

TOP FIVE EXECUTION BROKERS REPORT 2022

CANDRIAM

Contents

1. CONTEXT AND OBJECTIVE	2
2. SCOPE	2
3. GENERAL DISCLOSURES	2
4. RANKING OF THE 5 MAIN EXECUTION BROKERS	6

1. CONTEXT AND OBJECTIVE

The European Markets in Financial Instruments Directive 2014/65/EU (hereafter “MiFID II”) requires **CANDRIAM** to summarise and make public on an annual basis, for each class of financial instruments, the top five execution venues and/or brokers accompanied by an analysis of the quality of execution obtained during the relevant year.

2. SCOPE

This report covers the orders executed as part of the advisory and discretionary portfolio management activity for professional and non-professional clients in accordance with MiFID II regulation.

With effect from July 1st, 2022, CANDRIAM BELGIUM, a management company of undertakings for collective investment incorporated under the laws of Belgium and CANDRIAM FRANCE, a management company of undertakings for collective investment incorporated under the laws of France, merged with and into CANDRIAM (formerly CANDRIAM LUXEMBOURG), a management company of undertakings for collective investment incorporated as a partnership limited by shares (société en commandite par actions) under the laws of the Grand Duchy of Luxembourg, registered with the Luxembourg Register of Commerce and Companies with number B37647 and having its registered office at 19-21, route d’Arlon, L-8009 Strassen, Grand Duchy of Luxembourg. Prior to the merger, CANDRIAM was the parent company of CANDRIAM BELGIUM and CANDRIAM FRANCE. As a result of the merger, CANDRIAM BELGIUM and CANDRIAM FRANCE have ceased to exist as separate legal entities. Therefore, the statements in this report are based on the consolidation of the data and information from CANDRIAM and its former two absorbed affiliates during the year 2022.

All orders made as part of the mandates managed by CANDRIAM are transmitted to the internal Trading Desk which is responsible for the execution, unless the client has given specific instructions otherwise. With certain mandates, clients can give specific instructions as to the selection of the intermediary used to execute their orders.

The present report refers to the obligations set out in Article 27(6) of MiFID II, Article 65(6) of the Commission Delegated Regulation (EU) 2017/565 and Article 3(1) and 3(2) of Commission Delegated Regulation (EU) 2017/576 (“RTS 28”), detailing the top five execution brokers in terms of transaction volume by asset class, by client category. Transaction data are provided by client category (retail or professional), providing a split of the total volume across the top five intermediaries (such as brokers).

The information provided in the present document covers the period from 1.01.2022 to 31.12.2022.

3. GENERAL INFORMATION AND DISCLOSURES

According to the applicable regulation, CANDRIAM shall publish for each class of financial instruments, a summary of the analysis and conclusions they draw from their detailed monitoring of the quality of execution obtained where they executed all client orders in the previous year.

The following information is provided on a consolidated basis where such information is common to several or all classes of financial instruments:

(a) Explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when assessing the quality of execution;

CANDRIAM seeks to manage portfolios in the best interest of clients and to obtain the best possible result considering the client's investment objectives. CANDRIAM takes all sufficient steps to obtain the best possible result when placing orders with other entities for execution.

As detailed in its **Best Selection Policy**, CANDRIAM relies on qualitative factors to select an execution venue or an intermediary and has in place processes which are designed to obtain the best possible execution result on a consistent basis taking into consideration the relevant execution factors. The detailed matrix presented in the **Best Selection Policy** sums up the continuous broker selection principles applied by the Dealing Desk by type of products and presents the relative importance of the execution factors/criteria per asset class taken into account in the assessment of the execution performance of the brokers.

Specific comments per asset classes:

▪ **Equities**

Candriam takes all sufficient steps to select the best brokers. For the most liquid stocks (tick size liquidity bands 5 and 6), one of the key factors was the ability of brokers to execute orders with the use of technology (for example, portfolio trading). In this area, over the reviewed period (2022), the most representative brokers typically were the global players (Barclays, UBS, Credit Suisse JP Morgan, Bank of America, Morgan Stanley) that were selected for their ability to efficiently handle large lists of orders globally across various regions. For less liquid stocks (tick size liquidity bands 1,2,3 and 4), one of the key factors was the ability of brokers to execute orders with an access to domestic pools of liquidity. In this area, global brokers (UBS, Credit Suisse, JP Morgan) and local brokers (KBC Securities, Degroof Petercam, Kepler Cheuvreux) were helpful to access small & mid cap liquidity.

