

Putnam Investments Limited

Annual Best Execution Report

FYE 2019

1. Introduction

In compliance with the requirements of Regulatory Technical Standard 28 adopted by the European Commission in connection with the Markets in Financial Instruments Directive II (MiFID II), Putnam Investments Limited (“PIL”) is required to provide on an annual basis additional disclosure relating to the execution venues utilized for each asset class and certain information on the quality of execution.

PIL and its affiliates place orders for the purchase and sale of portfolio investments for its clients on various trading venues and through a substantial number of brokers and dealers. PIL generally places trades for European fixed income investments itself, and its affiliate The Putnam Advisory Company, LLC (“PAC”) places trades for equities and other transactions. In both cases, outside brokers and dealers execute the trades. In seeking the best execution reasonably available under the circumstances, PIL and PAC (collectively, Putnam) select broker-dealers to execute trades considering execution factors it believes to be relevant which may include price, size of the transaction, the nature of the market for the investment, the amount of commission, the timing of the transaction, and the quality of the service rendered by the broker-dealer in other transactions. Putnam may also take into account the type of client, the type of order, the type of financial instrument being traded, the execution venues on which the order can be executed and the execution entities with which the order can be executed. Where the execution factors may differ based on asset class, we have set out below the relative importance of the execution factors for each asset class.

Putnam currently does not execute portfolio transactions for client accounts with any affiliated broker-dealers (as defined under relevant securities laws). All of PIL’s clients are categorized as Professional Clients under MiFID II and PIL does not trade for retail clients. Further, as required under MiFID II, Putnam does not use brokerage commissions generated by PIL clients to obtain brokerage and research products and services.

Putnam maintains a list of approved counterparties with which it places orders for execution. The list of approved counterparties may change over time. A list of the approved counterparties on whom significant reliance is currently placed is included in [PIL's Best Execution and Order Handling Policy](#).

A transaction cost analysis (TCA) is regularly carried out for transactions in equity securities and enables Putnam to measure implicit costs such as market impact. TCA reports are produced by a third-party vendor and are reviewed by the Head of Equity Trading. Management information is in place to analyse fixed income transactions. Putnam has engaged a third-party vendor to evaluate fixed income trading activity. This evaluation is presently somewhat constrained by a lack of transparency into certain classes of fixed income securities in the market. The Global Co-Heads of Fixed Income along with investment specialists and traders evaluate brokers versus certain execution factors on a periodic basis. Putnam will continue to analyse the data issued by execution venues as required by Regulatory Technical Standard 27 (“RTS 27”) (Delegated Regulation (EU) 2017/575) and where applicable, this

will be considered as part of Putnam's analysis and oversight of best execution. Putnam did not directly use the output of a consolidated tape provider established under Article 65 of MiFID II Directive 2014/65/EU during the period to which this disclosure relates.

Putnam has in place a Trade Management Oversight Committee comprised of senior investment, compliance, risk and technology employees who review various matters relating to trading activity, including management information related to best execution for equity and fixed income asset classes, at least annually.

2. Equity Instruments

2.1 Top Five Execution Venues

Tick Size Liquidity Bands 5&6 (from 2000 trades per day)

Class of Instrument	Equities – Shares and Depository Receipts				
Notification if < 1 average trade per business day in the previous year	NO				
Top 5 execution venues ranked in terms of trading volume (descending order)	Proportion of volume executed 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
J.P. MORGAN SECURITIES LLC LEI: ZBUT11V806EZRVWT807	23.07%	27.11	N/A	N/A	0.00%
CREDIT SUISSE SECURITIES (EUROPE) LIMITED LEI: DL6FFRRLF74S01HE2M14	11.68%	13.07%	N/A	N/A	0.00%
UBS SECURITIES LLC LEI: T6FIZBDPKLYJKFCRVK44	10.26%	10.25%	N/A	N/A	0.00%
MORGAN & STANLEY CO. LLC LEI: 9R7GPTSO7KV3UQJZQ078	9.98%	7.58%	N/A	N/A	0.00%
GOLDMAN SACHS INTERNATIONAL LEI: W22LROWP2IHZNBB6K528	4.69%	6.88%	N/A	N/A	0.00%

Tick Size Liquidity Bands 3 and 4 (from 80 to 1999 trades per day)

Class of Instrument	Equities – Shares and Depository Receipts				
Notification if < 1 average trade per business day in the previous year	NO				
Top 5 execution venues ranked in terms of trading volume (descending order)	Proportion of volume executed 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
J.P. MORGAN SECURITIES LLC LEI: ZBUT11V806EZRVWT807	26.19%	25.59%	N/A	N/A	0.00%
CREDIT SUISSE SECURITIES (EUROPE) LIMITED LEI: DL6FFRRLF74S01HE2M14	19.51%	22.13%	N/A	N/A	0.00%
MORGAN & STANLEY CO. LLC LEI: 9R7GPTSO7KV3UQJZQ078	15.49%	11.89%	N/A	N/A	0.00%
UBS SECURITIES LLC LEI: T6FIZBDPKLYJKFCRVK44	9.12%	13.55%	N/A	N/A	0.00%

