

# Top 5 brokers 2022

## Top 5 brokers retail

Class of Instrument		Equities-Shares Depository Receipts band 5-6				
Notification if <1 average trade per business day in the previous year		N				
Top 5 Brokers ranked in terms of volume (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
6TJCK1B7E7UTXP528Y04 Citigroup Global Markets Europe AG		49,7%	72,2%	N/A	N/A	0,0%
213800EEC95PRUCEUP63 VIRTU EUROPE TRADING LIMITED		29,6%	21,1%	N/A	N/A	0,0%
9695002I9DJHZ3449066 ODDO BHF SCA		12,2%	1,0%	N/A	N/A	0,0%
BFM8T61CT2L1QCCEMIK50 UBS AG		6,0%	5,2%	N/A	N/A	0,0%
6EWKU0FGVX5QQJHFGT48 BNP PARIBAS ARBITRAGE		0,9%	0,1%	N/A	N/A	0,0%

Class of Instrument		Equities-Shares Depository Receipts band 3-4				
Notification if <1 average trade per business day in the previous year		N				
Top 5 Brokers ranked in terms of volume (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
213800EEC95PRUCEUP63 VIRTU EUROPE TRADING LIMITED		62,8%	71,1%	N/A	N/A	0,0%
6TJCK1B7E7UTXP528Y04 Citigroup Global Markets Europe AG		12,9%	21,5%	N/A	N/A	0,0%
9695002I9DJHZ3449066 ODDO BHF SCA		9,6%	0,8%	N/A	N/A	0,0%
549300W0IFUSNYH0FL22 UBS Switzerland AG		6,0%	0,7%	N/A	N/A	0,0%
BFM8T61CT2L1QCCEMIK50 UBS AG		5,3%	4,2%	N/A	N/A	0,0%

Class of Instrument		Equities-Shares Depository Receipts band 1-2				
Notification if <1 average trade per business day in the previous year		N				
Top 5 Brokers ranked in terms of volume (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
213800EEC95PRUCEUP63 VIRTU EUROPE TRADING LIMITED		54,5%	80,7%	N/A	N/A	0,0%
BFM8T61CT2L1QCCEMIK50 UBS AG		18,4%	9,0%	N/A	N/A	0,0%
9695002I9DJHZ3449066 ODDO BHF SCA		8,0%	0,6%	N/A	N/A	0,0%
549300SXSTGQY3EA1B18 RBC Capital Markets (Europe) GmbH		6,7%	0,7%	N/A	N/A	0,0%
549300WOIFUSNYH0FL22 UBS Switzerland AG		3,9%	0,9%	N/A	N/A	0,0%

Class of Instrument		Debt Instruments-Bonds				
Notification if <1 average trade per business day in the previous year		Y				
Top 5 Brokers ranked in terms of volume (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
BFM8T61CT2L1QCCEMIK50 UBS AG		96,2%	98,7%	N/A	N/A	0,0%
O2RNE8IBXP4R0TD8PU41 SOCIETE GENERALE		2,5%	0,6%	N/A	N/A	0,0%
54930056FHWP7GIWYY08 MORGAN STANLEY EUROPE SE		1,3%	0,6%	N/A	N/A	0,0%
549300CLJI9XDH12XV51 Flow Traders B.V.		0,1%	0,1%	N/A	N/A	0,0%

Class of Instrument		Structured Finance Instruments				
Notification if <1 average trade per business day in the previous year		Y				
Top 5 Brokers ranked in terms of volume (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
2G5BKIC2CB69PRJH1W31 BARCLAYS BANK IRELAND PUBLIC LIMITED COMPANY		25,3%	1,9%	N/A	N/A	0,0%
549300ZHEHX8M31RP142 JANE STREET FINANCIAL LIMITED		22,5%	9,1%	N/A	N/A	0,0%
6TJCK1B7E7UTXP528Y04 Citigroup Global Markets Europe AG		22,1%	76,4%	N/A	N/A	0,0%
54930056FHWP7GIWYY08 MORGAN STANLEY EUROPE SE		11,7%	4,4%	N/A	N/A	0,0%
549300CLJI9XDH12XV51 Flow Traders B.V.		11,5%	3,3%	N/A	N/A	0,0%

