

MiFID II: RTS 28 Qualitative Commentary – Goldman Sachs Bank Europe SE Retail 2022

Equities – Shares & Depositary Receipts

1. Topic 1: an 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:

This qualitative commentary covers the activity of the Private Wealth Management business within Asset and Wealth Management which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

Where GS has determined it had a best execution obligation in respect of an order, GS took into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS generally gave the highest priority to total consideration for retail clients, then likelihood of execution. The remaining execution factors - cost (including implicit cost such as impact on the market), speed, order size, nature of the order and any other consideration relevant to the efficient execution of the client's order - were generally given equal ranking.

Note that where we employed smart order routing or algorithmic strategies, the priority execution factor is price. Price in this context was considered the result of improvements in parent order execution performance. Parent order execution performance considers a range of elements depending on execution venue including price impact, latency and likelihood of execution. The remaining execution factors – cost, speed, order size and any other consideration relevant to the efficient execution of the client's order - were generally given due priority based on the nature of the order, i.e. depending on whether the order was passive or aggressive or any other features stipulated by the client.

GS prioritised one or more of the other execution factors in the following scenarios: (i) there was insufficient immediately available liquidity on the relevant execution venues to execute the relevant order in full; or (ii) where a client instructed GS to work a relevant order over a period of time or by reference to a benchmark calculated over a period of time (such as VWAP); or (iii) GS determined that there were other circumstances such that obtaining the best immediately available price was not the best possible result for the client. In these cases, GS determined the relative priority of each execution factor on an order-by-order basis, where the order was executed manually, and by order type (e.g. iceberg, VWAP), where the order was executed using an algorithm.

GS used brokers, including affiliate brokers, to access equities markets for which it does not have a direct membership itself.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management executed shares and depository receipts via the Equities business unit within Global Banking & Markets in GS, and where appropriate, other GS affiliates. Private Wealth Management determined that it can consistently achieve the best results for its clients using a single execution venue (being the Equities business unit within Global Banking & Markets in the Goldman Sachs group).

For further details on the execution venues used by Private Wealth Management and its conflicts of interest policy, please refer to Private Wealth Management's best execution policy summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

Goldman Sachs and persons connected with Goldman Sachs provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which Goldman Sachs may have a conflict of interest.

GS is a member of the Goldman Sachs group of companies. The GS Equities business unit may execute transactions in certain asset classes with or through affiliated entities.

GS has close links and/or common ownership with respect to the following entities:

SIGMA X MTF/SIGMA X Europe MTF – Goldman Sachs Bank Europe SE is under common ownership with Goldman Sachs International Bank, which operates SIGMA X MTF, and Goldman Sachs Paris inc et Cie, which operates SIGMA X Europe MTF, each multilateral trading facilities for trading in European and non-European equity and equity-like instruments. Each of the MTFs are operated on an independent and segregated basis to other Goldman Sachs businesses. Goldman Sachs International is itself one of several trading participants on SIGMA X MTF. For further information on SIGMA X MTF please visit the SIGMA X MTF website at http://gset.gs.com/sigmaxmtf/.

In addition, Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which Goldman Sachs may use to execute orders on behalf of clients in certain financial instruments, including:

- BIDS Holdings L.P.
- CHX Holdings, Inc.
- Chi-X Global Holdings LLC
- SBI Japannext Co., Ltd.
- National Stock Exchange of India Limited
- Turquoise Global Holdings Limited

GS' decision to route orders to a particular venue for execution is determined by whether execution on such venues allows GS to satisfy its best execution obligations and is not influenced by any such ownership or revenue share arrangements.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue's rules. Information on such arrangements is publicly

available on the relevant execution venue's website. GS' decision to route orders to a particular venue for execution was determined by whether execution on such venue allowed GS to satisfy its best execution obligations and was not influenced by any such fee structure or volume discount.

4. Topic 4: an 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;

Goldman Sachs maintains internal procedures for the selection of Brokers, Trading Venues and other Execution Venues, both at the stage of on-boarding and throughout the relationship, in order to satisfy ourselves that those selections enable us to obtain best execution on a consistent basis. These procedures include undertaking due diligence and regular assessments of execution quality.

