

Class of Instrument Equities (AA99)
Ticksize AB
Notification if <1 average trade per business day in the previous

year

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders		Percentage of directed orders
New York-NASDAQ	24,38%	32,36%	100,00%	0,00%	0,17%
New York-NYSE	23,20%	13,57%	100,00%	0,00%	0,87%
Zürich	9,93%	1,67%	100,00%	0,00%	3,66%
London	9,60%	4,81%	100,00%	0,00%	2,60%
New York-NASDAQ GM	7,32%	13,72%	100,00%	0,00%	0,10%
Others Total	25,56% 100,00%	33,87% 100,00%			



Class of Instrument Equities (AA99)
Ticksize CD

Notification if <1 average trade No per business day in the previous year

•	total in that class	Proportion of orders executed as percentage of total in that class			Percentage of directed orders
Xetra	49,65%	25,62%	80,12%	19,88%	4,81%
Paris	7,67%	9,79%	100,00%	0,00%	0,72%
Stockholm	5,06%	2,18%	100,00%	0,00%	1,99%
New York-NASDAQ	4,55%	10,99%	100,00%	0,00%	0,00%
New York-NASDAQ CM	3,71%	12,55%	100,00%	0,00%	0,00%
Others Total	29,36% 100,00%	38,87% 100,00%			



Class of Instrument Equities (AA99)
Ticksize EF
Notification if <1 average trade No

per business day in the previous

year

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class		_	Percentage of directed orders
New York-NASDAQ	28,50%	27,63%	100,00%	0,00%	0,60%
New York-NYSE	21,58%	24,20%	100,00%	0,00%	0,91%
Xetra	18,06%	8,88%	67,45%	32,55%	11,28%
Paris	7,60%	3,86%	100,00%	0,00%	1,40%
Amsterdam	4,51%	2,88%	100,00%	0,00%	2,31%
Others	19,75%	32,55%			
Total	100,00%	100,00%			



Class of Instrument Equities (AA99)

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

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	9	Percentage of directed orders
New York-NASDAQ	40,51%	34,42%	100,00%	0,00%	0,02%
São Paulo	18,03%	19,45%	100,00%	0,00%	0,00%
New York-NYSE	7,14%	6,13%	100,00%	0,00%	0,00%
Busan-KOSDAQ	6,09%	15,08%	100,00%	0,00%	0,00%
Shenzhen	6,07%	0,01%	100,00%	0,00%	0,00%
Others Total	22,17% 100,00%	,			



Class of Instrument Equity certificates (AB99)
Ticksize AB
Notification if <1 average trade
per business day in the previous
year

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders		Percentage of directed orders
New York-NYSE	42,29%	29,78%	100,00%	0,00%	1,13%
New York-NASDAQ	41,90%	49,31%	100,00%	0,00%	1,33%
New York-NASDAQ GM	8,21%	19,69%	100,00%	0,00%	0,02%
London	6,63%	0,64%	100,00%	0,00%	12,50%
Xetra	0,72%	0,20%	55,74%	44,26%	0,00%
Others Total	0,25% 100,00%	-,			



Class of Instrument Equity certificates (AB99)
Ticksize CD
Notification if <1 average trade per business day in the previous year

Top five execution venues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
New York-NYSE	81,41%	74,10%	100,00%	0,00%	0,03%
New York-NASDAQ	14,70%	25,45%	100,00%	0,00%	0,00%
London	2,58%	0,17%	100,00%	0,00%	0,00%
Xetra	1,31%	0,29%	33,33%	66,67%	100,00%

Others	0,00%	0,00%
Total	100,00%	100,00%



Class of Instrument Equity certificates (AB99)
Ticksize EF
Notification if <1 average trade per business day in the previous

year

Top five execution venues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
Paris	100,00%	100,00%	100,00%	0,00%	45,45%



Class of Instrument Equity certificates (AB99)
Ticksize -Notification if <1 average trade per business day in the previous year