Class of Instrument		Equity Derivatives-Options and Futures			
Notification if <1 average trade per business day in the previous year	N				
Top 5 Brokers ranked in terms of volume (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
<b>BFM8T61CT2L1QCEMIK50</b> <b>UBS AG</b>	100.0%	100.0%	N/A	N/A	0.0%

Class of Instrument		Securitized Derivatives-Other Securitized Derivatives			
Notification if <1 average trade per business day in the previous year	N				
Top 5 Brokers ranked in terms of volume (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
<b>213800EEC95PRUCEUP63</b> <b>VIRTU EUROPE TRADING LIMITED</b>	94,5%	72,6%	N/A	N/A	0,0%
<b>6TJCK1B7E7UTXP528Y04</b> <b>Citigroup Global Markets Europe AG</b>	4,6%	17,7%	N/A	N/A	0,0%
<b>BFM8T61CT2L1QCEMIK50</b> <b>UBS AG</b>	0,7%	4,8%	N/A	N/A	0,0%
<b>5493000JJX6CVVUXLE15</b> <b>RBC DOMINION SECURITIES INC.</b>	0,2%	3,2%	N/A	N/A	0,0%
<b>549300W0IFUSNYH0FL22</b> <b>UBS Switzerland AG</b>	0,0%	1,6%	N/A	N/A	0,0%

Class of Instrument		Securitized Derivatives-Other Securitized Derivatives			
Notification if <1 average trade per business day in the previous year	N				
Top 5 Brokers ranked in terms of volume (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
<b>BFM8T61CT2L1QCEMIK50</b> <b>UBS AG</b>	60,1%	0,1%	N/A	N/A	0,0%
<b>6TJCK1B7E7UTXP528Y04</b> <b>Citigroup Global Markets Europe AG</b>	39,9%	99,8%	N/A	N/A	0,0%
<b>5493000JJX6CVVUXLE15</b> <b>RBC DOMINION SECURITIES INC.</b>	0,0%	0,0%	N/A	N/A	0,0%

Class of Instrument		Exchange traded products-Exchange traded funds			
Notification if <1 average trade per business day in the previous year	N				
Top 5 Brokers ranked in terms of volume (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
<b>6TJCK1B7E7UTXP528Y04</b> <b>Citigroup Global Markets Europe AG</b>	37,4%	78,9%	N/A	N/A	0,0%
<b>549300ZHEHX8M31RP142</b> <b>JANE STREET FINANCIAL LIMITED</b>	20,9%	3,6%	N/A	N/A	0,0%
<b>549300CLJI9XDH12XV51</b> <b>Flow Traders B.V.</b>	19,6%	3,1%	N/A	N/A	0,0%
<b>7245009KRY SAYB2QCC29</b> <b>Optiver V.O.F.</b>	10,5%	1,2%	N/A	N/A	0,0%
<b>BFM8T61CT2L1QCEMIK50</b> <b>UBS AG</b>	5,5%	8,4%	N/A	N/A	0,0%

## Top 5 brokers professional

Class of Instrument		Equities-Shares Depository Receipts band 5-6				
Notification if <1 average trade per business day in the previous year		N				
Top 5 Brokers ranked in terms of volume (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
213800EEC95PRUCEUP63 VIRTU EUROPE TRADING LIMITED		39,0%	28,3%	N/A	N/A	0,0%
9695002I9DJHZ3449066 ODDO BHF SCA		35,9%	0,2%	N/A	N/A	0,0%
6TJCK1B7E7UTXP528Y04 Citigroup Global Markets Europe AG		21,6%	67,4%	N/A	N/A	0,0%
BFM8T61CT2L1QCEMIK50 UBS AG		3,4%	4,0%	N/A	N/A	0,0%
549300W0IFUSNYH0FL22 UBS Switzerland AG		0,0%	0,1%	N/A	N/A	0,0%

Class of Instrument		Equities-Shares Depository Receipts band 3-4				
Notification if <1 average trade per business day in the previous year		N				
Top 5 Brokers ranked in terms of volume (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
213800EEC95PRUCEUP63 VIRTU EUROPE TRADING LIMITED		58,2%	75,7%	N/A	N/A	0,0%
9695002I9DJHZ3449066 ODDO BHF SCA		26,2%	0,3%	N/A	N/A	0,0%
6TJCK1B7E7UTXP528Y04 Citigroup Global Markets Europe AG		9,9%	17,7%	N/A	N/A	0,0%
BFM8T61CT2L1QCEMIK50 UBS AG		5,0%	4,1%	N/A	N/A	0,0%
549300W0IFUSNYH0FL22 UBS Switzerland AG		0,7%	2,2%	N/A	N/A	0,0%