▪ **Bonds**

Candriam takes all sufficient steps to select the best fixed-income trading venues (for example platforms). For the most liquid bonds, the key venue for executing orders were multi-bank trading platforms where large liquidity providers (JP Morgan, Citigroup, BNP Paribas, Deutsche Bank, Barclays, Nomura, Natixis) are easily accessible. They could be put into competition in an effort to get the best prices. On a specific fixed-income category (High Yields bonds), the key venues for executing orders were multi-bank trading platforms where large liquidity providers (Bank of America, Barclays, BNP Paribas, HSBC, Morgan Stanley) could also be put into competition in an effort to get the best prices. On another specific fixed-income category (money-market), four important banks in money-market instruments were used (Barclays, Citigroup, Natixis, Nomura).

▪ **Futures & options**

Candriam takes all sufficient steps to select the best brokers and make sure those brokers provide the best possible execution & post-execution results. For futures, the vast majority of orders were small size tickets with no liquidity issues. In this area, an important factor was the quality of booking & settlement and the concentration of brokers (mainly JP Morgan in 2021) was due to our efforts in ensuring timely operations. Bank Julius Baer received orders for a specific account (contractual agreement).

▪ **FX**

Candriam takes all sufficient steps to select the best FX trading venues. For FX, the vast majority of orders did not represent any liquidity issues. The key venue for executing orders was a multi-bank trading platform (Refinitiv FX-All) where large liquidity providers (UBS, Societe Generale, Barclays, JP Morgan) could be put into competition in an effort to get the best prices. Belfius and Banque de Luxembourg are custodian banks which received orders for some specific accounts (contractual agreements).

▪ **ETFs**

Candriam takes all sufficient steps to select the best ETF trading venues (for example multi-dealers' platforms like Tradeweb or Bloomberg). For ETFs, the key venue for executing orders were multi-bank trading platforms (for example, Tradeweb) where large liquidity providers (Societe Generale, Flow traders, Jane Street, BNP Paribas) could be put into competition in an effort to get the best prices.

(b) Description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

CANDRIAM is required to identify and to prevent or manage any actual, potential or perceived conflicts of interest to ensure that it does not place its own interests above its clients' interests and must, at all times, observe the fair treatment of all of its clients.

To fulfil this requirement, CANDRIAM maintains and operates effective organisational and administrative arrangements, and implements policies and procedures designed to identify, monitor and to prevent or manage any actual, potential or perceived conflicts of interest and ensure that CANDRIAM employees conduct business activities in accordance with the principles stated above.

Our order placement and execution procedures are intended to ensure that the transactions carried out for portfolio management purposes, as well as their frequency, are exclusively in the best interest of CANDRIAM clients.

CANDRIAM:

- holds neither stake nor interest in any venue or broker it may rely on to execute transactions on behalf of clients
- is not a member of any market, therefore, any conflict of interest in the use of the execution platforms is annihilated.

CANDRIAM does not have any close links, conflicts of interests, nor common ownerships with respect to any execution venues used to execute orders.

(c) Description of any specific arrangements with any execution venues regarding payments

CANDRIAM does not receive payments, discounts, rebates or nonmonetary benefits in its trading arrangements. made or received, discounts, rebates or nonmonetary benefits received;

(d) Explanation of the factors that led to a change in the list of execution venues listed in the firm's execution policy, if such a change occurred;

Before the CANDRIAM trading desk transmits orders to brokers, it takes all sufficient steps to make sure that those brokers provide the best possible execution results.

CANDRIAM has identified key factors in determining which broker to use for executing orders:

- Ability of brokers to execute small-size market orders on liquid instruments in a timely manner (with the use of technology);

- Ability of brokers to execute efficiently large-size orders and thinly traded instruments (with access to large pools of liquidity);
- Ability of brokers to interact with the CANDRIAM trading desk (with optimal dialogue, permanent feedback on market conditions and on order fills).

