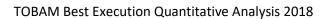


TOBAM Best Execution Quantitative Analysis 2018

Class of Instrument				Bonds				
Notification if <1 average trade per business day in the previous year			N	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 order		
BoA Merrill Lynch GGDZP1UYGU9STUHRDP48	18.5%	14.2%		n/a	n/a	0%		
JP Morgan 549300EJYMJS22ND8Y17	14.2%	11.7%		n/a	n/a	0%		
Goldman Sachs W22LROWP2IHZNBB6K528	10.9%	10.6%		n/a	n/a	0%		
Morgan Stanley 4PQUHN3JPFGFNF3BB653	9.6%	6.3%		n/a	n/a	0%		
BARCAP K9WDOH4D2PYBSLSOB484	8.8%	7.6%		n/a	n/a	0%		

Class of Instrument			Bond Futures				
Notification if <1 average trade per business day in the previous year		N	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 order	
Morgan Stanley 4PQUHN3JPFGFNF3BB653	99.2%	99.8%		n/a	n/a	0%	
JP Morgan 549300EJYMJS22ND8Y17	0.8%	0.2%		n/a	n/a	0%	





Class of Instrument			Other Credit Derivatives – CDX					
Notification if <1 average trade per business day in the previous year			N	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 order		
Credit Suisse 549300GUAMON5OX2OO54	67.4%	46.6%		n/a	n/a	0%		
Societe Generale O2RNE8IBXP4R0TD8PU41	16.4%	27.6%		n/a	n/a	0%		
Goldman Sachs W22LROWP2IHZNBB6K528	9.5%	12.1%		n/a	n/a	0%		
BNP Paribas ROMUWSFPU8MPRO8K5P83	6.0%	12.1%		n/a	n/a	0%		
BoA Merrill Lynch GGDZP1UYGU9STUHRDP48	0.7%	1.7%		n/a	n/a	0%		

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 order		
State Street	76.32%	93.46%		n/a	n/a	0%		
State Street Gmbh	23.06%	2.98%		n/a	n/a	0%		
Northern Trust	0.31%	2.52%		n/a	n/a	0%		
CACEIS Luxembourg	0.3%	1.01%		n/a	n/a	0%		
ВВН	0%	0.%		n/a	n/a	0%		



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Class of Instrument			Index Futures						
Notification if <1 average trade per business day in the previous year			N	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 order			
Morgan Stanley 4PQUHN3JPFGFNF3BB653	67.1%	67.7%		n/a	n/a	0%			
JP Morgan 549300EJYMJS22ND8Y17	32.9%	32.3%		n/a	n/a	0%			

Class of Instrument Notification if <1 average trade per business day in the previous year			Equities				
			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 order	
Morgan Stanley 4PQUHN3JPFGFNF3BB653	26.3%	24.1%		n/a	n/a	0%	
UBS International REYPIEJN7XZHSUI0N355	25.5%	23.6%		n/a	n/a	0%	
BoA Merrill Lynch GGDZP1UYGU9STUHRDP48	25.5%	25.1%		n/a	n/a	0%	
Credit Suisse 549300GUAMON5OX2OO54	10.9%	14.1%		n/a	n/a	0%	
JP Morgan 549300EJYMJS22ND8Y17	9.9%	10.1%		n/a	n/a	0%	