Class of Instrument		Equities-Shares Depository Receipts band 1-2				
Notification if <1 average trade per business day in the previous year		N				
Top 5 Brokers ranked in terms of volume (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
9695002I9DJHZ3449066 ODDO BHF SCA		50,4%	0,5%	N/A	N/A	0,0%
213800EEC95PRUCEUP63 VIRTU EUROPE TRADING LIMITED		26,6%	66,2%	N/A	N/A	0,0%
BFM8T61CT2L1QCEMIK50 UBS AG		12,8%	10,9%	N/A	N/A	0,0%
549300SXSTGQY3EA1B18 RBC Capital Markets (Europe) GmbH		4,9%	0,4%	N/A	N/A	0,0%

<b>6TJCK1B7E7UTXP528Y04 Citigroup Global Markets Europe AG</b>	3,3%	17,6%	N/A	N/A	0,0%
<b>Class of Instrument</b>	<b>Debt Instruments-Bonds</b>				
<b>Notification if &lt;1 average trade per business day in the previous year</b>	Y				
<b>Top 5 Brokers ranked in terms of volume (descending order)</b>	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
<b>BFM8T61CT2L1QCCEMIK50 UBS AG</b>	100,0%	100,0%	N/A	N/A	0,0%
<b>Class of Instrument</b>	<b>Structured Finance Instruments</b>				
<b>Notification if &lt;1 average trade per business day in the previous year</b>	Y				
<b>Top 5 Brokers ranked in terms of volume (descending order)</b>	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
<b>02RNE8IBXP4R0TD8PU41 SOCIETE GENERALE</b>	67,9%	13,9%	N/A	N/A	0,0%
<b>6TJCK1B7E7UTXP528Y04 Citigroup Global Markets Europe AG</b>	18,4%	83,3%	N/A	N/A	0,0%
<b>549300CLJ9XDH12XV51 Flow Traders B.V.</b>	13,8%	2,8%	N/A	N/A	0,0%
<b>Class of Instrument</b>	<b>Equity Derivatives-Options and Futures</b>				
<b>Notification if &lt;1 average trade per business day in the previous year</b>	Y				
<b>Top 5 Brokers ranked in terms of volume (descending order)</b>	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
<b>BFM8T61CT2L1QCCEMIK50 UBS AG</b>	100,0%	100,0%	N/A	N/A	0,0%
<b>Class of Instrument</b>	<b>Securitized Derivatives-Warrants and Certificate Derivatives</b>				
<b>Notification if &lt;1 average trade per business day in the previous year</b>	Y				
<b>Top 5 Brokers ranked in terms of volume (descending order)</b>	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
<b>BFM8T61CT2L1QCCEMIK50 UBS AG</b>	58,3%	50,0%	N/A	N/A	0,0%
<b>213800EEC95PRUCEUP63 VIRTU EUROPE TRADING LIMITED</b>	41,7%	50,0%	N/A	N/A	0,0%

Class of Instrument		Securitized Derivatives-Other Securitized Derivatives			
Notification if <1 average trade per business day in the previous year		Y			
Top 5 Brokers ranked in terms of volume (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
<b>6TJCK1B7E7UTXP528Y04</b> Citigroup Global Markets Europe AG	100%	100%	N/A	N/A	0,0%

Class of Instrument		Exchange traded products-Exchange traded funds			
Notification if <1 average trade per business day in the previous year		Y			
Top 5 Brokers ranked in terms of volume (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
<b>969500219DJHZ3449066</b> ODDO BHF SCA	26,5%	1,7%	N/A	N/A	0,0%
<b>549300ZHEHX8M31RP142</b> JANE STREET FINANCIAL LIMITED	14,6%	0,7%	N/A	N/A	0,0%
<b>6TJCK1B7E7UTXP528Y04</b> Citigroup Global Markets Europe AG	12,8%	47,4%	N/A	N/A	0,0%
<b>635400IAV22ZOU1NFS89</b> Susquehanna International Securities Limited	10,7%	0,3%	N/A	N/A	0,0%
<b>02RNE8IBXP4R0TD8PU41</b> SOCIETE GENERALE	10,1%	0,3%	N/A	N/A	0,0%