In response to evolving market structure and client demand GS frequently evaluates existing and new execution venues. GS did not add any new execution venues during the reporting period.

As part of our periodic evaluation of execution venues GS reviews a variety of execution performance metrics, including addressable liquidity, fill rate, mark-outs and latency.

Private Wealth Management executed equity shares and depository receipts via the Equities business unit within Global Banking & Markets in GS, and where appropriate, other GS affiliates. GS' best execution report reflects the affiliate broker to which GS routed the order for execution, either directly or, in certain cases, by further transmitting the order to another affiliate broker.

5. Topic 5: an 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;

Private Wealth Management provided order execution for retail and professional clients.

The starting presumption was that retail clients did legitimately rely on GS to protect their interests in relation to pricing and other elements of the transaction that may be affected by the choice made by GS in executing the relevant order (i.e. GS owes a duty of best execution to retail clients).

Subject to any specific instructions, GS generally gave the highest priority to:

- price for professional clients; and
- total consideration for retail clients,
- 6. Topic 6: an 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;

Subject to any specific instructions, GS generally did not give precedence over immediate price and cost when executing retail client orders.

If GS received an order from a retail client that included a specific instruction or specific instructions in relation to the handling and execution of the entire order or a particular aspect or aspects of an order (including selecting a particular execution venue, executing at a particular price or time or through the use of a particular strategy) then, subject to GS' legal and regulatory obligations, GS executed the retail client's order in accordance with that specific instruction. Where the specific instruction covered only a portion of an order (for example, as to the choice of execution venue), and GS had discretion over the execution of other elements of the order, then GS continued to be subject to the best execution obligation in respect of the elements of the order that were not covered by the client's specific instruction.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS had in place post-execution supervisory monitoring procedures which used market data, where available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria are used to benchmark client transactions for monitoring purposes. This monitoring was undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

Not applicable.

Debt instruments

(i) Bonds

1. Topic 1: an 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:

This qualitative commentary covers the activity of the Private Wealth Management business within Asset and Wealth Management which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

Where GS determined it had a best execution obligation in respect of an order, GS took into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS generally gave the highest priority to total consideration for retail clients.

GS prioritised one or more of the other execution factors in the following scenarios: (i) there was insufficient immediately available liquidity on the relevant execution venues to execute the relevant order in full; or (ii) a client instructed us to work a relevant order over a period of time; or (iii) GS determined that there were other circumstances such that obtaining the best immediately available price was not the best possible result for the client. In these cases, GS determined the relative priority of each execution factor on an order-by-order basis, where the order was executed manually, and by order type where the order was executed using an algorithm.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management utilised different execution venues to execute client orders. Private Wealth Management operated an "open architecture" model for executing all fixed income trades unless the open architecture platform did not support a certain product or an order was subject to specific instructions. Where this was the case, Private Wealth Management traded through the FICC business unit within GS Global Banking & Markets.

When executing transactions in bonds using this open architecture model, GS utilises the venue memberships and external broker relationships of GSI. For transparency purposes, GS has disclosed the underlying execution venue and broker data in its best execution report.

For further details on the execution venues used by Private Wealth Management and its conflicts of interest policy, please refer to Private Wealth Management's best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

GS is a member of the Goldman Sachs group of companies. Goldman Sachs and persons connected with Goldman Sachs provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which Goldman Sachs may have a conflict of interest.

In addition, Goldman Sachs group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which Goldman Sachs may use to execute orders on behalf of clients in certain financial instruments, including:

- Tradeweb LLC
- Bloomberg
- Market Axess

Goldman Sachs' decision to route orders to a particular venue for execution was determined by whether execution on such venues allowed us to satisfy our best execution obligations and was not influenced by any such ownership or revenue share arrangements.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Not applicable.

4. Topic 4: an 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;

Private Wealth Management revised its list of execution venues for this asset class during 2022 to add the following broker dealers to enable GS to improve the liquidity access provided to retail clients in certain markets: Guy Butler, Jane Street. Activity with Sberbank and VTB was suspended due to global sanctions impacting these entities.

 Topic 5: an 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;

Private Wealth Management executed orders for retail and professional clients.

Private Wealth Management generally gave the highest priority to total consideration for both retail and professional clients. Order execution arrangements differed to the extent of a client's specific instructions.