RBC CAPITAL MARKETS, LLC LEI: 549300LCO2FLSSVFFR64	4.89%	1.11%	N/A	N/A	0.00%
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Tick Size Liquidity Bands 1 and 2 (from 0 to 79 trades per day)

Class of Instrument	Equities – Shares and Depository Receipts				
Notification if < 1 average trade per business day in the previous year	NO				
Top 5 execution venues ranked in terms of trading volume (descending order)	Proportion of volume executed 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 SECURITIES LLC LEI: T6FIZBDPKLYJKFCRVK44	13.51%	14.46%	N/A	N/A	0.00%
CITIGROUP INC LEI: 6SHGI4ZSSLQXQSB395	11.78%	8.07	N/A	N/A	0.00%
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED LEI: 8NAV47T0Y26Q87Y0QP81	10.93	9.06%	N/A	N/A	0.00%
CREDIT SUISSE SECURITIES (USA) LLC LEI: 1V8Y6QCX6YMJ2OELI46	9.44%	7.76%	N/A	N/A	0.00%
RBC CAPITAL MARKETS, LLC LEI: 549300LCO2FLSSVFFR64	7.41%	8.52%	N/A	N/A	0.00%

“Passive Order” Article 2 Definition: An order entered into the order book that provided liquidity.

“Aggressive Order” Article 2 Definition: An order entered into the order book that took liquidity.

“Directed Order” Article 2 Definition: An order where a specific execution venue was specified by the client prior to the execution of the order.

“Volume Traded” Investment Association: “By volume we understand the regulation to mean market value.”

“Orders Executed” A deal in a specific stock with a specific broker: number of orders.

Equity Security Execution Factors

- For liquid equity securities (generally defined as 80 trades or more per day), price and cost will normally be the determining factors but other reasons could be more important depending on the circumstances.
- For illiquid securities (generally defined as less than 80 trades per day), in addition to price and cost, the size of the order is normally a determining factor but other reasons could be more important depending on the circumstances.

3. Debt Instruments

3.1 Top Five Execution Venues

Class of Instrument	Debt Instruments – Bonds				
Notification if < 1 average trade per business day in the previous year	NO				
Top 5 execution venues ranked in terms of trading volume (descending order)	Proportion of volume executed 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
MARKET AXESS* MIC: MAEL	20.77%	23.65%	N/A	N/A	0.00%
CITIGROUP GLOBAL MARKETS LIMITED LEI: XKZZ2JZF41MRHTR1V493	11.23%	11.30%	N/A	N/A	0.00%
MORGAN STANLEY & CO. INTERNATIONAL PLC LEI: 4PQUHN3JPFQFN3BB653	9.52%	7.60%	N/A	N/A	0.00%
DEUTSCHE BANK AKTIENGESELLSCHAFT LEI: 7LTWFZYICNSX8D621K86	9.33%	6.65%	N/A	N/A	0.00%
BARCLAYS CAPITAL SECURITIES LIMITED LEI: K9WDOH4D2PYBSLSOB484	9.26%	7.81%	N/A	N/A	0.00%

“Passive Order” Article 2 Definition: An order entered into the order book that provided liquidity.

“Aggressive Order” Article 2 Definition: An order entered into the order book that took liquidity.

“Directed Order” Article 2 Definition: An order where a specific execution venue was specified by the client prior to the execution of the order.

“Volume Traded” Investment Association: “By volume we understand the regulation to mean market value.”

“Orders Executed” A deal in a specific stock with a specific broker: number of orders.

* Where PIL have used a RFQ systems of trading venues to select counterparties in order to obtain quotes and conclude transactions, we provide additional information to the identity of the Top Five Counterparties with whom we have executed trades in the previous year via these venues.

Debt Instrument Execution Factors

- The size of the order and price are normally the most significant factors but other reasons could be more important depending on the circumstances.

Where a request for quotes (“RFQ”) system of a trading venue (marked * in table Section 3.1 Top Five Execution Venues) is used to select counterparties in order to obtain quotes and ultimately conclude the transaction.

As per the ESMA’s updated MiFID and MiFIR Investor Protection Q&A (dated 3 October 2018), where PIL have used the RFQ systems of trading venues, we provide additional information to the identity of the Top Five Counterparties with whom we have executed trades in the previous year via these venues.

Orders executed on MarketAxess	Debt Instruments – Bonds				
Top 5 execution venues ranked in terms of trading volume (descending order)	Proportion of volume executed 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
BNP PARIBAS LEI: ROMUWSFPU8MPRO8K5P83	17.28%	14.73%	N/A	N/A	0.00%
UniCredit Bank AG LEI: 2ZCNRR8UK83OBTEK2170	14.81%	11.16%	N/A	N/A	0.00%
UBS AG LEI: BFM8T61CT2L1QCCEMIK50	9.63%	9.82%	N/A	N/A	0.00%
MORGAN STANLEY & CO. INTERNATIONAL PLC LEI: 4PQUHN3JPFGFNF3BB653	8.14%	6.70%	N/A	N/A	0.00%
HSBC BANK PLC LEI: MP615ZYBUEU3UXPYFY54	8.11%	7.59%	N/A	N/A	0.00%

4. Other

During the period, Putnam executed one securitized derivative transaction and five structured finance products transactions the results of which are not included above, because, due to the small volumes, their addition would not meaningful.

Important Information

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