

## MIFID II QUALITATIVE ANALYSIS OF BEST EXECUTION

This report (the **Report**) is published in accordance with the requirements of the Markets in Financial Instruments Directive (2014/65/EU) and associated regulatory technical standards.

J.P. Morgan Bank Luxembourg S.A. (JPMBL or the Private Bank) is required to meet certain obligations in relation to what is called Best Execution. Best Execution relates to the way in which we execute, place or transmit orders on our clients' behalf.

All clients are treated as if they are Retail clients for the purposes of the Best Execution policy. All execution decisions are made by a central desk who execute according to a single policy. This Report therefore is for both Retail and Professional clients of JPMBL.

A description of the approach taken by the Private Bank to achieve Best Execution when executing or transmitting client orders (entitled "Best Execution Summary") is available below. The following information explains the strategies and tools used by JPMBL to effect and assess the quality of execution of transactions in the asset classes listed below.

### Execution venues by asset class in 2019:

## EQUITIES

### 1. Equities

<b>ESMA<sup>1</sup> Class of Instrument</b>	Equities – Shares and Depositary Receipts. ESMA Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)		
Notification if <1 average trade per business day in the previous year	No		
Execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total <sup>2</sup>	Proportion of orders executed as percentage of total <sup>3</sup>	Percentage of directed orders
JPMorgan Asset Management (UK) Ltd 20FULDKQMC7ZL80LYR79	4.98	21.77	n/a
J.P. Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	0.52	0.06	n/a
J.P. Morgan Securities LLC ZBUT11V806EZRVTWT807	5.93	0.22	n/a

1 European Securities and Markets Authority.  
2 Notional amount (USD) as a percentage of total.  
3 Number of client orders as a percentage of total.

ESMA <sup>1</sup> Class of Instrument	Equities – Shares and Depositary Receipts. ESMA Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)		
Notification if <1 average trade per business day in the previous year	No		
Execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total <sup>2</sup>	Proportion of orders executed as percentage of total <sup>3</sup>	Percentage of directed orders
JPMorgan Asset Management (UK) Ltd 20FULDKQMC7ZL80LYR79	15.95	36.04	n/a
J.P. Morgan Securities Plc K6Q0W1PS1L1O4IQL9C32	2.48	0.13	n/a
J.P. Morgan Securities LLC ZBUT11V806EZRVTWT807	19.23	0.65	n/a

ESMA <sup>1</sup> Class of Instrument	Equities – Shares and Depositary Receipts. ESMA Tick size liquidity bands 5 and 6 (from 2000 trades per day)		
Notification if <1 average trade per business day in the previous year	No		
Execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total <sup>2</sup>	Proportion of orders executed as percentage of total <sup>3</sup>	Percentage of directed orders
JPMorgan Asset Management (UK) Ltd 20FULDKQMC7ZL80LYR79	10.56	15.73	n/a
J.P. Morgan Securities Plc K6Q0W1PS1L1O4IQL9C32	21.54	0.52	n/a
J.P. Morgan Securities LLC ZBUT11V806EZRVTWT807	4.57	0.07	n/a

ESMA <sup>1</sup> Class of Instrument	Equities – Shares and Depositary Receipts. ESMA Tick size liquidity band information not available		
Notification if <1 average trade per business day in the previous year	No		
Execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total <sup>2</sup>	Proportion of orders executed as percentage of total <sup>3</sup>	Percentage of directed orders
JPMorgan Asset Management (UK) Ltd 20FULDKQMC7ZL80LYR79	5.75	24.63	n/a
J.P. Morgan Securities Plc K6Q0W1PS1L1O4IQL9C32	0.36	0.04	n/a
J.P. Morgan Securities LLC ZBUT11V806EZRVTWT807	8.13	0.16	n/a

1 European Securities and Markets Authority.  
2 Notional amount (USD) as a percentage of total.  
3 Number of client orders as a percentage of total.

The execution factors which we consider and their order of importance are listed below:

1. Total consideration
2. Speed
3. Size of order
4. Nature of order
5. Likelihood of execution

## 2. Exchange Traded Products

ESMA Class of Instrument	Exchange Traded Products		
Notification if <1 average trade per business day in the previous year	No		
Execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
J.P. Morgan Asset Management (UK) Limited 20FULDKQMC7ZL80LYR79	80.04	97.6	n/a
J.P. Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	17.2	1.58	n/a
J.P. Morgan Securities LLC ZBUT11V806EZRVTWT807	2.76	0.82	n/a

The execution factors which we consider and their order of importance are listed below:

1. Total consideration
2. Size of order
3. Speed
4. Nature of order
5. Likelihood of execution

## 3. Equity Derivatives – Listed Options

ESMA Class of Instrument	Equity Derivatives – Options and Futures admitted to trading on a trading venue		
Notification if <1 average trade per business day in the previous year	No		
Execution venue(s) ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
J.P. Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	100	100	n/a

## 4. Exchange Traded Warrants

ESMA Class of Instrument	Securitized Derivatives – Warrants and Certificate Derivatives		
Notification if <1 average trade per business day in the previous year	Yes		
Execution venue(s) ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
J.P. Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	100	100	n/a

The execution factors which we consider and their order of importance are listed below:

1. Total consideration
2. Speed
3. Size of order
4. Nature of order
5. Likelihood of execution

Equities, Exchange Traded Funds and Equity Derivative – Listed Options orders are transmitted to J.P. Morgan Asset Management (UK) Limited (**JPMAM**), J.P. Morgan Securities PLC (**JPMSL**) and J.P. Morgan Securities LLC (**JPMS**). In deciding to use these entities, we have considered price and cost in terms of the ability to offer the best possible outcome in terms of total consideration on a consistent basis (based on a comparison with other entities).

Total consideration is the price plus costs payable on execution. Costs include costs and expenses related to execution, including execution venue fees, clearing and settlement fees and any other fees paid to third parties involved in the execution of the order. Total consideration is the most important factor and other factors will only be given precedence insofar as they are instrumental in delivering the best possible result.

JPMBL, JPMAM, JPMSL and JPMS are all ultimately owned by JPMorgan Chase & Co. Employees of the Private Bank execute orders using JPMAM, JPMSL or JPMS infrastructure on behalf of Private Bank clients. The Private Bank is able to directly compare market prices on behalf of its clients. JPMBL may select JPMAM, JPMSL or JPMS as counterparty to a given transaction, where this is the case management information is reviewed on a frequent basis to ensure that best execution is achieved.

The Transaction and Advice fee charged per transaction, which includes any fees or charges of JPMSL or JPMS, is disclosed to clients in the "J.P. Morgan Private Bank Fee Schedule".

## FIXED INCOME

### 5. Fixed Income

ESMA Class of Instrument	Debt Instrument Bonds		
Notification if <1 average trade per business day in the previous year	No		
Execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
JPMorgan Asset Management (UK) Limited 20FULDKQMC7ZL80LYR79	66.00	94.14	n/a
J.P. Morgan Securities Plc K6Q0W1PS1L1O4IQL9C32	32.43	5.57	n/a
J.P. Morgan Securities LLC ZBUT11V806EZRVWT807	1.57	0.28	n/a

The factors which we consider and their order of importance are listed below:

1. Total consideration
2. Size of order
3. Speed
4. Likelihood of execution
5. Nature of order

Orders in Fixed Income Securities are transmitted to J.P. Morgan Asset Management (UK) Limited (**JPMAM**), J.P. Morgan Securities PLC (**JPMSL**) or J.P. Morgan Securities LLC (**JPMS**). In deciding to use these entities, we have considered price and cost in terms of the ability to offer the best possible outcome in terms of total consideration on a consistent basis (based on a comparison with other entities).

JPMBL, JPMAM, JPMSL and JPMS are all ultimately owned by JPMorgan Chase & Co. Employees of the Private Bank execute orders using JPMAM, JPMSL or JPMS infrastructure on behalf of Private Bank clients. The Private Bank is able to directly compare market prices on behalf of its clients. JPMBL may select JPMAM, JPMSL or JPMS as counterparty to a given transaction, where this is the case management information is reviewed on a frequent basis to ensure that best execution is achieved.

The Transaction and Advice fee charged per transaction, which includes any fees or charges of JPMSL or JPMS, is disclosed to clients in the “J.P. Morgan Private Bank Fee Schedule”.

## DERIVATIVES

### 6. Foreign Exchange Derivatives

ESMA Class of Instrument	Currency Derivatives - swaps, forwards and other currency derivatives		
Notification if <1 average trade per business day in the previous year	No		
Execution venue(s) ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
JPMorgan Chase Bank, N.A. 7H6GLXDRUGQFU57RNE97	100	100	n/a

The factors which we consider and their order of importance are listed below:

1. Total consideration
2. Speed
3. Likelihood of execution
4. Size of order
5. Nature of order

Orders in Forward Foreign Exchange Transactions are executed with JPMorgan Chase Bank, N.A. (**JPMCB**). In deciding to transact with this entity, we have considered price and cost in terms of the ability to offer the best possible outcome in terms of total consideration on a consistent basis (based on a comparison with other entities).

