

# State Street Global Advisors Ireland Limited (“SSGA”) Quality of Execution Assessment Report

- (A) Explanation of the relative importance SSGA 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**

Please refer to Schedule 1 to this report.

- (B) Description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used by SSGA to execute orders**

## **Foreign exchange**

SSGA used a panel of Trading Counterparties for foreign exchange transactions, which included State Street Bank and Trust Company, which is an affiliate of SSGA. Subject to its duty of best execution, SSGA entered into certain foreign exchange transactions on behalf of Accounts with State Street Bank and Trust Company.

For certain foreign exchange transactions, SSGA coordinated with the relevant Account’s global custodian to place and execute foreign exchange transactions (which for certain Accounts included placing of such transactions with a State Street group entity). SSGA adopted this approach when it was not reasonably possible for SSGA to directly negotiate foreign exchange trades in a market (e.g., when SSGA was restricted from dealing in a local market, suitable counterparties had not been identified, or it was seeking to mitigate operational or settlement risk in the local market).

SSGA executed foreign exchange transactions with Trading Counterparties using FX Connect, which is owned and operated by the State Street group of companies.

## **General comment**

Where appropriate taking into account the nature of the order, SSGA transmitted orders to be executed by the State Street Global Advisors trading desks located in the United States and in Hong Kong. The State Street Global Advisors United States trading desk forms part of State Street Global Advisors Trust Company and the State Street Global Advisors Hong Kong trading desk forms part of

State Street Global Advisors Asia Limited. State Street Global Advisors Trust Company and State Street Global Advisors Asia Limited are affiliates of SSGA. The State Street Global Advisors United States and Hong Kong trading desks acted as agent (not as principal) and orders were executed by them using their panel of venues and Trading Counterparties and taking into account their best execution and applicable local market requirements and practices.

**(C) Description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received**

**Foreign exchange**

As mentioned above, SSGA executed foreign exchange transactions with Trading Counterparties using FX Connect, which is owned and operated by the State Street group of companies. Trading Counterparties that SSGA traded with on behalf of Accounts typically paid fees to a State Street group entity to use FX Connect.

**(D) Explanation of the factors that led to a change in the list of execution venues listed in SSGA's execution policy, if such a change occurred**

**Equities**

SSGA made certain changes to Execution Venues and Trading Counterparties used by it as a result of changes in market conditions/structure.

**Foreign Exchange**

SSGA used Bloomberg for certain foreign exchange trading due to the requirements of an alternative strategy account, which was subsequently closed in the fourth quarter in 2018.

## General Comment

SSGA ceased to use certain execution Trading Counterparties as result of concerns relating to: pricing, credit concerns or insufficient trading volume.

If a client directed SSGA to trade with one or more specific counterparty(ies), SSGA executed or transmitted the client's order(s) following the client's specific instruction.

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

SSGA did not differentiate between professional clients and retail clients when executing or transmitting orders.

**(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**

SSGA did not give precedence to any criteria other than immediate price and cost when executing or transmitting retail client orders.

**(G) Explanation of how SSGA has used any data or tools relating to the quality of execution, including any data published under Delegated Regulation (EU) 2017/575**

**General Comments**

A dedicated State Street Global Advisors Transaction Costs Analysis (TCA) group monitored execution prices in relation to their benchmarks for futures, equities, currency, and fixed-income trading, and performed analysis of trading results. This analysis was shared with trading, portfolio management senior management, compliance and other relevant SSGA personnel as part of SSGA’s best execution review and oversight process.

Frequent assessment of transactions can provide insights on trading cost trends.

TCA can be used to forecast expected costs, confirm the efficacy of Trading Counterparties, venues, algorithms, and current processes and to highlight opportunities to improve trading outcomes in the future.

SSGA’s traders have many tools at their disposal to assess market liquidity (e.g. Bloomberg, broker communications, indications of interest (IOIs)). SSGA trading personnel hold quarterly meetings with SSGA's investment teams globally to discuss volume, TCA and volatility. Additionally, traders in each region also produce daily market commentary which is widely distributed within State Street Global Advisors.