6. Topic 6: an 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;

Subject to any specific instructions, GS generally did not give precedence over immediate price and cost when executing retail client orders.

If GS received an order from a retail client that included a specific instruction or specific instructions in relation to the handling and execution of the entire order or a particular aspect or aspects of an order (including selecting a particular execution venue, executing at a particular price or time or through the use of a particular strategy) then, subject to GS' legal and regulatory obligations, GS executed the retail client's order in accordance with that specific instruction. Where the specific instruction covered only a portion of an order (for example, as to the choice of execution venue), and GS had discretion over the execution of other elements of the order, then GS continued to be subject to the best execution obligation in respect of the elements of the order that were not covered by the client's specific instruction.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post execution supervisory monitoring procedures which use market data, where available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria were used to benchmark client transactions for monitoring purposes. This monitoring was undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

Not applicable.

Bonds

(ii) Money Market instruments

1. Topic 1: an 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:

This qualitative commentary covers the activity of the Private Wealth Management business within Asset and Wealth Management which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

Where GS determined it had a best execution obligation in respect of an order, GS took into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS generally gave the highest priority to total consideration for retail clients.

GS prioritised one or more of the other execution factors in the following scenarios: (i) there was insufficient immediately available liquidity on the relevant execution venues to execute the relevant order in full; or (ii) a client instructed us to work a relevant order over a period of time; or (iii) GS determined that there were other circumstances such that obtaining the best immediately available price may not be the best possible result for the client. In these cases, GS determine the relative priority of each execution factor on an order-by-order basis, where the order was executed manually, and by order type where the order was executed using an algorithm.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management utilised different execution venues to execute client orders. Private Wealth Management operates an "open architecture" model for executing all fixed income trades unless the open architecture platform does not support a certain product or an order is subject to specific instructions. Where this was the case, Private Wealth Management traded through the FICC business unit within GS Global Banking & Markets.

When executing transactions in bonds using this open architecture model, GS utilises the venue memberships and external broker relationships of GSI. For transparency purposes, GS has disclosed the underlying execution venue and broker data in its best execution report.

For further details on the execution venues used by Private Wealth Management and its conflicts of interest policy, please refer to the Private Wealth Management's best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

GS is a member of the Goldman Sachs group of companies. Goldman Sachs and persons connected with Goldman Sachs provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which Goldman Sachs may have a conflict of interest.

In addition, Goldman Sachs group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which Goldman Sachs may use to execute orders on behalf of clients in certain financial instruments, including:

- Tradeweb LLC
- Bloomberg
- Market Axess

Goldman Sachs' decision to route orders to a particular venue for execution is determined by whether execution on such venues allows us to satisfy our best execution obligations and is not influenced by any such ownership or revenue share arrangements.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Not applicable.

4. Topic 4: an 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;

Private Wealth Management revised its list of execution venues for this asset class during 2022 to add the following broker dealers to enable GS to improve the liquidity access provided to retail clients: Guy Butler, Jane Street. Activity with Sberbank and VTB was suspended due to global sanctions impacting these entities.

 Topic 5: an 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;

Private Wealth Management executes orders for retail and professional clients.

Private Wealth Management generally gave the highest priority to total consideration for both retail and professional clients. Order execution arrangements differed to the extent of a client's specific instructions.

6. Topic 6: an 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;

Subject to any specific instructions, GS generally did not give precedence to other criteria over immediate price and cost when executing retail client orders.

If GS received an order from a retail client that included a specific instruction or specific instructions in relation to the handling and execution of the entire order or a particular aspect or aspects of an order (including selecting a particular execution venue, executing at a particular price or time or through the use of a particular strategy) then, subject to GS' legal and regulatory obligations, GS executed the retail client's order in accordance with that specific instruction. Where the specific instruction covered only a portion of an order (for example, as to the choice of execution venue), and GS had discretion over the execution of other elements of the order, then GS continued to be subject to the best execution obligation in respect of the elements of the order that were not covered by the client's specific instruction.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria were used to benchmark client transactions for monitoring purposes. This monitoring was undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

Not applicable.

Interest Rate Derivatives

(i) Futures and options admitted to trading on a trading venue

GS did not trade these financial instruments with retail clients.

