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4th Quarter, 2022

October 2022

S&P 500 Stocks

Summary

•	Non-Directed Orders as % of All Orders	Market Orders as % of Non- Directed Orders	Marketable Limit Orders as % of NonDirected Orders	Non- Marketable Limit Orders as % of NonDirected Orders	Other Orders as % of Non- Directed Orders
	100%	0.00%	0%	100.00%	0%

Venue - Non- directe d Order Flow	Non Directed Orders (%)	Market Orders (%)	Marketabl e Limit Orders (%)	NonMarketab le 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(cent s per hundred shares)	Net Payment Paid/ Received for NonMarketab le Limit Orders(USD)	Net Payment Paid/ Received for NonMarketab le Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cen ts per hundred shares)
#N/A	100.00%	0.00%	0.00%	100.00%	0.00%								

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4th Quarter, 2022

October 2022

Non S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non- Directed Orders	Marketable Limit Orders as % of NonDirected Orders	Non- Marketable Limit Orders as % of NonDirected Orders	Other Orders as % of Non- Directed Orders
100%	79.19%	0%	20.81%	0%

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4th Quarter, 2022

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Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
0005 500444 6	85.51%	79%	0.00%	7%	0%								
CBOE EDGX U.S. EQUITIES EXCHANGE (EDGX)	1.51%	0%	0.00%	1%	0%								
NEW YORK STOCK EXCHANGE, INC. (XNYS)	1.44%	0%	0.00%	1%	0%								
CBOE BZX U.S. EQUITIES EXCHANGE (BATS)	1.39%	0%	0.00%	1%	0%								
NASDAQ - ALL MARKETS (XNAS)	1.31%	0%	0.00%	1%	0%								
TORONTO STOCK EXCHANGE (XTSE)	0.96%	0%	0.00%	1%	0%								
NYSE ARCA (ARCX)	0.88%	0%	0.00%	1%	0%								
MEMX LLC EQUITIES (MEMX)	0.68%	0%	0.00%	1%	0%								
NYSE MKT LLC (XASE)	0.55%	0%	0.00%	1%	0%								
MIAX PEARL EQUITIES (EPRL)	0.54%	0%	0.00%	1%	0%								
CBOE BYX U.S. EQUITIES EXCHANGE (BATY)	0.42%	0%	0.00%	0%	0%								

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4th Quarter, 2022

October 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
VIRTU MATCHIT - MAIN CROSSING SESSION (VFMI)	0.40%	0%	0.00%	0%	0%								
INVESTORS EXCHANGE (IEXG)	0.39%	0%	0.00%	0%	0%								
SIGMA X2 (SGMT)	0.38%	0%	0.00%	0%	0%								
CBOE EDGA U.S. EQUITIES EXCHANGE (EDGA)	0.38%	0%	0.00%	0%	0%								
NASDAQ OMX PSX (XPSX)	0.37%	0%	0.00%	0%	0%								
NASDAQ OMX BX (XBOS)	0.37%	0%	0.00%	0%	0%								
UBS ATS (UBSA)	0.33%	0%	0.00%	0%	0%								
LEVEL ATS (LEVL)	0.32%	0%	0.00%	0%	0%								
NYSE NATIONAL, INC. (XCIS)	0.22%	0%	0.00%	0%	0%								
CHI-X CANADA ATS (CHIC)	0.20%	0%	0.00%	0%	0%								
BANK OF AMERICA - MERRILL LYNCH INSTINCT X ATS (BAML)	0.15%	0%	0.00%	0%	0%								

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4th Quarter, 2022

October 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS (XOFF)	0.14%	0%	0.00%	0%	0%								
CREDIT SUISSE AES CROSSFINDER (CAES)	0.13%	0%	0.00%	0%	0%								
JPMX (JPMX)	0.13%	0%	0.00%	0%	0%								
CITADEL SECURITIES (CDED)	0.13%	0%	0.00%	0%	0%								
INTELLIGENTCR OSS (INCR)	0.12%	0%	0.00%	0%	0%								
BARCLAYS ATS (BARX)	0.11%	0%	0.00%	0%	0%								
BNPP CORTEX ATS (BNPC)	0.11%	0%	0.00%	0%	0%								
KNIGHT LINK (KNLI)	0.10%	0%	0.00%	0%	0%								
INSTINET CBX (US) (ICBX)	0.07%	0%	0.00%	0%	0%								
ALPHA EXCHANGE (XATS)	0.06%	0%	0.00%	0%	0%								
MS POOL (MSPL)	0.04%	0%	0.00%	0%	0%								
NEO EXCHANGE - NEO-L (MARKET BY	0.04%	0%	0.00%	0%	0%								

