

Putnam Investments Limited
Annual Best Execution Report 2017

April 2018

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. As more transparency with respect to trading in certain asset classes becomes available, including information provided under Regulatory Technical Standard 27, it will be incorporated into PIL's analysis and oversight of best execution.

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.

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
UBS	14.97%	14.33%
Citigroup	11.48%	5.28%
Credit Suisse	8.80%	16.90%
Morgan Stanley	7.77%	7.27%
Merrill Lynch	5.65%	6.06%

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.

Class of Instrument	Debt Instruments	
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
Deutsche Bank	24.25%	16.96%
Citigroup	9.03%	11.82%
Credit Suisse	8.10%	7.95%
Morgan Stanley	7.04%	7.85%
Merrill Lynch	6.81%	7.07%

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.

Important Information

This document is intended to be of general interest only and does not constitute legal or tax advice, nor is it an offer for shares or an invitation to apply for shares. Investments entail risks. **Past performance is not a guarantee of future results. As with any investment, there is a potential for profit as well as the possibility of loss.**

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