**(H) Where applicable, an explanation of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.**

SSGA did not use output of a consolidated Tape Provider during the relevant period.

## Schedule 1

Asset Class	Explanation of the Relative Importance
<p>Equities – Shares &amp; Depositary Receipts – Tick size liquidity bands 5&amp;6 (from 2000 trades per day)</p> <p>Annex 1 of the SSGA best execution policy</p>	<p>Details of relevant execution factors are set out in the “relevant criteria” section of the SSGA best execution policy.</p> <p>The price was determined by the Trading Counterparty if the equity was being traded with the Trading Counterparty or otherwise by the relevant Execution Venue.</p> <p>With the exception of its seed Alternative Core Exposure Strategy, which had a separate commission schedule and no external clients, SSGA used the same negotiated equity commission schedule with each Trading Counterparty per market/region, and applied these to each Account it traded for<sup>1</sup>. These negotiated equity commission rates took into account considerations such as liquidity, market conditions or trading expertise needed to achieve execution.</p> <p>SSGA matched certain orders relating to Accounts traded by it using SSGA's internal cross. The internal cross enables equities to be transferred between Accounts without any requirement to pay brokerage commission or any exchange/venue fees. The Accounts that participated in the Internal Cross were all index tracking funds and the internal cross trades were crossed using market close pricing.</p>

<sup>1</sup> In certain situations, SSGA used a commission rate that was not on that schedule due to the circumstances (nature, timing, market dynamics) of the trade - for example, in the case of secondary offerings, short settling and/or block trades. Certain alternative strategy accounts used a different commission schedule

Asset Class	Explanation of the Relative Importance
<p>Equities – Shares &amp; Depositary Receipts – Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)</p> <p>Annex 2 of the SSGA best execution policy</p>	<p>Details of relevant execution factors are set out in the “relevant criteria” section of the SSGA best execution policy.</p> <p>The price was determined by the Trading Counterparty if the equity was being traded with the Trading Counterparty or otherwise by the relevant Execution Venue.</p> <p>With the exception of its seed Alternative Core Exposure Strategy, which had a separate commission schedule and no external clients, SSGA used the same negotiated equity commission schedule with each Trading Counterparty per market/region, and applied these to each Account it traded for.<sup>2</sup> These negotiated equity commission rates took into account considerations such as liquidity, market conditions or trading expertise needed to achieve execution.</p> <p>SSGA matched certain orders relating to Accounts traded by it using SSGA's internal cross. The internal cross enables equities to be transferred between Accounts without any requirement to pay brokerage commission or any exchange/venue fees. The Accounts that participated in the Internal Cross were all index tracking funds and the internal cross trades were crossed using market close pricing.</p>

<sup>2</sup> In certain situations, SSGA used a commission rate that was not on that schedule due to the circumstances (nature, timing, market dynamics) of the trade - for example, in the case of secondary offerings, short settling and/or block trades. Certain alternative strategy accounts used a different commission schedule.

Information Classification: General

Asset Class	Explanation of the Relative Importance
<p>Equities – Shares &amp; Depositary Receipts – Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)</p> <p>Annex 3 of the SSGA best execution policy</p>	<p>Details of relevant execution factors are set out in the “relevant criteria” section of the SSGA best execution policy.</p> <p>The price was determined by the Trading Counterparty if the equity was being traded with the Trading Counterparty or otherwise by the relevant Execution Venue.</p> <p>With the exception of its seed Alternative Core Exposure Strategy, which had a separate commission schedule and no external clients, SSGA used the same negotiated equity commission schedule with each Trading Counterparty per market/region, and applied these to each Account it traded for<sup>3</sup>. These negotiated equity commission rates took into account considerations such as liquidity, market conditions or trading expertise needed to achieve execution.</p> <p>SSGA matched certain orders relating to Accounts traded by it using SSGA's internal cross. The internal cross enables equities to be transferred between Accounts without any requirement to pay brokerage commission or any exchange/venue fees. The Accounts that participated in the Internal Cross were all index tracking funds and the internal cross trades were crossed using market close pricing.</p>

<sup>3</sup> In certain situations, SSGA used a commission rate that was not on that schedule due to the circumstances (nature, timing, market dynamics) of the trade - for example, in the case of secondary offerings, short settling and/or block trades. Certain alternative strategy accounts used a different commission schedule.