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4th Quarter, 2022

October 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
ORDER) (NEOE)													
NASDAQ/NGS (GLOBAL SELECT MARKET) (XNGS)	0.04%	0%	0.00%	0%	0%								
JANE STREET JX (JSJX)	0.03%	0%	0.00%	0%	0%								
CANADIAN SECURITIES EXCHANGE - PURE (PURE)	0.02%	0%	0.00%	0%	0%								
HUDSON RIVER TRADING (HRTX)	0.01%	0%	0.00%	0%	0%								
OMEGA ATS (OMGA)	0.01%	0%	0.00%	0%	0%								

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4th Quarter, 2022

November 2022

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non- Directed Orders	Marketable Limit Orders as % of NonDirected Orders	Non- Marketable Limit Orders as % of NonDirected Orders	Other Orders as % of Non- Directed Orders
100%	0.00%	0%	0.00%	0%

Venue - Non- directe d Order Flow	Non Directed Orders (%)	Market Orders (%)	Marketabl e Limit Orders (%)	NonMarketab le 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(cent s per hundred shares)	Net Payment Paid/ Received for NonMarketab le Limit Orders(USD)	Net Payment Paid/ Received for NonMarketab le Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cen ts per hundred shares)
#N/A	0.00%	0.00%	0.00%	0.00%	0.00%								

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4th Quarter, 2022

November 2022

Non S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non- Directed Orders	Marketable Limit Orders as % of NonDirected Orders	Non- Marketable Limit Orders as % of NonDirected Orders	Other Orders as % of Non- Directed Orders
100%	57.18%	0%	42.82%	0%

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
	69.90%	56%	0.00%	14%	0%								
NEW YORK STOCK EXCHANGE, INC. (XNYS)	4.71%	0%	0.00%	5%	0%								
CBOE BZX U.S. EQUITIES EXCHANGE (BATS)	2.99%	0%	0.00%	3%	0%								
NYSE ARCA (ARCX)	2.89%	0%	0.00%	3%	0%								
MEMX LLC EQUITIES (MEMX)	2.67%	0%	0.00%	3%	0%								
NASDAQ - ALL MARKETS (XNAS)	2.60%	0%	0.00%	3%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
CBOE EDGX U.S. EQUITIES EXCHANGE (EDGX)	2.29%	0%	0.00%	2%	0%								
NYSE MKT LLC (XASE)	1.08%	0%	0.00%	1%	0%								
NASDAQ/NGS (GLOBAL SELECT MARKET) (XNGS)	0.98%	0%	0.00%	1%	0%								
MIAX PEARL EQUITIES (EPRL)	0.91%	0%	0.00%	1%	0%								
UBS ATS (UBSA)	0.85%	0%	0.00%	1%	0%								
INVESTORS EXCHANGE (IEXG)	0.82%	0%	0.00%	1%	0%								
CBOE EDGA U.S. EQUITIES EXCHANGE (EDGA)	0.71%	0%	0.00%	1%	0%								
CBOE BYX U.S. EQUITIES EXCHANGE (BATY)	0.69%	0%	0.00%	1%	0%								
NASDAQ OMX BX (XBOS)	0.63%	0%	0.00%	1%	0%								
NYSE NATIONAL, INC. (XCIS)	0.54%	0%	0.00%	1%	0%								
NASDAQ OMX PSX (XPSX)	0.52%	0%	0.00%	1%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
TORONTO STOCK EXCHANGE (XTSE)	0.43%	0%	0.00%	0%	0%								
LEVEL ATS (LEVL)	0.42%	0%	0.00%	0%	0%								
CREDIT SUISSE AES CROSSFINDER (CAES)	0.40%	0%	0.00%	0%	0%								
BARCLAYS ATS (BARX)	0.35%	0%	0.00%	0%	0%								
SIGMA X2 (SGMT)	0.33%	0%	0.00%	0%	0%								
BANK OF AMERICA - MERRILL LYNCH INSTINCT X ATS (BAML)	0.30%	0%	0.00%	0%	0%								
JPMX (JPMX)	0.25%	0%	0.00%	0%	0%								
VIRTU MATCHIT - MAIN CROSSING SESSION (VFMI)	0.24%	0%	0.00%	0%	0%								
KNIGHT LINK (KNLI)	0.23%	0%	0.00%	0%	0%								
INSTINET CBX (US) (ICBX)	0.20%	0%	0.00%	0%	0%								
BOLSA DE VALENCIA (XVAL)	0.18%	0%	0.00%	0%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
BNPP CORTEX ATS (BNPC)	0.16%	0%	0.00%	0%	0%								
CITADEL SECURITIES (CDED)	0.14%	0%	0.00%	0%	0%								
CHI-X CANADA ATS (CHIC)	0.14%	0%	0.00%	0%	0%								
INTELLIGENTCR OSS (INCR)	0.11%	0%	0.00%	0%	0%								
OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS (XOFF)	0.07%	0%	0.00%	0%	0%								
MS POOL (MSPL)	0.06%	0%	0.00%	0%	0%								
NEO EXCHANGE - NEO-L (MARKET BY ORDER) (NEOE)	0.04%	0%	0.00%	0%	0%								
JANE STREET JX (JSJX)	0.03%	0%	0.00%	0%	0%								
POSIT (ITGI)	0.02%	0%	0.00%	0%	0%								
ALPHA EXCHANGE (XATS)	0.02%	0%	0.00%	0%	0%								
SANTIAGO STOCK	0.02%	0%	0.00%	0%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
EXCHANGE (XSGO)													
FIDELITY CROSSSTREAM ATS (XSTM)	0.02%	0%	0.00%	0%	0%								
TWO SIGMA SECURITIES, LLC (SOHO)	0.02%	0%	0.00%	0%	0%								
NASDAQ OMX PHLX (XPHL)	0.01%	0%	0.00%	0%	0%								
CX2 (XCX2)	0.01%	0%	0.00%	0%	0%								
LONDON STOCK EXCHANGE (XLON)	0.01%	0%	0.00%	0%	0%								
CANADIAN SECURITIES EXCHANGE - PURE (PURE)	0.01%	0%	0.00%	0%	0%								
SIX SWISS EXCHANGE (XSWX)	0.01%	0%	0.00%	0%	0%								
INSTINET DESK CROSS (INCA)	0.00%	0%	0.00%	0%	0%								
HUDSON RIVER TRADING (HRTX)	0.00%	0%	0.00%	0%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
HUDSON RIVER TRADING - SYSTEMATIC INTERNALISER (HRSI)	0.00%	0%	0.00%	0%	0%								
LYNX ATS (LYNX)	0.00%	0%	0.00%	0%	0%								

