USE OUR INNOVATIVE ANALYTICS TO MANAGE YOUR EXECUTION STRATEGY, SUPPORT REGULATORY **COMPLIANCE, AND REDUCE** TRADING COSTS

ABEL NOSER'S NEXT-GEN FIXED **INCOME TCA WILL HELP YOU** MINIMIZE TRADING COSTS WHILE SUPPORTING BEST EXECUTION.

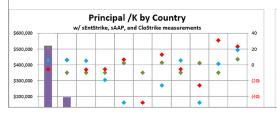
With fixed income trading rapidly migrating onto electronic venues, more accurate trade data has enabled us to bring to market a new generation of fixed income TCA. Combined with the need for greater liquidity and the incessant demand for increased efficiency, our innovative post-trade analytics tool is built from the ground up to satisfy the needs of not just compliance departments, but also offers value-add functionality for traders, portfolio managers, asset owners and even technologists.

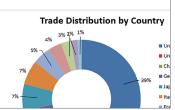
Our Breakthrough Methodology Offers Unmatched Flexibility

- Coverage includes US Treasuries, global corporate and sovereign bonds, US mortgage backed securities, European mortgage and ABS, consumer ABS, municipal bonds, bank *loans* and *credit default swaps*
- Costs are calculated in multiple units including price, aggregate dollar amount, and BPS of market value traded
- · Trading benchmarks include last mid-

FIXED INCOME TCA TRADE-ZOOM

	Principal /K	sEntStrike				sAAP				CloStrike		
Country		/ K	ВР	Univ (BP)	% Rank	/ K	ВР	Univ (BP)	% Rank	/ K	ВР	Univ (E
United States	\$519,826.31	(\$16.78)	21.48	(5.61)	75%	(\$2.61)	(5.87)	(8.15)	42%	\$2.54	5.32	0.5
United Kingdom	\$194,195.62	\$5.21	(9.87)	2.65	98%	(\$18.75)	6.12	(26.34)	48%	(\$16.21)	6.15	19.
China	\$126,459.17	(\$16.18)	(9.87)	32.10	74%	\$36.21	(6.32)	8.56	17%	\$6.32	4.89	(9.3
Germany	\$110,482.36	\$5.67	(9.87)	18.26	12%	(\$18.75)	(5.87)	6.48	81%	(\$14.87)	(19.23)	(8.7
Japan	\$95,648.17	\$23.15	2.30	(48.10)	29%	(\$36.00)	6.32	(9.32)	16%	\$16.05	(48.12)	(16.
Italy	\$87,915.26	\$48.00	(9.87)	26.00	45%	\$5.48	(48.10)	19.28	54%	\$98.15	(68.00)	26.
France	\$64,328.95	\$2.30	2.78	18.17	73%	(\$18.75)	12.84	36.18	32%	(\$16.24)	(26.02)	12.
Russia	\$49,871.02	(\$8.91)	(9.87)	(6.25)	69%	(\$81.08)	(5.87)	(2.49)	64%	\$78.15	5.64	(36.:
Brazil	\$36,518.12	(\$1.02)	2.30	(48.10)	23%	\$1.95	(26.10)	(36.15)	19%	(\$21.08)	(48.12)	(18.
Switzerland	\$23,481.26	\$2.03	(9.87)	(5.61)	56%	(\$18.75)	31.02	(6.89)	81%	(\$48.00)	1.20	(2.0
All Other	\$14,529.36	\$15.48	6.99	8.94	18%	\$48.15	23.18	6.98	64%	(\$160.48)	18.74	48.1
Total	\$1,323,255.60	\$2.03	(9.87)	(2.61)	36%	(\$16.54)	(16.48)	(26.15)	57%	(\$23.17)	(6.54)	(26.:





Dynamic, easy-to-read fixed income trade data within our Trade-Zoom interface

price, bid or offer prior to the trade, or prior day close

- · Additional benchmark prices are available including open, close, 3 PM spot, and near and far side of the market.
- Can handle multiple timestamps, including decision time, entry time, trader pickup time and execution time
- Accommodates multiple execution styles including single trades or multiple fills per order making it applicable to both liquid and illiquid markets.
- · Provides relative comparisons of trades by duration, credit quality, maturity and coupon rate as well as by absolute transaction cost
- Identifies best and worst trades with results sortable by bond type, country, credit quality, duration, and outlier trades

Truly Multi-Asset Functionality with a Fixed Income Focus

Trade Zoom offers a consistent approach to measuring global fixed income trading costs in addition to equity, futures or foreign exchange trading costs, all on one platform.

- · Tool provides a dynamic, interactive user front-end to explore cost drivers in a familiar pivot-table style format
- · In addition to predefined, ondemand reporting, custom scheduled reporting is available in Excel or PDF file formats; perfect for regular reviews of trading activity and costs or use in oversight meetings
- · Critical trade data is recorded in a long-term repository allowing regular compliance and regulatory reviews

Abel Noser's decades of experience and unparalleled client services team give us an edge no other provider can match.

Abel Noser Solutions, an industry pioneer, has been a proven leader in multi-asset Trade Cost Analysis solutions for over three decades. Over 500 clients worldwide subscribe to our TCA and compliance products through a network of re-sellers, distribution partners, and strategic alliances.