Interest Rate Derivatives

(ii) Swaps, forwards, and other interest rates derivatives

GS did not trade these financial instruments with retail clients.

Credit Derivatives

(i) Futures and options admitted to trading on a trading venue)

GS did not trade these financial instruments with retail clients.

Credit Derivatives

(ii) Other credit derivatives

GS did not trade these financial instruments with retail clients.

Currency Derivatives

(i) Futures and options admitted to trading on a trading venue

GS did not trade these financial instruments with retail clients.

Currency Derivatives

(ii) Swaps, forwards, and other currency derivatives

1. Topic 1: an 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:

This qualitative commentary covers the activity of the Private Wealth Management business within Asset and Wealth Management which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments were often traded on a request for quote basis, including where clients approached us for a quote and the client ultimately decided whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it had sourced quotes.

Subject to any specific instructions, GS generally gave the highest priority to total consideration for retail clients. The remaining factors, to the extent applicable—cost (including implicit cost such as

impact on the market), likelihood of execution, order size, nature of the order and any other consideration relevant to the efficient execution of the client's order – to the extent applicable, were generally given equal ranking.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management executes currency derivatives via the FICC business unit within Global Banking & Markets in Goldman Sachs, including Goldman Sachs International and where and if appropriate, other GS affiliates. The Private Wealth Management client-facing entity executes the trade as the client's counterparty and is therefore listed as execution venue in the best execution report.

GS is a member of the Goldman Sachs group of companies. Goldman Sachs and persons connected with Goldman Sachs provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which Goldman Sachs may have had a conflict of interest.

For further details on the execution venues used by Private Wealth Management and its conflicts of interest policy, please refer to Private Wealth Management's best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Not applicable.

4. Topic 4: an 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;

There has been no change to the execution venues listed in GS' execution policy for the reporting period.

5. Topic 5: an 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;

Private Wealth Management provides order execution for retail and professional clients.

The starting presumption is that retail clients do legitimately rely on GS to protect their interests in relation to pricing and other elements of the transaction that may be affected by the choice made by GS in executing the relevant order (i.e. GS owes a duty of best execution to retail clients).

Subject to any specific instructions, GS generally gave the highest priority to:

- price for professional clients; and
- total consideration for retail clients.

Other execution factors, to the extent relevant, they were generally given equal ranking.

6. Topic 6: an 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;

Subject to any specific instructions, GS generally did not give precedence over immediate price and cost when executing retail client order.

If GS receives an order from a retail client that includes a specific instruction or specific instructions in relation to the handling and execution of the entire order or a particular aspect or aspects of an order (including selecting a particular execution venue, executing at a particular price or time or through the use of a particular strategy) then, subject to GS' legal and regulatory obligations, GS executed the retail client's order in accordance with that specific instruction. Where the specific instruction covered only a portion of an order (for example, as to the choice of execution venue), and GS had discretion over the execution of other elements of the order, then GS continued to be subject to the best execution obligation in respect of the elements of the order that were not covered by the client's specific instruction.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post-execution supervisory monitoring procedures which use market data, where available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria were used to benchmark client transactions for monitoring purposes. This monitoring was undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

Not applicable

Structured Finance Instruments

GS did not trade these financial instruments with retail clients.

Equity Derivatives

(i) Options and Futures admitted to trading on a trading venue

1. Topic 1: an 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**:

This qualitative commentary covers the activity of the Private Wealth Management business which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically traded only on the execution venue of their listing and therefore client orders in the instrument will determine the execution venue. Application of best execution is therefore limited to liquidity available on the relevant execution venue for the instrument.

Where GS determined it had a best execution obligation in respect of an order, GS took into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS generally gave the highest priority to total consideration for retail clients. The remaining factors – cost (including implicit cost such as impact on the market), likelihood of execution, order size, nature of the order and any other consideration relevant to the efficient execution of the client's order –to the extent applicable, were generally given equal ranking.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management executed exchange traded options:

- On the basis of an order passed by GS to the Equities business unit within Global Banking & Markets in Goldman Sachs Bank Europe SE, Goldman Sachs International and other GS affiliates; or
- On the basis of a decision taken by GSI as delegated portfolio manager on behalf of GS
 clients under our discretionary managed options advisory service, either via the Equities
 business unit within Global Banking & Markets or via an "open architecture" model for
 executing such trades which utilizes different execution venues (using the memberships of
 GSI).