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4th Quarter, 2022

December 2022

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non- Directed Orders	Marketable Limit Orders as % of NonDirected Orders	Non- Marketable Limit Orders as % of NonDirected Orders	Other Orders as % of Non- Directed Orders
100%	100.00%	0%	0.00%	0%

Venue - Non- directe d Order Flow	Non Directed Orders (%)	Market Orders (%)	Marketabl e Limit Orders (%)	NonMarketab le 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(cent s per hundred shares)	Net Payment Paid/ Received for NonMarketab Ie Limit Orders(USD)	Net Payment Paid/ Received for NonMarketab le Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cen ts per hundred shares)
#N/A	100.00%	0.00%	0.00%	0.00%	0.00%								

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4th Quarter, 2022

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Non S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non- Directed Orders	Marketable Limit Orders as % of NonDirected Orders	Non- Marketable Limit Orders as % of NonDirected Orders	Other Orders as % of Non- Directed Orders
100%	64.26%	0%	35.74%	0%

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
	67.04%	54%	0.00%	13%	0%								
NYSE ARCA (ARCX)	5.60%	3%	0.00%	3%	0%								
CBOE BZX U.S. EQUITIES EXCHANGE (BATS)	4.76%	2%	0.00%	3%	0%								
CBOE EDGX U.S. EQUITIES EXCHANGE (EDGX)	4.16%	2%	0.00%	2%	0%								
NASDAQ/NGS (GLOBAL SELECT MARKET) (XNGS)	4.03%	2%	0.00%	2%	0%								

