



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AA99
Equity instruments- Shares and share certificates

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AA99
Equity instruments- Shares and share certificates

Tick Size liquidity band A and liquidity band B

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	99,22%	93,76%	100,00%	0,00%	100,00%
UBS Europe SE (5299007QVIQ7IO64NX37)	0,74%	0,10%	100,00%	0,00%	100,00%
Goldman Sachs Bank Europe (8IBZUGJ7JPLH368JE346)	0,03%	6,14%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AA99
Equity instruments- Shares and share certificates

Tick Size liquidity band C and liquidity band D

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument	AA99				
	Equity instruments- Shares and share certificates				
Tick Size	liquidity band E and liquidity band F				
Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	98,13%	95,47%	100,00%	0,00%	100,00%
Goldman Sachs Bank Europe (8IBZUGJ7JPLH368JE346)	0,77%	0,31%	100,00%	0,00%	100,00%
Jefferies GmbH (5493004I3LZM39BWHQ75)	0,56%	2,50%	100,00%	0,00%	100,00%
UBS Europe SE (5299007QVIQ7IO64NX37)	0,54%	1,72%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AB99
Equity instruments- Shares and share certificates

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AB99
Equity instruments- Shares and share certificates

Tick Size liquidity band A and liquidity band B

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AB99
Equity instruments- Shares and share certificates

Tick Size liquidity band C and liquidity band D

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AB99
Equity instruments- Shares and share certificates

Tick Size liquidity band E and liquidity band F

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument	AC99				
	Exchange traded products (ETPs)Exc				
Tick Size	not used				
Information on whether an average of < 1 trade per business day was executed 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
Jane Street Financial Ltd. (549300ZHEHX8M31RP142)	33,74%	36,81%	100,00%	0,00%	100,00%
Flow Traders B V (549300CLJ9XDH12XV51)	33,35%	36,12%	100,00%	0,00%	100,00%
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	22,20%	21,11%	100,00%	0,00%	100,00%
Optiver V.O.F. (7245009KRY SAYB2QCC29)	9,24%	5,09%	100,00%	0,00%	100,00%
Donner & Reuschel AG (23ZYQ4KSBEDVYML8NC86)	1,29%	0,67%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AC99
Exchange traded products (ETPs)Exc

Tick Size liquidity band A and liquidity band B

Information on whether an average of < 1 trade per business day was executed 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
Jane Street Financial Ltd. (549300ZHEHX8M31RP142)	98,64%	99,17%	100,00%	0,00%	100,00%
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	1,36%	0,83%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AD99
other instruments

Tick Size liquidity band A and liquidity band B

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AE99
other instruments

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AE99
other instruments

Tick Size liquidity band A and liquidity band B

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument AE99
other instruments

Tick Size liquidity band C and liquidity band D

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument	BA10				
	Debt instruments				
Tick Size	not used				
Information on whether an average of < 1 trade per business day was executed 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
NatWest Markets N.V. (X3CZP3CK64YBHON1LE12)	19,95%	13,35%	100,00%	0,00%	100,00%
Deutsche Bk Ffm (7LTFWZYICNSX8D621K86)	15,11%	18,00%	100,00%	0,00%	100,00%
Wells Fargo Secur Intl Ltd. (BWS7DNS2Z4NPKPNYKL75)	10,80%	9,06%	100,00%	0,00%	100,00%
RBC Capital Markets Europe (549300SXSTGQY3EA1B18)	8,48%	8,87%	100,00%	0,00%	100,00%
Toronto Dominion Bk Ldn (PT3QB789TSUIDF371261)	7,99%	8,27%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BA11
Debt instruments

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
UniCredit Bank AG Mün (2ZCNRR8UK83OBTEK2170)	27,97%	21,37%	100,00%	0,00%	100,00%
J P Morgan SE FFM (549300ZK53CNGEEI6A29)	26,32%	21,06%	100,00%	0,00%	100,00%
Toronto Dominion Bk Ldn (PT3QB789TSUIDF371261)	7,38%	25,64%	100,00%	0,00%	100,00%
HSBC Trinkaus Dssd GmbH (JUNT405OW8OY5GN4DX16)	7,17%	5,45%	100,00%	0,00%	100,00%
Credit Agricole Corp & Inv (1VUV7VQFKUOQSJ21A208)	6,28%	4,27%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BA12
Debt instruments

