

Top 5 Execution Venues for 2019

Fixed Income Business

Class of instrument: Debt Instruments: Bonds						
Notification if < 1 average trade per business day in the previous year: N						
Top five execution venues ranked in terms of trading volumes (descending order)						
Rank	Venue Name	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive order	Percentage of directed order
1	Tradeweb Europe Limited MIC – TREU	31.4%	3.88%	N/A	N/A	N/A
2	Bloomberg Trading Facility Limited MIC – BMTF	28.87%	91.31%	N/A	N/A	N/A
3	Daiwa Capital Markets Europe – OTC MIC – XOFF	21.55%	2.37%	N/A	N/A	N/A
4	Tradeweb EU BV – MTF MIC – TWEM	18.13%	1.4%	N/A	N/A	N/A
5	Bloomberg Trading Facility BV MIC - BTFE	0.03%	0.4%	N/A	N/A	N/A

Equity Business

Class of instrument: Shares and Depositary receipts						
Notification if < 1 average trade per business day in the previous year: N						
Top five execution venues ranked in terms of trading volumes (descending order)						
Rank	Venue Name & LEI	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive order	Percentage of directed order
1	Daiwa Capital Markets Europe Ltd MIM2K09LFYD4IB163 W58	100%	100%	N/A	N/A	N/A

Class of instrument: Exchange Traded Products						
Notification if < 1 average trade per business day in the previous year: N						
Top five execution venues ranked in terms of trading volumes (descending order) *						
Rank	Venue Name	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive order	Percentage of directed order
1	Daiwa Capital Markets Europe Ltd MIM2K09LFYD4IB163 W58	100%	100%	N/A	N/A	N/A

International Convertible Bonds Business

Class of instrument : Debt Instruments, Bonds						
Notification if < 1 average trade per business day in the previous year: N						
Top five execution venues ranked in terms of trading volumes (descending order) *						
Rank	Venue Name & MIC	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive order	Percentage of directed order
1	Daiwa Capital Markets Europe Limited – OTC MIC - XOFF	64.81%	66.67%	N/A	N/A	N/A
2	Daiwa Capital Markets Europe Ltd MIC - DAIW	35.19%	33.33%	N/A	N/A	N/A