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class		_	Percentage of directed orders
New York-NASDAQ	60,25%	36,97%	100,00%	0,00%	0,00%
New York-NYSE	34,88%	51,52%	100,00%	0,00%	0,00%
Chicago	3,70%	8,41%	100,00%	0,00%	0,00%
New York-NASDAQ GM	0,69%	2,17%	100,00%	0,00%	0,00%
Bangkok	0,48%	0,92%	100,00%	0,00%	0,00%
Others Total	0,00% 100,00%	0,00% 100,00%			



Class of Instrument	Exchange Traded Funds (AC99)
Ticksize	
Notification if <1 average trade	No
per business day in the previous	
year	

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders		Percentage of directed orders
BLOOMBERG TRADING FA	81,75%	33,62%	100,00%	0,00%	17,38%
BLOOMBERG TRADING FA	11,47%	3,82%	100,00%	0,00%	18,57%
Xetra	3,90%	22,85%	34,26%	65,74%	20,24%
London	1,90%	23,65%	100,00%	0,00%	0,62%
Zürich	0,59%	9,08%	100,00%	0,00%	2,20%
Others Total	0,40% 100,00%	6,97% 100,00%			



Class of Instrument Certificates (AD99)

Ticksize -
Notification if <1 average trade yes
per business day in the previous
year

Top five execution venues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
Zürich	89,88%	93,62%	100,00%	0,00%	4,22%
Stuttgart	5,87%	4,56%	0,00%	100,00%	46,67%
München	4,26%	1,82%	0,00%	100,00%	100,00%



Class of Instrument other equity related instruments (AE99)

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

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders		Percentage of directed orders
New York-NYSE	57,51%	74,27%	100,00%	0,00%	0,05%
Zürich	20,03%	1,27%	100,00%	0,00%	0,00%
Paris	15,33%	17,95%	100,00%	0,00%	0,00%
Madrid-Merc.Cont.	4,49%	3,14%	100,00%	0,00%	15,19%
Xetra	1,30%	2,14%	66,67%	33,33%	1,85%
Others	1,35%	1,23%			
Total	100,00%	100,00%			



Class of Instrument Government bonds (BA10)

Ticksize -
Notification if <1 average trade yes
per business day in the previous
year

Top five execution venues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
BLOOMBERG TRADING FA	74,83%	88,24%	100,00%	0,00%	5,00%
BLOOMBERG TRADING FA	25,10%	9,56%	100,00%	0,00%	7,69%
Stuttgart	0,07%	2,21%	0,00%	100,00%	0,00%



Class of Instrument Other bonds (BA11)
Ticksize -Notification if <1 average trade
per business day in the previous

year

Top five execution venues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
BLOOMBERG TRADING FA	100,00%	100,00%	100,00%	0,00%	33,33%



Class of Instrument Convertibles (BA12)
Ticksize -Notification if <1 average trade
per business day in the previous
year

Top five execution venues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
BLOOMBERG TRADING FA	87,85%	53,85%	100,00%	0,00%	0,00%
Zürich	8,88%	23,08%	100,00%	0,00%	33,33%
Stuttgart	3,27%	23,08%	0,00%	100,00%	0,00%



Class of Instrument Debentures (BA13)

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

•	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	<u> </u>	Percentage of directed orders
BLOOMBERG TRADING FA BLOOMBERG TRADING FA	68,75%	88,89%	100,00%	0,00%	0,00%
	31,25%	11,11%	100,00%	0,00%	0,00%



Class of Instrument Corporate Bonds (BA14)

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

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders		Percentage of directed orders
BLOOMBERG TRADING FA	91,53%	62,91%	100,00%	0,00%	2,24%
Stuttgart	5,57%	30,99%	0,00%	100,00%	7,07%
BLOOMBERG TRADING FA	1,63%	1,72%	100,00%	0,00%	0,00%
Zürich	0,45%	1,10%	100,00%	0,00%	0,00%
München	0,36%	2,19%	0,00%	100,00%	21,43%
Others Total	0,46% 100,00%	1,10% 100,00%			



Class of Instrument Other Bonds (BA15)

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

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	~	Percentage of directed orders
BLOOMBERG TRADING FA	98,21%	63,16%	100,00%	0,00%	0,00%
Stuttgart	1,12%	26,32%	0,00%	100,00%	10,00%
Amsterdam	0,45%	2,63%	100,00%	0,00%	100,00%
München	0,22%	7,89%	0,00%	100,00%	0,00%

