.06%									
Marie   Mari	,													
Part	October 2024				Non-S&P 500 Stocks									
Marie   Mari	Summary													
March   1986														
Mark														
Part														
Marie   Mari														
Marie   Mari	Venues - Non Directed Orders													
March   Section   Sectio														
Marie   Mari														
Marie   Mari	Venue	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)		Other Orders (%)	for Market Orders (USD)							
Column   C										0.0000		0.0000		
Control   Cont	Citadel Securities LLC (CDRG)	34.96%	34.52%	39.22%	39.01%	27.91%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Mary	Virtu Americas LLC (NITE)	30.01%	30.21%	27.59%	28.34%	34.88%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Mary	0-1-1				0-11 2									
Secure of 10   10   10   10   10   10   10   10					Option Contracts									
No Processe (1998) 1	Summary		Markotable Limit Ord	Non Marketable Limit Order										
Section   1968	Non-Directed Orders as Man	rket Orders as Percent of Non-												
Value   Part	Percent of All Orders	Directed Orders	Orders	Orders	Non-Directed Orders									
Part	100.00%	64.51%	3.54%	20.44%	11.51%									
Part														
Marked   M	Venues - Non Directed Orders													
March   Marc								Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received		Net Payment Paid/Received
Makes   Color   Makes   Color   Makes   Color   Makes   Color   Makes   Makes   Color   Makes   Make					Non-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
10   10   10   10   10   10   10   10		Non-Directed Orders (%)	Market Orders (%)			Other Orders (%)								
Marie   Control   Contro														
Clased Secure List.   Wilson   Birar of an er new perpende for order for from Print Prin	LLC (NFSC)	100.00%	100.00%	100.00%	100.00%	100.00%	U	0.0000	U	0.0000	U	0.0000	U	0.0000
Marie   Colore   Marie   Colore   Marie   Colore   Marie   Colore   Color	Wall Street Access - William Blair di	lid not receive payment for orde	er flow from VNDM for these tr	rades.										
Non-Directed Odors at Market Orders as Personal Follow Persona														
Market Didors   Market Didors   Servent of Non-Directed Orders   Market Didors   Servent of Non-Directed Orders   Servent of Non-D					S&P 500 Stocks									
No-Directed Orders as Market Orders as Precessed Fishers 100,000% 9,825% 2,666% 0,665% 1,565% 1,056% 1,565%	Summary		Marketable Limit Orders as	Non-Marketable Limit Orders										
10000  100000  1000000  1000000  1000000  1000000  1000000  100000000	Non-Directed Orders as Mar	rket Orders as Percent of Non-												
Value   Valu	Percent of All Orders	Directed Orders	Orders	Orders	Non-Directed Orders									
Non-Directed Orders	100.00%	90.85%	2.66%	5.43%	1.06%									
Non-Directed Orders	Vanuer Non Directed Orders													
Non-Directed Orders (No. Directed Orders (No. Dir	venues - Non Directed Orders													
Non-Directed Orders (No. Directed Orders (No. Dir								Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received		Net Payment Paid/Received
Wall Street Access (MDM)								for Market Orders (cents per	Marketable Limit Orders	Marketable Limit Orders	Non-Marketable Limit Orders	Non-Marketable Limit Orders	Net Payment Paid/Received	
Cliaded Securities LLE (CDRC) 44.54% 44.15% 41.16% 41.16% 53.07% 0.000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0	Venue	Non-Directed Orders (%)		Marketable Limit Orders (%)			for Market Orders (USD)			(cents per hundred shares)		(cents per hundred shares)		
Non-Directed Orders as Market Orders as Percent of Non-Directed Orders as Market Orders as Says   Non-Directed Orders   Non-Directed O						46.03%	0							
Marketable Limit Orders as Market Orders as Percent of Non-Directed Orders as Market Orders as Percent of Non-Directed Orders as Market Orders as Percent of Non-Directed Orders (%)	Virtu Americas LLC (NITE)						0							