### 7. Commodity Derivatives

ESMA Class of Instrument	Commodity Derivatives		
Notification if <1 average trade per business day in the previous year	Yes		
Execution venue(s) ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
JPMorgan Chase Bank, N.A. 7H6GLXDRUGQFU57RNE97	100	100	n/a

### 8. Credit Derivatives

ESMA Class of Instrument	Credit Derivatives		
Notification if <1 average trade per business day in the previous year	No		
Execution venue(s) ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
JPMorgan Chase Bank, N.A. 7H6GLXDRUGQFU57RNE97	100	100	n/a

## 9. Equity OTC Derivatives

<b>ESMA Class of Instrument</b>	Equity Derivatives – swaps and other equity derivatives		
Notification if <1 average trade per business day in the previous year	No		
Execution venue(s) ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
JPMorgan Chase Bank, N.A. 7H6GLXDRUGQFU57RNE97	100	100	n/a

## 10. Interest Rate Derivatives

<b>ESMA Class of Instrument</b>	Interest Rate Derivatives – swaps, forwards and other IR derivatives		
Notification if <1 average trade per business day in the previous year	Yes		
Execution venue(s) ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
JPMorgan Chase Bank, N.A. 7H6GLXDRUGQFU57RNE97	100	100	n/a

The factors which we consider and their order of importance are listed below:

1. Total consideration
2. Likelihood of execution
3. Speed
4. Size of order

JPMBL and JPMCB are ultimately owned by JPMorgan Chase & Co. We consider the conflict of interest arising from using JPMCB as a single derivative counterparty on an annual basis. Given the collateral costs and credit risk premium which we would need to charge in executing with other market counterparties, we consider JPMCB to be the most effective counterparty in terms of total consideration.

The Transaction and Advice fee charged per transaction, which includes any fees or charges of JPMCB, is disclosed to clients in the “J.P. Morgan Private Bank Fee Schedule”.

## STRUCTURED PRODUCTS

### 11. Structured Products

ESMA Class of Instrument	Structured Finance Instruments		
Notification if <1 average trade per business day in the previous year	No		
Execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total	Proportion of orders executed as percentage of total	Percentage of directed orders
J.P. Morgan Structured Products B.V XZYUUT6IYN31D9K77X08	50.68	21.32	n/a
Societe Generale 549300QNMBVTHX8H127	12.18	9.67	n/a
Royal Bank of Canada ES7IP3U3RHIGC71XBU11	8.53	19.35	n/a
The Goldman Sachs Group, Inc 784F5XWPLTWKTBV3E584	7.75	12.54	n/a
BNP Paribas Issuance B.V. 7245009UXRIGIRYOBR48	6.61	1.58	n/a

The factors which we consider and their order of importance are listed below:

1. Total consideration
2. Likelihood of execution
3. Nature of order
4. Speed
5. Size of order

Structured Products are issued by the counterparties listed in the Best Execution Summary, including J.P. Morgan Structured Products B.V. (**JPMS**). In deciding to transact with these entities, we have considered price and cost in terms of the ability to offer the best possible outcome in terms of total consideration on a consistent basis (based on a comparison with other entities). In 2019 there were sizable trades in products only offered by JPMS.

Percentage of directed orders for Structured Products is negligible and is less than 0.01%.

JPMBL and JPMS are ultimately owned by JPMorgan Chase & Co. We manage the conflict of interest arising from using JPMS as an Issuer of structured products, by arranging for competing quotes from other structured products issuers, where practicable.

The Transaction and Advice fee charged per transaction is disclosed to clients in the "J.P. Morgan Private Bank Fee Schedule".

### OTHER PRODUCTS (Private Equity, Hedge Funds, Mutual Funds)

There will commonly only be one method of purchasing or redeeming these instruments, for example via the manager, administrator, transfer agent or general partner of the fund. This limits the applicability of factors other than likelihood of execution and speed. Nevertheless when executing orders in these instruments internal policies and guidelines are followed to ensure efficient execution and the best possible client outcome.

Orders for J.P. Morgan Mutual Funds and Hedge Funds are executed directly with the transfer agent of the fund. Where orders are executed in Third Party Mutual Funds orders are sent to the market settlement systems for onward transmission to the fund's transfer agent.

## ALL PRODUCTS

There were no changes to JPMBL's execution arrangements in 2019. As of the 18th May 2020 JPMorgan AG Frankfurt became a counterparty to OTC derivative trading in addition to JPMCB. This will be reflected in the Report published in 2021.

JPMBL does not use output of a consolidated tape provider. JPMBL receives market data feeds directly from the market where it executed its orders.