The best execution report reflects the affiliate broker to which GS routed the order for execution (either directly or, in certain cases, by further transmitting the order to another affiliate broker).

GS is a member of the Goldman Sachs group of companies. Goldman Sachs and persons connected with Goldman Sachs provide diversified financial services to a broad range of clients and counterparties and circumstances may arise in which Goldman Sachs may have had a conflict of interest.

For further details on the execution venues used by Private Wealth Management and its conflicts of interest policy, please refer to the Private Wealth Management's best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue's rules. Information on such arrangements is publicly available on the relevant execution venue's website. Our decision to route orders to a particular venue for execution for this asset class was typically driven by the listing of the product the client wishes to trade, and was not influenced by any such fee structure or volume discount.

4. Topic 4: an 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;

There has been no change to the execution venues listed in GS' execution policy for the reporting period.

 Topic 5: an 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;

Private Wealth Management provides order execution for retail and professional clients.

The starting presumption is that retail clients do legitimately rely on GS to protect their interests in relation to pricing and other elements of the transaction that may be affected by the choice made by GS in executing the relevant order (i.e. GS owes a duty of best execution to retail clients).

Subject to any specific instructions, GS generally gave the highest priority to:

- price for professional clients; and
- total consideration for retail clients.
- 6. Topic 6: an 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;

Subject to any specific instructions, GS generally did not give precedence over immediate price and cost when executing retail client orders.

If GS receives an order from a retail client that includes a specific instruction or specific instructions in relation to the handling and execution of the entire order or a particular aspect or aspects of an order (including selecting a particular execution venue, executing at a particular price or time or through the use of a particular strategy) then, subject to GS' legal and regulatory obligations, GS executed the retail client's order in accordance with that specific instruction. Where the specific instruction covered only a portion of an order (for example, as to the choice of execution venue), and GS had discretion over the execution of other elements of the order, then GS continued to be subject to the best execution obligation in respect of the elements of the order that were not covered by the client's specific instruction.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post-execution supervisory monitoring procedures which use market data, where available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria were used to benchmark client transactions for monitoring purposes. This monitoring was undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

Not applicable.

Equity Derivatives

(ii) Swaps and other equity derivatives

GS did not trade these financial instruments with retail clients.

Securitized Derivatives

(i) Warrants and Certificate Derivatives

1. Topic 1: an 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:

This qualitative commentary covers the activity of the Private Wealth Management business within Asset and Wealth Management which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically traded only on the execution venue of their listing and therefore client orders in the instrument determined the execution venue. Application of best execution was therefore limited to liquidity available on the relevant execution venue for the instrument.

Where GS determined it had a best execution obligation in respect of an order, GS took into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS generally gave the highest priority to total consideration for retail clients.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management utilised different execution venues to execute client orders. Private Wealth Management operates an "open architecture" model for executing all trades in these financial instruments unless the open architecture platform did not support a certain product or an order was subject to specific instructions. Where this is the case, Private Wealth Management traded through Global Banking & Markets in Goldman Sachs. GS is a member of the Goldman Sachs group of companies.

When executing transactions in these financial instruments using this open architecture model, GS utilises the external broker relationships of GSI. For transparency purposes, GS has disclosed the underlying broker data in its best execution report.

For further details on the execution venues used by the Private Wealth Management business unit and its conflicts of interest policy, please refer to the Private Wealth Management Division's best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Not applicable.

4. Topic 4: an 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;

Private Wealth Management revised its execution venue list for this asset class to include an additional issuer on the open architecture platform in 2022 (Barclays Bank Plc), providing further issuer credit diversification and optionality for our clients. Private Wealth Management ceased distributing products issued by Credit Suisse during this period, however they remained on the platform and therefore were not removed from the list of execution venues listed in Private Wealth Management's execution policy.

 Topic 5: an 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;

Private Wealth Management provides order execution for retail and professional clients.

The starting presumption is that retail clients did legitimately rely on GS to protect their interests in relation to pricing and other elements of the transaction that may be affected by the choice made by GS in executing the relevant order (i.e. GS owes a duty of best execution to retail clients).

