SuperX ATS Monthly Statistics

SuperX is Deutsche Bank's Alternative Trading System (ATS) in the US. The SuperX ATS is a non-displayed order book for listed equities that can be accessed by clients directly, or using one of Deutsche Bank's equity trading platforms.

May 2021

SUMMARY STATISTICS						
ADV - Shares (MM) *	25.3					
ADV - Notional (MM) *	1,435.8					
# Symbols traded	9,430					

27.1%

9.8%

* These figures are single counted.

TRADE SIZE STATISTICS

Avg Trade Size (shares)	135
% trades >= 10k shares	1.20%
% trades >= \$200k	1.10%

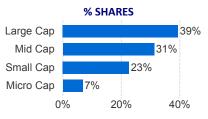


TRADE PRICE SUMMARY % SHARES

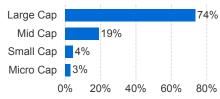
63.2% **NOTIONAL Execution Position Algorithms Alg**

Karge Cap 42% Mid Cap 32% Small Cap 20% Micro Cap 5% 0% 20% 40%

MARKET CAP SUMMARY

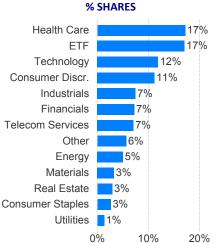


% NOTIONAL

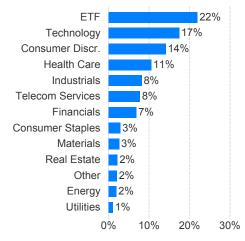




SECTOR SUMMARY



% NOTIONAL



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May 2021

COUNTERPARTY TYPE SUMMARY									
CounterParty Type	% Filled Shares	Average Fill Size	Spread (bps)	Spread Savings (bps)	Spread Savings (%)	Midpoint Slippage (bps)	T+20ms (bps)	T+30s (bps)	T+60min (bps)
1 Principal	0.0%	161	10.24	5.15	50.2%	0.04	0.50	1.86	-2.00
2 Agency	2.1%	174	9.36	7.58	81.1%	3.03	-2.69	-2.79	-0.75
3 Direct Low	60.6%	154	9.61	3.92	40.8%	-0.52	0.51	0.69	0.38
4 Direct Medium	24.5%	102	9.89	5.16	52.3%	-0.15	1.49	0.01	-0.49
5 Direct High	12.9%	137	6.57	4.78	72.5%	1.58	-3.05	-2.48	-0.11
Total	100.0%	135	9.22	4.51	50.0%	0.00	0.17	-0.08	0.02

GLOSSARY

• 1 Principal: DBSI acting as principal

• 2 Agency: Agency client order flow sent from DBSI's Algorithms or Smart Order Routers, where the router or the Algorithm logic elects to route to SuperX

• 3 Direct Low: Agency client orders directly routed to SuperX that are determined by DBSI to have a low average price reversion

• 4 Direct Medium: Agency client orders directly routed to SuperX that are determined by DBSI to have a medium average price reversion

• 5 Direct High: Agency client orders directly routed to SuperX that are determined by DBSI to have a high average price reversion

% Filled Shares: percentage of shares executed against a counterparty type.

Average Fill Size: the arithmetic average of fill size across all executions.

Spread (bps): the average difference in ask and bid prices expressed in basis points.

Spread Savings (bps): the notionally-weighted difference between fill price and the far touch price at fill time expressed in basis points.

Spread Savings (%): the notionally-weighted difference between fill price and the far touch price as a percentage of the bid-ask spread.

Midpoint Slippage (bps): the notionally-weighted difference between fill price and the midpoint price of the stock expressed in basis points.

T+X (bps): the notionally-weighted difference between the midpoint price at fill +X time units and the midpoint price at fill time expressed in basis points.

The above numbers are side-adjusted.

Positive mark outs reflect that prices moved in your favor. e.g. When buying, prices increased after the trade. Negative mark outs reflect that prices moved against you. e.g. When buying, prices decreased after the trade.

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