

TRANSMITTED AND PLACED ORDERS (ARTICLE 65.6)

Class of instrument		Equities - Shares and Depositary receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)					
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)	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	LEI / MIC	
J.P. Morgan Securities PLC	25.45%	19.27%	N/A	N/A	0%	K6Q0W1PS1L1O4IQL9C32	
UBS Limited	23.23%	23.26%	N/A	N/A	0%	REYPIEJN7XZHSUI0N355	
Citigroup Global Markets Limited	13.12%	19.49%	N/A	N/A	0%	XKZZ2JZF41MRHTR1V493	
Goldman Sachs International	9.11%	9.75%	N/A	N/A	0%	W22LROWP2IHZNBB6K528	
Barclays Bank PLC	7.84%	4.98%	N/A	N/A	0%	G5GSEF7VJPSI7OUK5573	

Class of instrument		Equities - Shares and Depositary receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)					
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)	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	LEI / MIC	
UBS Limited	17.27%	22.61%	N/A	N/A	0%	REYPIEJN7XZHSUI0N355	
J.P. Morgan Securities PLC	15.30%	13.81%	N/A	N/A	0%	K6Q0W1PS1L1O4IQL9C32	
Citigroup Global Markets Limited	10.53%	12.98%	N/A	N/A	0%	XKZZ2JZF41MRHTR1V493	
Goldman Sachs International	7.13%	13.66%	N/A	N/A	0%	W22LROWP2IHZNBB6K528	
Barclays Bank PLC	5.93%	2.89%	N/A	N/A	0%	G5GSEF7VJPSI7OUK5573	

Class of instrument		Equities - Shares and Depositary receipts - Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)					
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)	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	LEI / MIC	
Numis Securities Limited	16.3%	5.97%	N/A	N/A	0%	213800P3F4RT97WDSX47	
Winterflood Securities Limited	15.2%	4.53%	N/A	N/A	0%	8BRUP6V1DX3PIG2R0745	
Investec Bank PLC	7.7%	6.50%	N/A	N/A	0%	84S0VF8TSMH0T6D4K848	
Libernum Capital Limited	7.1%	5.77%	N/A	N/A	0%	213800U6KUF87S1KCC03	
N+1 Singer Capital Markets Limited	6.8%	4.37%	N/A	N/A	0%	213800ITO7QMNQ9SFG53	

Class of instrument		Interest rate derivatives - futures and options admitted to trading on a trading venue					
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)	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	LEI / MIC	
Morgan Stanley & Co. International PLC	75.40%	7.11%	N/A	N/A	0%	4PQUHN3JPFGFNF3BB653	
Bank of America Merrill Lynch	18.00%	64.58%	N/A	N/A	0%	GGDZP1UYGU9STUHRDP48	
Goldman Sachs International	6.61%	28.31%	N/A	N/A	0%	W22LROWP2IHZNBB6K528	

Class of instrument		Equity derivatives - options and futures admitted to trading on a trading venue					
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)	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	LEI / MIC	
Merrill Lynch International	97.70%	80.80%	N/A	N/A	0%	GGDZP1UYGU9STUHRDP48	
Goldman Sachs International	2.20%	19.10%	N/A	N/A	0%	W22LROWP2IHZNBB6K528	

TRANSMITTED AND PLACED ORDERS (ARTICLE 65.6)

Class of instrument		Other Instruments					
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)	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	LEI / MIC	
Citigroup Global Markets Limited	28.35%	10.34%	N/A	N/A	0%	XKZZ2JZF41MRHTR1V493	
J.P. Morgan Securities PLC	19.54%	17.30%	N/A	N/A	0%	K6Q0W1PS1L1O4IQL9C32	
UBS Limited	16.46%	17.86%	N/A	N/A	0%	REYPIEJN7XZHSUION355	
Barclays Bank PLC	6.38%	5.97%	N/A	N/A	0%	G5GSEF7VJPSI7OUK5573	
N+1 Singer Capital Markets Limited	2.97%	1.98%	N/A	N/A	0%	213800ITO7QMNQ9SFG53	

Class of instrument		Contracts for difference					
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)	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	LEI / MIC	
Citigroup Global Markets Limited	25.50%	19.90%	0%	100%	0%	XKZZ2JZF41MRHTR1V493	
Merrill Lynch International	23.30%	23.30%	0%	100%	0%	GGDZP1UYGU9STUHRDP48	
UBS Limited	15.60%	15.70%	0%	100%	0%	REYPIEJN7XZHSUION355	
Goldman Sachs International	10.70%	12.40%	0%	100%	0%	W22LROWP2IHZNBB6K528	
J.P. Morgan Securities PLC	4.80%	5.50%	0%	100%	0%	K6Q0W1PS1L1O4IQL9C32	

Class of instrument		Currency derivatives - Futures and options admitted to trading on a trading venue					
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)	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	LEI / MIC	
Merrill Lynch International	82.90%	42.00%	0%	100%	0%	GGDZP1UYGU9STUHRDP48	
Goldman Sachs International	17.10%	58.00%	0%	100%	0%	W22LROWP2IHZNBB6K528	

Class of instrument		Commodities derivatives - Options and futures admitted to trading on a trading venue					
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)	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	LEI / MIC	
Goldman Sachs International	98.05%	97.46%	0%	100%	0%	W22LROWP2IHZNBB6K528	
Morgan Stanley & Co. International PLC	1.95%	2.54%	0%	100%	0%	4PQUHN3JPFQFN3BB653	