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Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
MEMX LLC EQUITIES (MEMX)	3.91%	2%	0.00%	2%	0%								
NEW YORK STOCK EXCHANGE, INC. (XNYS)	1.92%	0%	0.00%	2%	0%								
TORONTO STOCK EXCHANGE (XTSE)	1.39%	0%	0.00%	1%	0%								
NASDAQ - ALL MARKETS (XNAS)	1.20%	0%	0.00%	1%	0%								
NYSE MKT LLC (XASE)	0.68%	0%	0.00%	1%	0%								
CBOE BYX U.S. EQUITIES EXCHANGE (BATY)	0.53%	0%	0.00%	1%	0%								
INVESTORS EXCHANGE (IEXG)	0.42%	0%	0.00%	0%	0%								
CBOE EDGA U.S. EQUITIES EXCHANGE (EDGA)	0.39%	0%	0.00%	0%	0%								
MIAX PEARL EQUITIES (EPRL)	0.38%	0%	0.00%	0%	0%								
UBS ATS (UBSA)	0.38%	0%	0.00%	0%	0%								
LEVEL ATS (LEVL)	0.34%	0%	0.00%	0%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
NASDAQ OMX PSX (XPSX)	0.30%	0%	0.00%	0%	0%								
NYSE NATIONAL, INC. (XCIS)	0.28%	0%	0.00%	0%	0%								
BANK OF AMERICA - MERRILL LYNCH INSTINCT X ATS (BAML)	0.22%	0%	0.00%	0%	0%								
CREDIT SUISSE AES CROSSFINDER (CAES)	0.21%	0%	0.00%	0%	0%								
CHI-X CANADA ATS (CHIC)	0.20%	0%	0.00%	0%	0%								
NASDAQ OMX BX (XBOS)	0.20%	0%	0.00%	0%	0%								
INSTINET CBX (US) (ICBX)	0.18%	0%	0.00%	0%	0%								
SIGMA X2 (SGMT)	0.16%	0%	0.00%	0%	0%								
CITADEL SECURITIES (CDED)	0.15%	0%	0.00%	0%	0%								
BARCLAYS ATS (BARX)	0.15%	0%	0.00%	0%	0%								
JPMX (JPMX)	0.14%	0%	0.00%	0%	0%								

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4th Quarter, 2022

December 202	-												
Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
VIRTU MATCHIT - MAIN CROSSING SESSION (VFMI)	0.13%	0%	0.00%	0%	0%								
KNIGHT LINK (KNLI)	0.11%	0%	0.00%	0%	0%								
BNPP CORTEX ATS (BNPC)	0.08%	0%	0.00%	0%	0%								
OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS (XOFF)	0.08%	0%	0.00%	0%	0%								
NEO EXCHANGE - NEO-L (MARKET BY ORDER) (NEOE)	0.07%	0%	0.00%	0%	0%								
NASDAQ OMX PHLX (XPHL)	0.05%	0%	0.00%	0%	0%								
JANE STREET JX (JSJX)	0.04%	0%	0.00%	0%	0%								
MS POOL (MSPL)	0.03%	0%	0.00%	0%	0%								
LONDON STOCK EXCHANGE (XLON)	0.03%	0%	0.00%	0%	0%								
POSIT (ITGI)	0.02%	0%	0.00%	0%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
ALPHA EXCHANGE (XATS)	0.01%	0%	0.00%	0%	0%								
CANADIAN SECURITIES EXCHANGE - PURE (PURE)	0.01%	0%	0.00%	0%	0%								
LYNX ATS (LYNX)	0.01%	0%	0.00%	0%	0%								
OMEGA ATS (OMGA)	0.01%	0%	0.00%	0%	0%								
TWO SIGMA SECURITIES, LLC (SOHO)	0.01%	0%	0.00%	0%	0%								
FIDELITY CROSSSTREAM ATS (XSTM)	0.00%	0%	0.00%	0%	0%								
SIX SWISS EXCHANGE (XSWX)	0.00%	0%	0.00%	0%	0%								
CBOE EUROPE - CXE ORDER BOOKS (CHIX)	0.00%	0%	0.00%	0%	0%								
HUDSON RIVER TRADING - SYSTEMATIC INTERNALISER (HRSI)	0.00%	0%	0.00%	0%	0%								
CBOE EUROPE - BXE ORDER BOOKS (BATE)	0.00%	0%	0.00%	0%	0%								

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4th Quarter, 2022

Venue - Non- directed Order Flow	NonDirect ed Orders (%)	Market Orders (%)	Marketab le Limit Orders (%)	NonMarketa ble Limit Orders (%)	Other Orders (%)	Net Payment Paid/Receive d for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(US D)	Net Payment Paid/ Received for Marketable Limit Orders(cen ts per hundred shares)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(USD)	Net Payment Paid/ Received for NonMarketa ble Limit Orders(cents per hundred shares)	Net Payment Paid/Receiv ed for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(ce nts per hundred shares)
CX2 (XCX2)	0.00%	0%	0.00%	0%	0%								
INTELLIGENTCR OSS (INCR)	0.00%	0%	0.00%	0%	0%								
CITADEL CONNECT EUROPE (CCEU)	0.00%	0%	0.00%	0%	0%								