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
UniCredit Bank AG Mün (2ZCNRR8UK83OBTEK2170)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument	BA13				
	Debt instruments				
Tick Size	not used				
Information on whether an average of < 1 trade per business day was executed 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
Hauck Aufhäuser Lampe (529900ODBMTZXAN1B073)	40,80%	39,22%	100,00%	0,00%	100,00%
DEKABK DGZ Ffm (0W2PZJM8XOY22M4GG883)	16,02%	15,51%	100,00%	0,00%	100,00%
Citigroup Global Markets EU (6TJCK1B7E7UTXP528Y04)	10,20%	9,94%	100,00%	0,00%	100,00%
Banco Santander S A (5493006QMFDDMYWIAM13)	8,06%	7,73%	100,00%	0,00%	100,00%
Goldman Sachs Bk Europe SE (8IBZUGJ7JPLH368JE346)	7,03%	6,77%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument	BA14				
	Debt instruments				
Tick Size	not used				
Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	10,77%	11,93%	100,00%	0,00%	100,00%
Jane Street Financial Ltd. (549300ZHEHX8M31RP142)	8,93%	9,09%	100,00%	0,00%	100,00%
RBC Capital Markets Europe (549300SXSTGQY3EA1B18)	8,85%	9,02%	100,00%	0,00%	100,00%
Goldman Sachs Bk Europe SE (8IBZUGJ7JPLH368JE346)	6,95%	6,69%	100,00%	0,00%	100,00%
Citigroup Global Markets EU (6TJCK1B7E7UTXP528Y04)	6,37%	6,40%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument	BA15				
	Debt instruments				
Tick Size	not used				
Information on whether an average of < 1 trade per business day was executed 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
Soc Gen Paris (O2RNE8IBXP4R0TD8PU41)	25,43%	13,85%	100,00%	0,00%	100,00%
HSBC Trinkaus Dssd GmbH (JUNT405OW8OY5GN4DX16)	10,99%	4,25%	100,00%	0,00%	100,00%
Deutsche Bk Ffm (7LTFWZYICNSX8D621K86)	9,18%	6,74%	100,00%	0,00%	100,00%
Toronto Dominion Bk Ldn (PT3QB789TSUIDF371261)	8,89%	4,36%	100,00%	0,00%	100,00%
Credit Agricole Corp & Inv (1VUV7VQFKUOQSJ21A208)	7,52%	3,77%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BD21
Equity derivatives

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
J P Morgan SE FFM (549300ZK53CNGEEI6A29)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BD99
 other derivatives

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
J P Morgan SE FFM (549300ZK53CNGEEI6A29)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BE21
securitized derivatives

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BE22
securitized derivatives

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BE99
securitized derivatives

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
Raiffeisen Bank Intern. AG (9ZHRYM6F437SQJ6OUG95)	49,33%	50,92%	100,00%	0,00%	100,00%
HSBC Trinkaus Dssd GmbH (JUNT405OW8OY5GN4DX16)	31,11%	30,33%	100,00%	0,00%	100,00%
UBS Europe SE (5299007QVIQ7IO64NX37)	9,77%	9,19%	100,00%	0,00%	100,00%
Erste Group Bank AG Wien (PQOH26KWDF7CG10L6792)	5,48%	5,51%	100,00%	0,00%	100,00%
Millennium Europe Limited (213800M4PALWKTSLLI88)	4,31%	4,04%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument BF99
Exchange traded products (ETPs)

Tick Size not used

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%



M.M. WARBURG & CO
BANK

Top 5 intermediaries reporting regarding MIFID II
retail clients
financial year 2022

Class of Instrument	CA99				
	Debt instruments				
Tick Size	not used				
Information on whether an average of < 1 trade per business day was executed 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
Credit Agricole Corp & Inv (1VUV7VQFKUOQSJ21A208)	38,47%	39,04%	100,00%	0,00%	100,00%
J P Morgan SE FFM (549300ZK53CNGEEI6A29)	26,73%	27,53%	100,00%	0,00%	100,00%
Citigroup Global Markets EU (6TJCK1B7E7UTXP528Y04)	14,40%	14,53%	100,00%	0,00%	100,00%
Barclays Bank PLC Ireland (2G5BKIC2CB69PRJH1W31)	5,35%	5,03%	100,00%	0,00%	100,00%
Deutsche Bk Ffm (7LTFWZYICNSX8D621K86)	3,61%	2,86%	100,00%	0,00%	100,00%



Top 5 intermediaries reporting regarding MIFID II retail clients financial year 2022

Class of Instrument CB99
 Other instruments

Tick Size liquidity band A and liquidity band B

Information on whether an average of < 1 trade per business day was executed 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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	100,00%	100,00%	100,00%	0,00%	100,00%