(e) Explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

Some investment strategies like quantitative and indexed equity are predominantly benchmarked against the official closing prices, the execution occurs at / near the closing auction time after orders are transmitted to brokers electronically. Emerging market equity strategies predominantly instruct VWAP which refers to targeting the volume weighted average price over a period of time or over the full-day trading session.

VWAP orders are also transmitted to brokers electronically. Investment strategies on less liquid instruments (small & mid-caps, emerging market bonds) often require block execution and voice trading.

(f) Explanation of whether other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;

In case of large lists of orders (program trading), broker selection is not only based on the broker ability to offer liquidity and competitive pricing, but also on the quality of post-trade confirmations and settlements (internal statistics given by CANDRIAM middle-office).

(g) Explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under Delegated Regulation (EU) 2017/575;

The CANDRIAM trading desk performs first-level controls and must justify large deviations with price reference benchmarks depending on order types (equities and bonds). It shares the conclusion of its control to compliance, portfolio management and risk departments on a periodic basis, in particular for the broker review committee.

The CANDRIAM Compliance department performs an independent control of the efficiency of the best selection policy application in order to make sure that the trading desk gets the best possible execution result for managed portfolios.

CANDRIAM does not directly use data published under Delegated Regulation (EU) 2017/575 but may occasionally request specific TCA requests from executing brokers.

(h) Explanation, where applicable, of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.

CANDRIAM does not use information from consolidated tape providers.

4. RANKING OF THE 5 MAIN EXECUTION BROKERS

In order to meet the requirements of MiFID, CANDRIAM must provide two sets of Top 5 Execution Brokers tables per class of financial instrument relating to orders transmitted to a broker, to execute in the market on CANDRIAM's behalf.

CANDRIAM is not facing the market or member of market. The report does not present data related security lending transactions as such type of transaction has not been carried out for the mandates.

a. Equities — Shares & Depository Receipts

i. Tick size liquidity bands 5 and 6 (from 2 000 trades per day)

Type	Retail				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 5 and 6				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	21.4	20.14	5.48	94.52	0
Credit Suisse Bank Europe SA(LEI:959800TMGPWX7NYM4R72)	19.89	25.71	4.86	95.14	0
KBC Securities NV(LEI:2138005SP78ELT822P61)	13.8	10.45	92.27	7.73	0
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	13.11	16.97	3.03	96.97	0
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	7.73	6.68	1.94	98.06	0

Type	Professional				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 5 and 6				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	18.47	15.37	68.75	31.25	0
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	12.3	13.04	36.62	63.38	0
BofA Securities Europe SA(LEI:549300FH0WJAPEHTIQ77)	10.1	6.89	53.16	46.84	0
Morgan Stanley Europe SE(LEI:54930056FHWP7GIWYY08)	9.89	9.15	38.75	61.25	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	7.09	6.25	67.23	32.77	0

ii. Tick size liquidity bands 3 and 4 (from 80 to 1 999 trades per day)

Type	Retail				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 3 and 4				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
KBC Securities NV(LEI:2138005SP78ELT822P61)	34.99	34.95	32.69	67.31	0
Banque Degroof Petercam SA(LEI:549300NBLHT527ZV1241)	13.51	8.81	0	100	0
Credit Suisse Bank Europe SA(LEI:959800TMGWPX7NYM4R72)	13.35	11.85	1.4	98.6	0
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	8.68	9.12	1.68	98.32	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	7.28	12.16	12.35	87.65	0

Type	Professional				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 3 and 4				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Kepler Cheuvreux SA(LEI:9695005EOZG9X8IRJD84)	20.39	3.83	27.21	72.79	0
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	16.76	18.39	75.33	24.67	0
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	12.91	14.3	38.27	61.73	0
Morgan Stanley Europe SE(LEI:54930056FHWP7GIWYY08)	7.93	8.42	48.4	51.6	0
Citigroup Global Markets Europe AG(LEI:6TJCK1B7E7UTXP528Y04)	6.77	6.87	50.76	49.24	0

iii. Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)

