

Execution Quality Scorecard

May 2023

Equities

	Quoted Spread	Effective Spread	Effective/ Quoted	Percent At Quote or Better	Covered Order Size	Percent of Shares Price Improved	Price Improvement Cents Per Share
Listed S&P 500	3.89	1.17	30.00	98.48	339	93.99	1.48
NASDAQ 100	4.32	1.42	32.89	96.55	325	91.28	1.65
NYSE ARCA ETF's	2.53	0.72	28.42	99.12	418	91.09	1.01

Options

	Quoted Spread	Effective Spread	Effective/ Quoted	Percent At Quote or Better	Covered Order Size	Percent of Contracts Price Improved	Price Improvement Cents Per Contract
Penny Pilot Classes	12.05	2.62	21.71	98.65	5	66.88	7.11
Non-Penny Pilot Classes	26.59	7.12	26.79	99.07	4	72.02	13.61

The performance for Pershing is comprised of the destinations receiving Pershing's order flow for the month, pursuant to SEC rule 605 for eligible market orders of less than 2,000 shares for equities. The option data covers electronic market orders, which are less than 20 contracts to harmonize with the data provided for equities. The Penny Classes category includes all option classes with the 0.01 minimum quoting increment when the option premium is less than three dollars per contract during the reporting month. Non-Penny Classes category does not include single listed index products.

This report is for general reference only. It does not necessarily reflect the performance which your firm received and should not be solely relied upon to satisfy your firm's obligation to regularly and rigorously review the execution quality of your order flow.

Please contact us if you have any questions.

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