Debt Instruments - Bonds

RTS 28 - Execution Venues					
Notification if <1 average trade per business day in the previous year	No				
Top 5 execution venues ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
Euronext Dublin	61.87	50.00	N/A	N/A	0
Bloomberg Global Markets, LLC	38.13	50.00	N/A	N/A	0
ART (65)6 - Execution Brokers					
Notification if <1 average trade per business	No				
day in the previous year	INO				
Top 5 investment firms ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
Bank of America	16.30	7.63	N/A	N/A	0
Chase Securities	13.40	6.51	N/A	N/A	0
Morgan Stanley	9.36	4.35	N/A	N/A	0
Citigroup Global Markets	8.09	3.65	N/A	N/A	0
Goldman, Sachs & Co.	6.84	3.61	N/A	N/A	0

Qualitative analysis - Debt instruments - Bonds

When trading on behalf of client portfolios, we use our relative value analysis, current market trading levels and market expertise to achieve best execution. Liquidity, as well as price can also be a very important input to achieving best execution while managing portfolio risk and performance.

With respect to trading venue, we will either engage broker/dealers directly or utilize competition to achieve best execution. When trading directly with a counterparty, we are utilizing credit market expertise and targeting specific dealers that will provide best execution. When utilizing competition, it is typically via an electronic platform where we are able to solicit bids/offer from multiple dealers.

Currency Derivatives - Swaps, Forwards and Other Currency Derivatives

RTS 28 - Execution Venues					
Notification if <1 average trade per business day in the previous year	Yes				
Top 5 execution venues ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
FX Connect	100.00	100.00	N/A	N/A	0
ART (65)6 - Execution Brokers					
Notification if <1 average trade per business	Not applicable				
day in the previous year	пот аррпсавіе				
Top 5 investment firms ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders

Not Applicable

Qualitative analysis - Currency Derivatives - Swaps, Forwards and Other Currency Derivatives

When trading on behalf of client portfolios, we use current market trading levels and market expertise to achieve best execution. Liquidity, as well as price can also be a very important input to achieving best execution while managing portfolio risk and performance.

With respect to trading venue, we will either engage broker/dealers directly or utilize competition to achieve best execution. When trading directly with a counterparty, we are targeting specific dealers that will provide best execution. We use a competitive process to solicit bids/offers from multiple dealers, which can be achieved through voice trading or an electronic execution platform.

Our execution methods also rely on continuous monitoring of our counterparty exposure and their financial strength and solvency. We use best in class risk management techniques to monitor and evaluate current and potential counterparty exposure and actively seek to diversify counterparty risk for our clients.

Equities - Shares and Depositary Receipts - Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)

RTS 28 - Execution Venues						
Notification if <1 average trade per business	Not applicable					
day in the previous year	ног аррисавіе	of applicable				
Top 5 execution venues ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed	
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders	
	that class	in that class				

Not Applicable

ART (65)6 - Execution Brokers					
Notification if <1 average trade per business	No				
day in the previous year	NO				
Top 5 investment firms ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
Citigroup Global Markets Inc.	16.34	13.88	N/A	N/A	0
J.P. Morgan Securities, LLC	15.66	17.65	N/A	N/A	0
Morgan Stanley & Co., LLC	15.19	22.44	N/A	N/A	0
Merrill Lynch International, LLC	14.82	9.71	N/A	N/A	0
Intel China Ltd.	5.57	2.30	N/A	N/A	0

Qualitative analysis -

Equities - Shares and Depositary Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)

Equities - Shares and Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)

RTS 28 - Execution Venues						
Notification if <1 average trade per business	Not applicable					
day in the previous year	Not applicable	ot applicable				
Top 5 execution venues ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed	
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders	
	that class	in that class				

Not Applicable

ART (65)6 - Execution Brokers					
Notification if <1 average trade per business	Yes				
day in the previous year					
Top 5 investment firms ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
Morgan Stanley & Co., LLC	24.92	23.83	N/A	N/A	0
J.P. Morgan Securities, LLC	17.68	25.07	N/A	N/A	0
UBS Securities, LLC	17.27	9.88	N/A	N/A	0
Merrill Lynch International, LLC	12.44	8.13	N/A	N/A	0
Citigroup Global Markets Inc.	8.46	8.13	N/A	N/A	0

Qualitative analysis -

Equities - Shares and Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)

Equities - Shares and Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)

RTS 28 - Execution Venues						
Notification if <1 average trade per business	Not applicable					
day in the previous year	ног аррисавіе	of applicable				
Top 5 execution venues ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed	
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders	
	that class	in that class				

Not Applicable

ART (65)6 - Execution Brokers					
Notification if <1 average trade per business	Yes				
day in the previous year	. 65				
Top 5 investment firms ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
J.P. Morgan Securities, LLC	45.63	20.50	N/A	N/A	0
Wood & Company Financial Services	15.83	5.75	N/A	N/A	0
Merrill Lynch International, LLC	6.14	7.55	N/A	N/A	0
Citigroup Global Markets Inc.	5.79	7.91	N/A	N/A	0
Instinet, LLC	4.93	3.59	N/A	N/A	0

Qualitative analysis -

Equities - Shares and Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)

Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)

RTS 28 - Execution Venues						
Notification if <1 average trade per business	Not applicable					
day in the previous year	Not applicable	ot applicable				
Top 5 execution venues ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed	
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders	
	that class	in that class				

Not Applicable

ART (65)6 - Execution Brokers					
Notification if <1 average trade per business	Voc				
day in the previous year	165				
Top 5 investment firms ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
Citigroup Global Markets Inc.	64.83	33.35	N/A	N/A	0
J.P. Morgan Securities, LLC	19.00	33.33	N/A	N/A	0
Merrill Lynch International, LLC	14.75	26.66	N/A	N/A	0
Goldman EU Algorithm	1.42	6.66	N/A	N/A	0

Qualitative analysis -

Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)

Other Instruments

RTS 28 - Execution Venues						
Notification if <1 average trade per business	Not applicable					
day in the previous year	пос аррпсавіе	т аррисаріе				
Top 5 execution venues ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed	
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders	
	that class	in that class				

Not Applicable

ART (65)6 - Execution Brokers					
Notification if <1 average trade per business day in the previous year	No				
Top 5 investment firms ranked in terms of	Proportion of volume	Proportion of orders	% of passive	% of aggressive	% of directed
trading volumes (descending order)	traded as a % of total in	executed as a % of total	orders	orders	orders
	that class	in that class			
UBS Securities, LLC	26.65	17.07	N/A	N/A	0
J.P. Morgan Securities, LLC	17.62	21.29	N/A	N/A	0
Merrill Lynch International, LLC	15.52	14.06	N/A	N/A	0
Citigroup Global Markets Inc.	11.56	11.26	N/A	N/A	0
Morgan Stanley & Co., LLC	6.31	6.31	N/A	N/A	0

Qualitative analysis - Other Instruments

We approach our equity trade analysis holistically by looking at a universe of trades through the Explicit cost and Implicit cost. We evaluate our trades by looking at the trade performance vs these measures directly as well as in where they fall within a peer group universe. The peer group approach compares a given subset of trades to other "like orders" contained within their peer group universe. These "like orders" are selected based on having similar characteristics as measured by things such as capitalization, liquidity, momentum, volatility, and region.

Data Source: Bloomberg and Markit TCA