Type	Retail				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 1 and 2				
Notification if <1 average trade per business day in the previous year	Yes				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Credit Suisse Bank Europe SA (LEI:959800TMGPWX7NYM4R72)	38.36	38.36	1.9	98.1	0
KBC Securities NV (LEI:2138005SP78ELT822P61)	13.98	16.35	81.12	18.88	0
Barclays Bank Ireland PLC (LEI:2G5BKIC2CB69PRJH1W31)	13.81	13.84	0	100	0
UBS Europe SE (LEI:5299007QVIQ7IO64NX37)	9.93	10.69	0	100	0
Kepler Cheuvreux SA (LEI:9695005EOZG9X8IRJD84)	6.7	1.89	0	100	0

Type	Professional				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 1 and 2				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS Europe SE (LEI:5299007QVIQ7IO64NX37)	15.43	15.48	18	82	0
JP Morgan SE (LEI:549300ZK53CNGEEI6A29)	14.67	16.57	23.41	76.59	0
Citigroup Global Markets Europe AG (LEI:6TJCK1B7E7UTXP528Y04)	13.71	14.41	10.73	89.27	0
Morgan Stanley Europe SE (LEI:54930056FHWP7GIWYY08)	11.96	11.19	20.38	79.62	0
Instinet Germany GmbH (LEI:213800A7BEQATAOUAN40)	10.39	12.45	3.09	96.91	0

b. Debt instruments

i. Bonds

Type	Retail				
Class of Instrument	Debt Instruments: Bonds				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	14.98	10.06	0.07	99.93	0
Citigroup Global Markets Europe AG(LEI:6TJCK1B7E7UTXP528Y04)	14.82	11.8	0.56	99.44	0
BNP Paribas(LEI:R0MUWSFPU8MPRO8K5P83)	11.45	6.38	0	100	0
Deutsche Bank AG(LEI:7LWTFZYICNSX8D621K86)	8.13	7.93	0	100	0
CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK(LEI:1VUV7VQFKUOQSJ21A208)	7.38	13.73	0	100	0

Type	Professional				
Class of Instrument	Debt Instruments: Bonds				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Citigroup Global Markets Europe AG(LEI:6TJCK1B7E7UTXP528Y04)	10.34	8.35	0	100	0
Deutsche Bank AG(LEI:7LWTFZYICNSX8D621K86)	9.3	8.01	5.76	94.24	0
BNP Paribas(LEI:R0MUWSFPU8MPRO8K5P83)	8.01	6.37	1.86	98.14	0
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	7.13	7.14	0	100	0
BofA Securities Europe SA(LEI:549300FH0WJAPHEHIQ77)	6.11	6.39	0	100	0

ii. Money markets instruments

Type	Retail				
Class of Instrument	Debt Instruments: Money Markets				
Notification if <1 average trade per business day in the previous year	Yes				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	50.12	25	0	100	0
Citigroup Global Markets Europe AG(LEI:6TJCK1B7E7UTXP528Y04)	37.37	50	0	100	0
CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK(LEI:1VUV7VQFKUOQSJ21A208)	12.52	25	0	100	0
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Debt Instruments: Money Markets				
Notification if <1 average trade per business day in the previous year	Yes				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Nomura Financial Products Europe GmbH(LEI:5493002XYZZ0CGQ6CB58)	27.2	26.47	0	100	0
Natixis SA(LEI:KX1WK48MPD4Y2NCUIZ63)	19.48	12.75	0	100	0
Intesa Sanpaolo SpA(LEI:2W8N8UU78PMDQKZENC08)	9.25	3.92	0	100	0
UniCredit Bank AG(LEI:2ZCNRR8UK83OBTEK2170)	7.21	2.94	0	100	0
HSBC CONTINENTAL EUROPE(LEI:F0HUI1NY1AZMJMD8LP67)	6.87	3.92	0	100	0

c. Interest rates derivatives

i. Futures and options admitted to trading on a trading venue

Type	Retail				
Class of Instrument	Interest Rate Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	Yes				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
BANK JULIUS BAER & CO AG(LEI:PNWU8O0BLT17BBV61Y18)	100	100	0	100	100
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Interest Rate Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	81.63	83.32	1.98	98.02	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	10.97	8.39	1.66	98.34	83.13
BNP Paribas(LEI:R0MUWSFPU8MPRO8K5P83)	5.15	3.47	0	100	0
Citigroup Global Markets Europe AG(LEI:6TJCK1B7E7UTXP528Y04)	1.6	3.09	0	100	100
Banque Internationale à Luxembourg(LEI:9C27TVMR36CYD5TZB550)	0.62	1.35	0	100	100