Marketable Limit Orders as Market Orders as Percent of Non-Directed Orders as Market Orders as Percent of Non-Directed Orders as Market Orders as Percent of Non-Directed Orders (%)	,													
Marketable Limit Orders as Market Orders as Percent of Non-Directed Orders as Nariet Orders as Market Orders as Nariet Orders as Non-Marketable Limit Orders as Percent of Non-Directed Orders (%) Order Order (%) Order (%) Order Order (%) Order Order (%) Order Order (%) Order (%) Order (%) Order Order (%)	November 2024				Non-S&P 500 Stocks									
Non-Directed Orders as Market Orders as Percent of Non-Directed Orders (Non-Directed Orders) (Parent of Non-Directed Orders) (	Summary													
Percent of All Orders   Directed Orders   100.00%   8.8.91%   2.58%   7.90%   0.65%														
100.00%   88.91%   2.58%   7.90%   0.60%														
Venues - Non Directed Orders    Non-Directed Orders   Non-Directed														
Non-Directed Orders (%)   Market Orders (%)   Other Orde		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,												
Market Dries   Non-Directed Orders   Non-D	Venues - Non Directed Orders													
Market Orders (No.)   Order (No.)   Order Orders (No.)   Order (No.)   Order Orders (No.)   Order Orde														
Venue   Non-Directed Orders (%)   Market Orders (%)   Market Orders (%)   Market Orders (%)   (%)   Other Orders (%)   (%)   Other Orders (%)   (%)   Other Orders (%)   (%)					Non-Marketable Limit Ord		Not Payment Paid/Possing	for Market Orders Joents	Net Payment Paid/Received	Net Payment Paid/Received	Non-Marketable Limit Order	Net Payment Paid/Received	Not Payment Paid/Possived	Other Order (cost-
Cliadel Securities LLC (CDRG) 4.5.71% 44,84% 59.00% 51.31% 44.26% 0 0.0000 0 0.000000	Venue	Non-Directed Orders (%)	Market Orders (%)			Other Orders (%)	for Market Orders (USD)	hundred shares)					Other Orders (USD)	hundred shares)
Virtu Americas LLC (NTE) 10.35% 10.59% 5.75% 9.01% 11.48% 0 0.0000	Citadel Securities LLC (CDRG)		44.84%							0.0000		0.0000	0	0.0000
November 2024  Summary  Marketable Limit Orders as Non-Marketable Limit Orders as Non-Marketable Limit Orders  Non-Directed Orders as Market Orders as Percent of Non-Directed orders  Percent of All Orders  Directed Orders  Orders  Orders  Orders  Non-Directed Orders	Wall Street Access (VNDM)													
Marketable Limit Orders as Mora-Marketable Limit Orders as Non-Marketable Limit Orders  Non-Directed Orders as Market Orders as Percent of Non-Directed orders  Percent of All Orders  Directed Orders  Orders  Orders  Non-Directed Orders  Orders	Virtu Americas LLC (NITE)	10.35%	10.59%	5.75%	9.01%	11.48%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Marketable Limit Orders as Non-Marketable Limit Orders as Non-Marketable Limit Orders as Percent of Non-Directed Orders orders as Percent of Non-Directed Orders Non-Directed Orders Non-Directed Orders Non-Directed Orders Non-Directed Orders Non-Directed Orders	N				0-11 0									
Marketable Limit Orders as Non-Marketable Limit Orders as Non-Marketable Limit Orders  Non-Directed Orders as Market Orders as Percent of Non-Directed as Percent of Non-Directed Orders  Percent of All Orders  Directed Orders  Orders  Orders Non-Directed Orders					Option Contracts									
Non-Directed Orders as Market Orders as Percent of Non- Percent of Non-Directed as Percent of Non-Directed Other Orders as Percent of All Orders Directed Orders Orders Non-Directed Orders	Junifidity		Marketable Limit Orders as	Non-Marketable Limit Orders										
Percent of All Orders Directed Orders Orders Orders Non-Directed Orders	Non Diseased Orders on Man													
100.00% 55.65% 6.64% 27.16% 10.56%	Mon-Directed Orders as Ivial	rket 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									

