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

Generation Date: 2024-10-06 13:17:28.877 GMT -0400 Year: 2024 Quarter: 3

	July 2024				S&P 500 Stocks
- 1	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%	93.99%	1.23%	3.21%	1.57%

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
			N	on-Marketable Limit Orders		Net Payment Paid/Received	for Market Orders (cents per	Marketable Limit Orders	Marketable Limit Orders 1	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)	35.97%	36.32%	43.01%	33.47%	14.41%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	35.32%	35.78%	26.88%	37.60%	9.32%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities LLC (CDRG)	27.74%	27.89%	30.11%	28.93%	14.41%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas LLC (ITGI)	0.97%	0.00%	0.00%	0.00%	61.86%	0.0000	0.0000	0	0.0000	0	0.0000	-16	-10.8485

July 2024 Summary				Non-S&P 500 Stocks
		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%	91.96%	1.42%	4.55%	2.06%

Venues - Non Directed Orders

Venue	Non-Directed Orders (%)	Market Orders (%) Marke		n-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders (USD)		Net Payment Paid/Received Marketable Limit Orders (USD)		Net Payment Paid/Received Non-Marketable Limit Orders (USD)		Net Payment Paid/Received Other Orders (USD)	Net Payment Paid/Received Other Orders (cents per hundred shares)
Wall Street Access (VNDM) Virtu Americas LLC (NITE)	35.98% 35.56%	36.55% 36.16%	34.32% 36.09%	32.72% 33.09%	18.78% 13.88%	0.0000	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities LLC (CDRG) Virtu Americas LLC (ITGI)	27.44% 0.95%	27.30% 0.00%	27.81% 0.00%	34.20% 0.00%	18.78% 46.12%	0.0000 0.0000	0.0000	0	0.0000	0	0.0000	0 -26	0.0000 -10.8485
BOFA Securities, Inc. (MLCO)	0.03%	0.00%	1.78%	0.00%	0.00%	0.0000	0.0000	-26	-84.3328	0	0.0000	0	0.0000
Clearpool Execution Services, LLC (CPEM) NASDAQ Stock Exchange	0.03%	0.00%	0.00%	0.00%	1.22%	0.0000	0.0000	0	0.0000	0	0.0000	-28	-40.0000
(XNAS) NYSE ARCA (ARCX)	0.02% 0.01%	0.00% 0.00%	0.00%	0.00% 0.00%	0.82% 0.41%	0.0000	0.0000 0.0000	0	0.0000 0.0000	0	0.0000 0.0000	0	0.0000 0.0000

July 2024				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%	69.55%	3.32%	17.47%	9.65%

Venues - Non Directed Orders

							Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received	Net Payment Paid/Received Net Payment Paid/Receive	1	Net Payment Paid/Received
			N	on-Marketable Limit Orders		Net Payment Paid/Received				Non-Marketable Limit Orders Non-Marketable Limit Order		
Venue	Non-Directed Orders (%)	Market Orders (%) Marketable Li	imit 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 0.000	0	0.0000

Material Aspects:

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 NITE for these trades.

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

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

BOFA Securities, Inc. - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by MLCO are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

MLCO may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee.

Virtu Americas LLC - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by ITGI are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

ITGI may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee.

Clearpool Execution Services, LLC - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by CPEM are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

CPEM may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee. CPEM may pass to William Blair any execution less and rebates incurred for routing the orders with an additional routing fee.

NASDAQ Stock Change - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by XNAS are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

XNAS may pass to William Blair may execution fees and rebates incurred for routing the orders with an additional routing fee.

NYSE ARCA. William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by ARCA are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

ARCX may pass to William Blair may execution fees and rebates incurred for routing the orders with an additional routing fee.

August 2024				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%	95.85%	0.90%	2.73%	0.52%

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
			N	Ion-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)	33.35%	33.60%	32.61%	29.86%	7.55%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Citadel Securities LLC (CDRG)	33.22%	33.19%	39.13%	37.77%	5.66%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	33.00%	33.22%	28.26%	32.37%	3.77%	0	0.0000	0	0.0000	0	0.0000	0	0.0000

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

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Year: 2024 Quarter: 3

Virtu Americas LLC (ITGI) 83.02% 0.0000 0.0000 0.0000 -11.9407

August 2024		Non-S&P 500 Stock
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 1.34% Orders Non-Directed Orders

Venues - Non Directed Orders

Venue	Non-Directed Orders (%)	Market Orders (%) Ma	N arketable Limit Orders (%)	Ion-Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders (USD)		Net Payment Paid/Received Marketable Limit Orders (USD)		Ion-Marketable Limit Orders		Net Payment Paid/Received Other Orders (USD)	Net Payment Paid/Received Other Orders (cents per hundred shares)
Citadel Securities LLC (CDRG)	33.34%	33.50%	36.02%	35.32%	11.65%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	32.89%	33.15%	34.12%	33.96%	8.74%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas LLC (NITE)	32.84%	33.35%	29.86%	30.72%	8.25%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Virtu Americas LLC (ITGI)	0.91%	0.00%	0.00%	0.00%	69.42%	0	0.0000	0	0.0000	0	0.0000	-94	-11.9407
Clearpool Execution Services, LLC (CPEM) NASDAQ Stock Exchange	0.01%	0.00%	0.00%	0.00%	0.97%	0	0.0000	0	0.0000	0	0.0000	-54	-35.0980
(XNAS)	0.01%	0.00%	0.00%	0.00%	0.49%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
New York Stock Exchange, Inc. (XNYS)	0.01%	0.00%	0.00%	0.00%	0.49%	0	0.0000	0	0.0000	0	0.0000	0	0.0000

August 2024 Option Contracts 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% 60.82% 5.98% 23.27%

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	Non-Marketable Limit Orders	Non-Marketable Limit Orders	Net Payment Paid/Received	Other Orders (cents per
Venue	Non-Directed Orders (%)	Market Orders (%) Marketable Limit On	ders (%) (%)	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 (NESC)	100.00%	100.00%	00.00% 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. Virtu Americas LLC - William Blair did not receive payment for order flow from NTET for these trades. Wall Street Access - William Blair did not receive payment for order flow from VNDM for these trades.