Subject to any specific instructions and issuer concentration limits, GS generally gave the highest priority to:

- price for professional clients. The remaining execution factors, to the extent applicable, were generally given equal ranking; and
- total consideration for retail clients.
- 6. Topic 6: an 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;

GS did not generally give precedence over immediate price and cost when executing retail client orders. However, credit diversification of a retail client's portfolio; comparison of issuer credit ratings and likelihood of execution were taken into account in certain client specific situations for retail clients.

These factors delivered the best possible result in terms of total consideration to the retail client within the risk framework agreed with the retail client as applicable to the client's portfolio.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post execution supervisory monitoring procedures which use market data, where it is available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria are used to benchmark client transactions for monitoring purposes. This monitoring was undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

N/A

Securitized Derivatives

(ii) Other Securitized Derivatives

GS did not trade these financial instruments with retail clients.

Commodities derivatives and emission allowances Derivatives

(i) Options and Futures admitted to trading on a trading venue

GS did not trade these financial instruments with retail clients.

Commodities derivatives and emission allowances Derivatives

(ii) Other commodities derivatives and emission allowances derivatives

GS did not trade these financial instruments with retail clients.

Contracts for Difference

GS did not trade these financial instruments with retail clients.

Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)

1. Topic 1: an 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:

This qualitative commentary covers the activity of the Private Wealth Management business within Asset and Wealth Management which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically traded only on the execution venue of their listing and therefore client orders in the instrument will determine the execution venue. Application of best execution is therefore limited to liquidity available on the relevant execution venue for the instrument.

Where GS determined it had a best execution obligation in respect of an order, GS took into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;

- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS generally gave the highest priority to total consideration for retail clients. The remaining factors - cost (including implicit cost such as impact on the market), speed, order size, nature of the order and any other consideration relevant to the efficient execution of the client's order - to the extent applicable, were generally given equal ranking.

Note that where we employed smart order routing or algorithmic strategies, the priority execution factor is price. Price in this context was considered the result of improvements in parent order execution performance. Parent order execution performance considers a range of elements depending on execution venue including price impact, latency and likelihood of execution. The remaining execution factors — cost, speed, order size and any other consideration relevant to the efficient execution of the client's order - were generally given due priority based on the nature of the order, i.e. depending on whether the order was passive or aggressive or any other features stipulated by the client.

Notwithstanding the above, we prioritised one or more of the other execution factors in the following scenarios: (i) there was insufficient immediately available liquidity on the relevant execution venues to execute the relevant order in full; or (ii) where a client instructed us to work a relevant order over a period of time or by reference to a benchmark calculated over a period of time (such as VWAP); or (iii) we determined that there were other circumstances such that obtaining the best immediately available price may not have been the best possible result for the client. In these cases, we determined the relative priority of each execution factor on an order-by-order basis, where the order is executed manually, and by order type (e.g. iceberg, VWAP), where the order was executed using an algorithm.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management executes exchange traded products via the Equities and FICC business units within Global Banking & Markets in Goldman Sachs Bank Europe SE (GSBE), Goldman Sachs International (GSI), and where appropriate, other GS affiliates. Private Wealth Management has determined that it can consistently achieve the best results for its clients using a single execution venue.

For further details on the execution venues used by Private Wealth Management and its conflicts of interest policy, please refer to Private Wealth Management's best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

Goldman Sachs and persons connected with Goldman Sachs provide diversified financial services to a broad range of clients and counterparties and circumstances may have arisen in which Goldman Sachs may have a conflict of interest.

GS is a member of the Goldman Sachs group of companies. The GS Equities and FICC business units may execute transactions in certain asset classes with or through affiliated entities.

GS has close links and/or common ownership with respect to the following entities:

SIGMA X MTF/SIGMA X Europe MTF – Goldman Sachs Bank Europe SE is under common ownership with Goldman Sachs International Bank, which operates SIGMA X MTF, and Goldman Sachs Paris inc et Cie, which operates SIGMA X Europe MTF, each multilateral trading facilities for trading in European and non-European equity and equity-like instruments. Each of the MTFs are operated on an

independent and segregated basis to other Goldman Sachs businesses. Goldman Sachs International is itself one of several trading participants on SIGMA X MTF. For further information on SIGMA X MTF please visit the SIGMA X MTF website at http://gset.gs.com/sigmaxmtf/.