Others	0,00%	0,00%
Total	100,00%	100,00%



Class of Instrument

Ticksize

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

Securitized equity derivatives (BE21)

-No
year

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class			Percentage of directed orders
Stuttgart	97,64%	98,94%	0,91%	99,09%	3,51%
Frankfurt	1,91%	0,15%	100,00%	0,00%	0,00%
Zürich-Scoach	0,27%	0,45%	100,00%	0,00%	0,00%
BLOOMBERG TRADING FA	0,17%	0,15%	100,00%	0,00%	0,00%
Zürich	0,01%	0,30%	100,00%	0,00%	0,00%
Others Total	0,00% 100,00%	-,			



Class of Instrument

Ticksize

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

Securitized commoditiy derivatives (BE22)

-Yes

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	<u> </u>	Percentage of directed orders
BLOOMBERG TRADING FA	94,83%	42,86%	100,00%	0,00%	0,00%
Stuttgart	5,17%	57,14%	0,00%	100,00%	0,00%



Class of Instrument

Ticksize

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

Securitized FX derivatives (BE24)

-Yes

Top five execution ver	nues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trad	ding	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending	order)		total in that class			
Stuttgart		100,00%	100,00%	0,00%	100,00%	0,00%



Class of Instrument

Ticksize

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

Securitized derivatives (BE99)

-Yes

Top five execution venues	Proportion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
Stuttgart	88,69%	56,25%	0,00%	100,00%	0,00%
Stockholm	10,51%	37,50%	100,00%	0,00%	0,00%
Zürich	0,80%	6,25%	100,00%	0,00%	0,00%



Class of Instrument ETPs (BF99)
Ticksize -Notification if <1 average trade per business day in the previous

year

portion of volume traded as a percentage of	Proportion of orders	Percentage of passive	Percentage of	Percentage of directed
in that class	executed as percentage of	orders	aggressive orders	orders
1	total in that class			
84,23%	22,20%	100,00%	0,00%	6,98%
8,92%	34,42%	60,00%	40,00%	4,00%
4,38%	5,85%	0,00%	100,00%	11,76%
2,47%	37,52%	100,00%	0,00%	0,00%
	84,23% 8,92% 4,38%	executed as percentage of total in that class  84,23% 22,20% 8,92% 34,42% 4,38% 5,85%	executed as percentage of total in that class  84,23%  84,23%  8,92%  34,42%  4,38%  5,85%  0,00%	executed as percentage of total in that class  84,23% 22,20% 100,00% 0,00% 8,92% 34,42% 60,00% 40,00% 4,38% 5,85% 0,00% 100,00%

Others	0,00%	0,00%
Total	100,00%	100,00%



Class of Instrument without further disclosure (C999)

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

•			Percentage of passive	· ·	Percentage of directed
ranked in terms of trading	total in that class	executed as percentage of	orders	aggressive orders	orders
volumes (descending order)		total in that class			
São Paulo	51,57%	88,47%	100,00%	0,00%	0,00%
New York-NYSE	32,41%	11,22%	100,00%	0,00%	24,30%
Sydney	16,02%	0,21%	100,00%	0,00%	0,00%
Stuttgart	0,00%	0,10%	0,00%	100,00%	0,00%

Others	0,00%	0,00%
Total	100,00%	100,00%



Class of Instrument ETD (BD)

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

Top five execution venues ranked in terms of trading volumes (descending order)	total in that class	Proportion of orders executed as percentage of total in that class			Percentage of directed orders
Chicago Mercantile (XCME)	53,69%	22,70%	100,00%	0,00%	0,00%
EUREX (XEUR)	33,86%	48,23%	100,00%	0,00%	0,00%
Chicago Board Option (XCBO)	3,00%	10,13%	100,00%	0,00%	0,00%
Chicago Board Trade (XCBT)	2,98%	3,24%	100,00%	0,00%	0,00%
London (XLON)	1,12%	2,38%	100,00%	0,00%	0,00%
Others Total	5,35% 100,00%	-,			