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

Virtu Americas LLC - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by ITGI are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

ITGI may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee.

Clearpool Execution Services, LLC - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by CPEM are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

CPEM may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee.

NASDAQ Stock Exchange - William Blair may be charged fees for orders executed in Alternative Trading Systems. Orders routed further by XNAS are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

XNAS may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee.

New York Stock Exchange, Inc. - William Blair may be changed fees for orders executed in Alternative Trading Systems. Order souted further by XNYS are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

XNYS may pass to William Blair any execution fees and rebates incurred for routing the orders with an additional routing fee.

September 2024 S&P 500 Stocks Marketable Limit Orders as Non-Marketable Limit Orders

Percent of Non-Directed as Percent of Non-Directed Other Orders as Percent of Orders Orders Orders Non-Directed Orders Non-Directed Orders as Market Orders as Percent of Non-Percent of All Orders Directed Orders 100.00% 91.97% 1.83% 4.76%

Venues - Non Directed Orders

Venue	Non-Directed Orders (%)	Market Orders (%) Marketa		xetable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders (USD)		Marketable Limit Orders	Marketable Limit Orders	Net Payment Paid/Received Non-Marketable Limit Orders N (USD)		Net Payment Paid/Received Other Orders (USD)	
Citadel Securities LLC (CDRG)	33.32%	33.44%	35.29%	35.85%	15.00%	0	0.0000	0	0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM) Virtu Americas LLC (NITE) Virtu Americas LLC (ITGI)	33.32% 32.78% 0.56%	33.52% 33.05% 0.00%	32.35% 32.35% 0.00%	33.58% 30.57% 0.00%	21.25% 23.75% 38.75%	0 0 0	0.0000 0.0000 0.0000	0 0 0	0.0000 0.0000 0.0000	0 0 0	0.0000 0.0000 0.0000	0 0 -17	0.0000 0.0000 -11.9407
Clearpool Execution Services, LLC (CPEM)	0.02%	0.00%	0.00%	0.00%	1.25%	0	0.0000	0	0.0000	0	0.0000	0	0.0000

September 2024 Non-S&P 500 Stocks Marketable Limit Orders as Non-Marketable Limit Orders 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 All Orders Directed Orders Orders Orders 7.07% 100.00% 89.50% 2.25%

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 Marketable Limit Orders (cents per hundred shares)	Non-Marketable Limit Orders			Net Payment Paid/Received Other Orders (cents per hundred shares)
Citadel Securities LLC (CDRG)	33.88%	33.29	6 35.03%	40.54%	36.56%	0	0.0000		0.0000	0	0.0000	0	0.0000
Virtu Americas LLC (NITE)	33.27%	33.48	6 32.77%	30.99%	32.26%	0	0.0000	(0.0000	0	0.0000	0	0.0000
Wall Street Access (VNDM)	32.75%	33.23	6 32.20%	28.47%	22.58%	0	0.0000		0.0000	0	0.0000	0	0.0000
Virtu Americas LLC (ITGI)	0.05%	0.00	6 0.00%	0.00%	4.30%	0	0.0000		0.0000	0	0.0000	-1	-11.9407

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

Generation Date: 2024-10-06 13:17:28.877 GMT -0400 Year: 2024 Quarter: 3

Quarter: 3

Clearpool Execution Services,

LLC (CPEM)	0.04%	0.00%	0.00%	0.00%	3.23%	0	0.0000	0	0.0000	0	0.0000	-17	-35.0000
New York Stock Exchange,													
Inc. (XNYS)	0.01%	0.00%	0.00%	0.00%	1.08%	0	0.0000	0	0.0000	0	0.0000	0	0.0000

September 2024 Option Contracts

		Non-Marketable Limit Orders	Marketable Limit Orders as		
ı	Other Orders as Percent of	as Percent of Non-Directed	Percent of Non-Directed	Market Orders as Percent of Non-	Non-Directed Orders as
ı	Non-Directed Order	Orders	Orders	Directed Orders	Percent of All Orders
ì	10.359	25.64%	4.99%	59.02%	100.00%

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 N	on-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.

Citade Securities LLC - William Bilar id not receive payment for order flow from CDRG for these trades.

With Americas LLC - William Bilar id and neceive payment for order flow from NTE for these trades.

Wall Street Access - William Bilar id and neceive payment for order flow from NTE for these trades.

Wall Street Access - William Bilar id and on traceive payment for order flow from NTE for these trades.

National Financial Services LLC - William Bilar id and receive payment for order flow from NTES for these trades.

Virtu Americas LLC - William Bilar imay be charged fees for orders executed in Alternative Trading Systems. Orders routed further by ITGI are sent to exchanges which incur fees and rebates based on the exchange rules, as approved by the SEC, and are non-negotiable.

ITGI may pass to William Bilar any execution fees and rebates incurred for routing the orders with an additional routing fee.

CPEM may pass to William Bilar any execution fees and rebates incurred for routing the orders with an additional routing fee.

New York Stock-Rohange, Inc. - William Bilar may be received by the SEC, and are non-negotiable.

XNYS may pass to William Bilar any execution fees and rebates incurred for routing the orders with an additional routing fee.