ii. Swaps, forwards, and other interest rates derivatives

➤ Non applicable

d. Credit derivatives

➤ Non applicable

e. Currency derivatives

i. Futures and options admitted to trading on a trading venue

Type	Retail				
Class of Instrument	Currency Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	-				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Currency Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan SE(LEI:549300ZK53CNGEIE6A29)	100	100	0.16	99.84	0
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

ii. Swaps, forwards, and other currency derivatives

Type	Retail				
Class of Instrument	Currency Derivatives: Swaps, Forwards and Other Currency Derivatives				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Belfius Bank SA(LEI:A5GWLFH3KM7YV2SFQL84)	99.18	99.57	0	100	96.58
Banque de Luxembourg(LEI:PSZXLEV07O5MHRRFCW56)	0.82	0.43	0	100	0
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Currency Derivatives: Swaps, Forwards and Other Currency Derivatives				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	21.45	24.05	0	100	0
Societe Generale SA(LEI:O2RNE8IBXP4R0TD8PU41)	18.71	10.84	0	100	0
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	17.79	3.23	0	100	0
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	17.23	5.6	0	100	0
Belfius Bank SA(LEI:A5GWLFH3KM7YV2SFQL84)	6.73	12.41	0	100	6.36

f. Structured finance instruments

➤ Non applicable

g. Equity Derivatives

i. Options and Futures admitted to trading on a trading venue

Type	Retail				
Class of Instrument	Equity Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	99.79	99.73	0.3	99.7	100
Banque de Luxembourg(LEI:PSZXLEV07O5MHRRFCW56)	0.14	0.2	0	100	100
JP Morgan Securities PLC - UK(LEI:8I5DZWZKVSZI1NUHU748)	0.07	0.07	0	100	100
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Equity Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	No				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	95.72	85.95	8.11	91.89	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	2.47	7.69	30.29	69.71	100
BNP Paribas(LEI:R0MUWSFPU8MPRO8K5P83)	1.55	4.68	0	100	0
Goldman Sachs International(LEI:W22LROWP2IHZNBB6K528)	0.15	0.67	0	100	0
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	0.12	1	0	100	0

ii. Swaps and other equity derivatives

➤ Non applicable

h. Securitized Derivatives

➤ Non applicable

i. Commodities derivatives and emission allowances Derivatives

➤ Non applicable

j. Contracts for difference

➤ Non applicable

k. Exchange traded products

Type	Retail				
Class of Instrument	Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)				
Notification if <1 average trade per business day in the previous year	Yes				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Societe Generale SA(LEI:O2RNE8IBXP4R0TD8PU41)	82.38	87.24	6.34	93.66	0
Flow Traders B.V.(LEI:549300CJJI9XDH12XV51)	16.03	7.82	0	100	0
KBC Securities NV(LEI:2138005SP78ELT822P61)	0.89	2.06	100	0	0
Morgan Stanley Europe SE(LEI:54930056FHWP7GIWYY08)	0.52	1.65	0	100	0
JP Morgan SE(LEI:549300ZK53CNGEEI6A29)	0.18	0.82	0	100	0

Type	Professional				
Class of Instrument	Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)				
Notification if <1 average trade per business day in the previous year	Yes				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Flow Traders B.V.(LEI:549300CJJI9XDH12XV51)	68.79	76	73.74	26.26	0
Societe Generale SA(LEI:O2RNE8IBXP4R0TD8PU41)	15.52	18	47.06	52.94	0
BNP Paribas(LEI:R0MUW5FP08MPRO8K5P83)	5.15	0.67	0	100	0
Jane Street Financial Limited - NL(LEI:549300AE0DWETJDYFB29)	4.35	1.33	0	100	0
KBC Securities NV(LEI:2138005SP78ELT822P61)	3.29	0.67	100	0	0

l. Emission allowances

➤ Non applicable

m. Other instruments

➤ Non applicable