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

William Diali 35:13:00:14:00:15:00:16:00:16:00:16:00:16:00:16:13:30:33.420 GMT-0400
Year: 2024 Quarter: 4
Venues - Non Directed Orders

venues - Non Directed Orders	S												
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	Marketable Limit Orders	Marketable Limit Orders		Net Payment Paid/Received Non-Marketable Limit Orders (cents per hundred shares)	Net Payment Paid/Received	Net Payment Paid/Received Other Orders (cents per hundred shares)
National Financial Services	Non Birected Gracis (10)	Warket Orders (70)	Warketable Ellille Orders (70)	(74)	Other Orders (70)	TOT MIDIRET OTDETS (OSD)	nunureu snures,	(030)	(cents per nunarea snares)	(035)	(cents per nunureu snures)	Other Orders (USD)	nanarea shares
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:	m Blair did not receive payment for o	-dflf CDDC fsh											
Virtu Americas LLC - William B	Blair did not receive payment for orde	er flow from NITE for these tra	des.										
	Blair did not receive payment for orde .C - William Blair did not receive payn												
National Financial Services Li	.c - William Biair did not receive payn	nent for order now from NFSC	for these trades										
December 2024				S&P 500 Stocks									
Summary													
			Non-Marketable Limit Orders										
Percent of All Orders	Market Orders as Percent of Non- Directed Orders	Percent of Non-Directed Orders	as Percent of Non-Directed Orders	Other Orders as Percent of Non-Directed Orders									
100.00%		1.91%	4.81%	1.81%									
Venues - Non Directed Orders	s												
				Non-Marketable Limit Orders		Net December Deld (December)	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 Other Orders (cents per
Venue	Non-Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	(%)	Other Orders (%)	for Market Orders (USD)					(cents per hundred shares)		hundred shares)
Wall Street Access (VNDM)	39.83%	39.61%	38.64%	44.44%	40.00%	0	0.0000						0.0000
Citadel Securities LLC (CDRG)	39.77%	40.03%	43.94%	33.93%	37.60%	0	0.0000						0.0000
Virtu Americas LLC (NITE)	20.40%	20.36%	17.42%	21.62%	22.40%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
December 2024				Non-S&P 500 Stocks									
Summary													
Non-Directed Orders as		Marketable Limit Orders as		Other Orders as Percent of									
Percent of All Orders	Directed Orders	Orders	Orders	Non-Directed Orders									
100.00%	88.44%	3.10%	6.87%	1.59%									
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			Non-Marketable Limit Orders		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)	Other Orders (USD)	hundred shares)
Citadel Securities LLC (CDRG) Wall Street Access (VNDM)	41.35% 39.23%	40.19% 39.97%	58.36% 27.76%	48.64% 34.51%	40.97% 40.97%	0	0.0000		0.0000				0.0000
Virtu Americas LLC (NITE)	19.42%	19.84%	13.88%	16.85%	18.06%	0	0.0000						0.0000
December 2024				Option Contracts									
Summary				Option contracts									
			Non-Marketable Limit Orders										
	Market Orders as Percent of Non-		as Percent of Non-Directed										
Percent of All Orders 100.00%		Orders 9.18%	Orders 26.22%	Non-Directed Orders 9.00%									
		3.10%	20.2270	3.00%									
Venues - Non Directed Orders	<b>S</b>												
										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 (cents per hundred shares)		Non-Marketable Limit Orders (cents per hundred shares)		Other Orders (cents per hundred shares)
National Financial Services	non birected orders (70)	munice orders (70)		(70)	Other Orders (70)	. St market Gracis (USD)	nunarea silates)	(030)	(==./G per numureu silales)	(030)	(==ts per manarea silales)	Outer Orders (OSD)	nunarea silates)

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100.00%

100.00%

## LLC (NFSC)

Material Aspects:
Closed Securities LLC. William Blair did not receive payment for order flow from CDRG for these trades.
Virtum-merclas LLC. William Blair did not receive payment for order flow from NVTE for these trades.
Virtum-merclas LLC. William Blair did not receive payment for order flow from NVTE for these trades.
National Financial Services LLC. William Blair did not receive payment for order flow from NVTEC for these trades.

100.00%

100.00%

100.00%