

Class of Instrument	Debt Instruments				
Notification if <1 average trade per business day in the previous year	No				
Top five execution venues ranked in terms of trading volumes	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 orders	Percentage of directed orders
Nomura International PLC (DGQCSV2PHVF712743539)	20.74%	4.54%	50.08%	49.92%	0.16%
Citigroup Global Markets Ltd (XKZZ2JZF41MRHTR1V493)	12.52%	10.46%	70.04%	29.96%	0.14%
BofAML Securities, Inc. (549300HN4UKV1E2R3U73)	10.86%	5.98%	61.01%	38.99%	1.11%
J.P. Morgan Securities Plc (K6Q0W1PS1L1O4IQL9C32)	6.76%	4.10%	68.10%	31.90%	1.97%
Morgan Stanley & Co International PLC (4PQUHN3JPF GFNF3BB653)	6.54%	6.47%	61.93%	38.07%	0.68%

Class of Instrument	Currency Derivatives				
Notification if <1 average trade per business day in the previous year	No				
Top five execution venues ranked in terms of trading volumes	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 orders	Percentage of directed orders
Northern Trust Co/London (6PTKHDJ8HDUF78PFWH30)	37.89%	29.61%	50.00%	50.00%	0.00%
RBC Europe Ltd (TXDSU46SXBWIGJ8G8E98)	31.84%	19.35%	50.00%	50.00%	0.00%
State Street Global Markets International Ltd (549300SQM0MRIF4HE647)	17.39%	20.78%	50.00%	50.00%	0.00%
BNP Paribas (R0MUWSFPU8MPRO8K5P83)	4.60%	7.10%	50.00%	50.00%	0.00%
JPMorgan Chase Bank, National Association (7H6GLXDRUGQFU57RNE97)	2.32%	5.17%	50.00%	50.00%	0.00%

Class of Instrument	Interest Rate Derivatives				
Notification if <1 average trade per business day in the previous year	Yes				
Top five execution venues ranked in terms of trading volumes	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 orders	Percentage of directed orders
Goldman Sachs International Bank (N9FYJ29MC81J174MJE92)	100.00%	100.00%	NA	NA	0.00%

Class of Instrument	Structured Finance Instruments				
Notification if <1 average trade per business day in the previous year	Yes				
Top five execution venues ranked in terms of trading volumes	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 orders	Percentage of directed orders
BNP Paribas (R0MUWSFPU8MPRO8K5P83)	100.00%	100.00%	0.00%	100.00%	0.00%

Class of Instrument	Equity Derivatives				
Notification if <1 average trade per business day in the previous year	Yes				
Top five execution venues ranked in terms of trading volumes	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 orders	Percentage of directed orders
Natwest Markets Plc (RR3QWICWWIPCS8A4S074)	100.00%	100.00%	0.00%	100.00%	0.00%