In addition, Goldman Sachs Group entities may have (i) minor, non-controlling ownership stakes in companies which operate or own execution venues and/or; (ii) be founding consortia members of execution venues for which it has revenue share arrangements, which Goldman Sachs may use to execute orders on behalf of clients in certain financial instruments, including:

- BIDS Holdings L.P.
- CHX Holdings, Inc.
- Chi-X Global Holdings LLC
- Turquoise Global Holdings Limited
- Tradeweb LLC
- Bloomberg

Goldman Sachs' decision to route orders to a particular venue for execution is determined by whether execution on such venues allowed us to satisfy our best execution obligations and was not influenced by any such ownership or revenue share arrangements.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Some execution venues may have offered differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue's rules. Information on such arrangements is publically available on the relevant execution venue's website. Our decision to route orders to a particular venue for execution was determined by whether execution on such venue allowed us to satisfy our best execution obligations and was not influenced by any such fee structure or volume discount.

4. Topic 4: an 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;

GS maintains internal procedures for the selection of Brokers, Trading Venues and other execution venues, both at the stage of on-boarding and throughout the relationship, in order to satisfy ourselves that those selections enabled us to obtain best execution on a consistent basis. These procedures include undertaking due diligence and regular assessments of execution quality.

In response to evolving market structure and client demand GS frequently evaluates existing and new execution venues. GS did not add any new venues during the reporting period. As part of our regular evaluation of execution venues GS reviewed a variety of execution performance metrics, including addressable liquidity, fill rate, mark-outs and latency.

Private Wealth Management executed exchange traded products via the Equities and FICC business units within Global Banking & Markets in GS, and where appropriate, other GS affiliates. The best execution report reflects the affiliate broker to which GS routed the order for execution (either directly or, in certain cases, by further transmitting the order to another affiliate broker).

 Topic 5: an 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; The Private Wealth Management business provides order execution for retail and professional clients.

The starting presumption is that retail clients did legitimately rely on GS to protect their interests in relation to pricing and other elements of the transaction that may be affected by the choice made by GS in executing the relevant order (i.e. GS owes a duty of best execution to retail clients).

Subject to any specific instructions and issuer concentration limits, GS generally gave the highest priority to:

- price for professional clients. The remaining execution factors, to the extent applicable, were generally given equal ranking; and
- total consideration for retail clients.
- 6. Topic 6: an 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;

Subject to any specific instructions, GS generally gave the highest priority to total consideration for its retail clients.

If GS received an order from a retail client that includes a specific instruction or specific instructions in relation to the handling and execution of the entire order or a particular aspect or aspects of an order (including selecting a particular execution venue, executing at a particular price or time or through the use of a particular strategy) then, subject to GS' legal and regulatory obligations, GS executed the retail client's order in accordance with that specific instruction. Where the specific instruction covered only a portion of an order (for example, as to the choice of execution venue), and GS had discretion over the execution of other elements of the order, then GS continued to be subject to the best execution obligation in respect of the elements of the order that were not covered by the client's specific instruction.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post-execution supervisory monitoring procedures which use market data, where available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria were used to benchmark client transactions for monitoring purposes. This monitoring is undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

Not applicable.

Emissions Allowances

GS did not trade these financial instruments with retail clients.

Other Instruments

(UK and US listed options admitted to trade on a trading venue)

1. Topic 1: an 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:

This qualitative commentary covers the activity of the Private Wealth Management business within Asset and Wealth Management which is the only part of Goldman Sachs Bank Europe SE ("GS") providing execution services to retail clients. For further information on Private Wealth Management's best execution arrangements please refer to the relevant summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

These instruments are typically traded only on the execution venue of their listing and therefore client orders in the instrument will determine the execution venue. Application of best execution is therefore limited to liquidity available on the relevant execution venue for the instrument.

Where GS determined it had a best execution obligation in respect of an order, GS took into account the following criteria for determining the relative importance of the execution factors in the circumstances:

- the characteristics of the client including the regulatory categorisation of the client;
- the characteristics of the relevant order;
- the characteristics of financial instruments that are the subject of the relevant order; and
- the characteristics of the execution venue to which that relevant order can be directed.