EXECUTED ORDERS (RTS 28)

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)	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	LEI / MIC	
Merrill Lynch International	31.73%	2.35%	90%	10%	0%	GGDZP1UYGU9STUHRDP48	
Bloomberg Trading Facility Limited	16.93%	48.38%	0%	100%	0%	BMTF	
Citigroup Global Markets Limited	11.92%	1.68%	90%	10%	0%	XKZZ2JZF41MRHTR1V493	
BNP Paribas	6.28%	0.71%	90%	10%	0%	R0MUWSFPU8MPRO8K5P83	
Market Axess Europe Limited	6.27%	40.59%	0%	100%	0%	MAEL	

Class of instrument		Debt instruments - Money Market Instruments					
Notification if < 1 average trade per business day in the previous year		Y					
Top five execution venues ranked in terms of trading volumes (descending order)	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	LEI / MIC	
Citigroup Global Markets Limited	18.64%	12.78%	0%	100%	0%	XKZZ2JZF41MRHTR1V493	
The Toronto Dominion Bank	13.21%	19.25%	0%	100%	0%	PT3QB789TSUIDF371261	
J.P. Morgan Securities PLC	7.59%	6.47%	0%	100%	0%	K6Q0W1PS1L1O4IQL9C32	
Morgan Stanley & Co. International PLC	7.03%	5.11%	0%	100%	0%	4PQUHN3JPFQFN3BB653	
Nomura International PLC	6.69%	9.71%	0%	100%	0%	DGQCSV2PHV712743539	

Class of instrument		Interest rate derivatives - Futures and options admitted to trading on a trading venue					
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)	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	LEI / MIC	
Societe Generale SA	39.77%	22.86%	90%	10%	0%	O2RNE8IBXP4R0TD8PU41	
Citigroup Global Markets Limited	36.69%	58.63%	90%	10%	0%	XKZZ2JZF41MRHTR1V493	
Morgan Stanley & Co. International PLC	6.75%	4.23%	90%	10%	0%	4PQUHN3JPFQFN3BB653	
J.P. Morgan Securities PLC	5.91%	4.69%	90%	10%	0%	K6Q0W1PS1L1O4IQL9C32	
Merrill Lynch International	5.30%	3.89%	90%	10%	0%	GGDZP1UYGU9STUHRDP48	

Class of instrument		Interest rate derivatives - Swaps, forwards and other interest rate derivatives					
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)	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	LEI / MIC	
J.P. Morgan Securities PLC	31.57%	29.89%	90%	10%	0%	K6Q0W1PS1L1O4IQL9C32	
Lloyds Bank PLC	13.60%	1.07%	90%	10%	0%	H7FNTJ4851HG0EXQ1Z70	
Merrill Lynch International	11.56%	14.47%	90%	10%	0%	GGDZP1UYGU9STUHRDP48	
UBS Limited	9.32%	7.08%	90%	10%	0%	REYPIJN7XZHSUI0N355	
Barclays Bank PLC	7.53%	10.83%	90%	10%	0%	G5GSEF7VJPSI7OUK5573	

Class of instrument		Credit Derivatives - Other credit derivatives					
Notification if < 1 average trade per business day in the previous year		Y					
Top five execution venues ranked in terms of trading volumes (descending order)	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	LEI / MIC	
Bloomberg Trading Facility Limited	100.0%	100.0%	0%	100%	0%	BMTF	

EXECUTED ORDERS (RTS 28)

Class of instrument Currency derivatives - swaps, forwards and other currency derivatives

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)	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	LEI / MIC
Reuters Transactions Services Limited	87.0%	88.0%	0%	100%	0%	TRAL
Nomura International PLC	10.7%	8.8%	0%	100%	0%	DGQCSV2PHVF712743539
Goldman Sachs International	1.0%	0.8%	0%	100%	0%	W22LROWP2IHZNBB6K528
Bank of America Merrill Lynch	0.7%	0.9%	0%	100%	0%	GGDZP1UYGU9STUHRDP48
Lloyds Bank PLC	0.4%	0.5%	0%	100%	0%	H7FNTJ4851HG0EXQ1270

Class of instrument Security Financing Transaction - Bonds repurchase and reverse repurchase transactions

Notification if < 1 average trade per business day in the previous year Y

Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	LEI / MIC
BNP Paribas	39.78%	37.98%	R0MUWSFPU8MPRO8K5P83
Nomura International PLC	35.43%	32.34%	DGQCSV2PHVF712743539
Goldman Sachs International	14.24%	16.32%	W22LROWP2IHZNBB6K528
Australia and NZ Banking Group Limited	4.25%	7.42%	JHE42UYNWWTJB8YTTU19
Nomura Securities International, Inc.	5.22%	5.04%	OXTKY6Q8X53C9ILVV871

We assume transmitted orders do not have an active/passive indicator.

Proportion of volume = percentage by value

Proportion of orders executed = percentage by number of orders

Liquidity bandings set to latest banding where available. Where the banding is not available we estimated using an indication of the number of daily trades in that asset

Other assets includes equities where we cannot establish a liquidity band.

Options included using option premium value

Passive/Aggressive ratios estimated