Asset Class	Explanation of the Relative Importance
<p>Currency Derivatives: forwards (deliverable and non-deliverable)</p> <p>Annex 10 of the SSGA best execution policy</p>	<p>Details of relevant execution factors are set out in the “relevant criteria” section of the SSGA best execution policy.</p> <p>The price (i.e. the competitiveness of foreign exchange spread) offered by the Trading Counterparties typically merited a high relative importance in selecting a Trading Counterparty.</p> <p>When selecting a Trading Counterparty, SSGA referred to and selected from Trading Counterparties approved by SSGA’s Counterparty Risk Management division with which SSGA had pre-determined trading documentation in place.</p> <p>Where appropriate, SSGA diversified exposure to Trading Counterparties in order to reduce exposure to individual Trading Counterparties.</p>

Information Classification: General



Asset Class	Explanation of the Relative Importance
<p>Exchange traded Funds (“ETFs”)</p> <p>Annex 16 of the SSGA best execution policy</p>	<p>Details of relevant execution factors are set out in the “relevant criteria” section of the SSGA best execution policy.</p> <p>The price was determined by the Trading Counterparty if the ETF was being traded with the Trading Counterparty or otherwise by the relevant Execution Venue.</p> <p>For certain exchange traded products, SSGA compared the likely costs to execute in the market against the costs and feasibility of creating/redeeming units via the ETF provider. If we chose to execute via the create/redeem method we partnered with a counterparty that acted as an Authorised Participant to the ETF provider. There were fees and costs associated with the create/redeem method, but the additional liquidity of the underlying and the likely reduced implicit costs made this approach attractive in certain scenarios.</p> <p>In certain situations and conditions SSGA made use of a RFQ platform in order to collect bids/offers.</p> <p>With the exception of its seed Alternative Core Exposure Strategy, which had a separate commission schedule and no external clients, SSGA used the same negotiated commission schedule with each Trading Counterparty per market/region, and applied these to each Account it traded for.<sup>4</sup> These negotiated equity commission rates took into account considerations such as liquidity, market conditions or trading expertise needed to achieve execution.</p>

<sup>4</sup> In certain situations, SSGA used a commission rate that was not on that schedule due to the circumstances (nature, timing, market dynamics) of the trade - for example, in the case of secondary offerings, short settling and/or block trades. Certain alternative strategy accounts used a different commission schedule.

Information Classification: General

## Defined Terms

Account(s)	Any segregated client account or pooled fund account for which SSGA executes an order
Execution Venue(s)	<p>Means the following:</p> <ul style="list-style-type: none"> <li>• regulated markets;</li> <li>• multilateral trading facilities ("MTF") (i.e. a multilateral system, operated by an investment firm or a market operator, which brings together multiple third-party buying and selling interests in financial instruments – in the system and in accordance with non-discretionary rules – in a way that results in a contract);</li> <li>• systematic internalisers (“SI”) (i.e., a firm which, on an organized, frequent and systematic basis, deals on own account by executing client orders outside a regulated market or an MTF);</li> <li>• organized trading facilities (“OTF”) (i.e. any facility or system that is not an MTF or regulated market, operated by an investment firm or market operator in which multiple third party buying and selling interests in financial instruments are able to interact in the system in a way that results in a contract); or</li> <li>• market makers or other liquidity providers (which includes non-European Economic Entities that perform a similar function to the other Execution Venues listed above)</li> </ul>
Trading Counterparty	Brokers, dealers, clearing members, futures commission merchants, banks, agents, prime brokers or other counterparties, including counterparties to over-the-counter transactions.