Subject to any specific instructions, taking into account the criteria above, GS generally gave the highest priority to total consideration for retail clients. The remaining factors - cost (including implicit cost such as impact on the market), speed, order size, nature of the order and any other consideration relevant to the efficient execution of the client's order - to the extent applicable, were generally given equal ranking.

2. Topic 2: a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

Private Wealth Management executes US exchange traded equity options via the Equities and FICC business units within Global Banking & Markets in Goldman Sachs & Co LLC (GS&Co) and UK exchange traded equity options via the Equities and FICC business units within Global Banking & Markets in Goldman Sachs International (GSI). The best execution report reflects the affiliate broker to which GS routed the order for execution, which was GS&Co or GSI (for US and UK exchange traded options, respectively), either directly or via another GS affiliate for onward transmission to GS&Co.

Goldman Sachs and persons connected with Goldman Sachs provide diversified financial services to a broad range of clients and counterparties and circumstances may have arisen in which Goldman Sachs may have had a conflict of interest.

For further details on the execution venues used by Private Wealth Management and its conflicts of interest policy, please refer to the Private Wealth Management business's best execution summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.

3. Topic 3: a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

Some execution venues may offer differing fee plans to trading members depending on the volume and nature/type of a trading activity on the venue as well as fee discounts depending on average volume of trading undertaken. Such arrangements apply equally to all trading members who satisfy the relevant criteria under the execution venue's rules. Information on such arrangements is publicly available on the relevant execution venue's website. Goldman Sachs' decision to route orders to a particular venue for execution for this asset class was typically driven by the listing of the product the client wished to trade, and is not influenced by any such fee structure or volume discount.

4. Topic 4: an 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;

There has been no change to the execution venues listed in GS' execution policy for the reporting period.

 Topic 5: an 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;

Private Wealth Management provides order execution for retail and professional clients.

The starting presumption is that retail clients did legitimately rely on GS to protect their interests in relation to pricing and other elements of the transaction that may be affected by the choice made by GS in executing the relevant order (i.e. GS owes a duty of best execution to retail clients).

Subject to any specific instructions, GS generally gave the highest priority to:

- price for professional clients; and
- total consideration for retail clients.

Other execution factors, to the extent relevant, are generally given equal ranking.

 Topic 6: an 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;

Subject to any specific instructions, GS generally did not give precedence over immediate price and cost when executing retail client orders.

If GS received an order from a retail client that included a specific instruction or specific instructions in relation to the handling and execution of the entire order or a particular aspect or aspects of an order (including selecting a particular execution venue, executing at a particular price or time or through the use of a particular strategy) then, subject to GS' legal and regulatory obligations, GS executed the retail client's order in accordance with that specific instruction. Where the specific instruction covered only a portion of an order (for example, as to the choice of execution venue), and GS had discretion over the execution of other elements of the order, then GS continued to be subject to the best execution obligation in respect of the elements of the order that were not covered by the client's specific instruction.

7. Topic 7: an explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under RTS 27;

GS has in place post execution supervisory monitoring procedures which use market data, where available, to assess client transactions against relevant market prices and benchmarks. For products with no observable external market data other criteria was used to benchmark client transactions

for monitoring purposes. This monitoring is undertaken on a manual basis in accordance with internal monitoring policies and procedures.

Data published under RTS 27 data has not been used as it is not currently available following the publication of Directive 2021/338 which suspended the obligation for execution venues to make available RTS 27 Reports until 28 February 2023.

8. Topic 8: 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.

Not applicable.

Securities Financing Transactions

Private Wealth Management executes securities financing transactions (specifically, securities lending) as part of short sale transactions of equities and bonds with retail clients. Best execution is owed to clients on the sale element of the transaction in accordance with the Equity Instruments and Debt Instruments (Bonds) sections set out above.

For the securities lending element of these transactions, GS enters into a securities loan with the client on a principal basis. Details of GS' approach to best execution in respect of securities financing transactions is set out in the Private Wealth Management's best execution policy, a summary which is available at: http://www.goldmansachs.com/disclosures/mifid/.