
MiFID II: RTS 28 Qualitative Commentary – GSBE Professional

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 different divisions of Goldman Sachs Bank Europe SE (GS), namely the Global Markets Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to the Global Markets Division or Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

When assessing the relative importance given to execution factors 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 price, 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.

Notwithstanding the above, we prioritised one or more of the other execution factors in certain scenarios: (i) where 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 was not 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 was executed manually, and by order type (e.g. iceberg, VWAP), where the order was executed using an algorithm. We have a degree of discretion in how to apply the different execution factors and this may have resulted in a range of different permissible approaches to executing client orders.

It should also be noted that where we are provided specific instructions in relation to a trade or all trades via a particular execution channel, our relative prioritization of execution factors was limited to those elements of the execution not covered by the client's specific instructions.

GS uses 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;

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

GS is a member of the Goldman Sachs group of companies. The Global Markets Division of GS may execute transactions in certain asset classes with or through affiliated entities. Execution quality received from affiliated entities is subject to the same monitoring and assessment applied to third party entities and execution venues utilized by GS for execution of client orders.

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

SIGMA X MTF – Goldman Sachs Bank Europe SE is under common ownership with Goldman Sachs International Bank which operates SIGMA X MTF, a multilateral trading facility for trading in European equity and equity-like instruments. SIGMA X MTF is operated on an independent and segregated basis to other Goldman Sachs businesses. 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 GS 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*

Our 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.

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

The Private Wealth Management Division executed these financial instruments primarily via the Global Markets Division, and where appropriate, other GS affiliates. The Private Wealth Management Division determined that could consistently achieve the best results for its clients using a single execution venue. For further details on the execution venues used by the Global Markets Division please refer to the Global Markets Division's best execution summary which is available via the link above.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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;**

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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;

Not applicable.

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:

GS executed orders for professional clients of the Global Markets Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria is used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

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**:

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references are made to the Global Markets Division or the Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our streamed prices/indications of interest through electronic platforms where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution, particularly given the market practice for clients to shop around for quotes, and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

The Private Wealth Management Division operates an "open architecture" model for executing all fixed income trades where the GS Global Markets Division is one of the possible execution venues. Where the open architecture platform does not support a certain product or an order is subject to specific instructions the Private Wealth Management Division can trade through the Global Markets Division.

To the extent we determined we owed a best execution obligation and subject to any specific instructions, GS generally gave the highest priority to:

- For Global Markets Division, net price. The remaining execution factors, to the extent relevant, – 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.
- For professional clients of the Private Wealth Management Division, total consideration.

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;

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

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 GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including

- *Tradeweb LLC*
- *Bloomberg*
- *MarketAxess*

Our decision to route orders to, or respond to clients' request for quotes on, a particular execution venue was determined, as applicable, by whether execution on such venues allowed us to satisfy our best execution obligations or as necessary to interact with clients and was not influenced by any such ownership or revenue share arrangements.

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

The Private Wealth Management Division operates an "open architecture" order execution platform 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 is the case, Private Wealth Management can trade through the GS Global Markets Division.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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**;

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

This is not applicable to the Private Wealth Management Division's open architecture order execution platform.

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 has obtained membership to certain MTFs for these products, including Tradeweb EU B.V., Bloomberg Trading Facility Limited, MarketAxess NL B.V. and Bond Vision Europe as part of Brexit preparations and has been active on those trading venues in 2019.

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;

The Private Wealth Management Division generally gives the highest priority to total consideration for professional clients which is consistent with the Private Wealth Management Division's approach to execution with its retail clients.

GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best

execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

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**:

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These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our streamed prices/indications of interest through electronic platforms where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution, particularly given the market practice for clients to shop around for quotes, and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

The Private Wealth Management Division operates an "open architecture" model for executing all fixed income trades where the GS Global Markets Division is one of the possible execution venues. Where the open architecture platform does not support a certain product or an order is subject to specific instructions the Private Wealth Management Division can trade through the Global Markets Division.

To the extent we determined we owed a best execution obligation and subject to any specific instructions, GS generally gave the highest priority to:

- For Global Markets Division, net price. The remaining execution factors, to the extent relevant, – 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
 - For professional clients of the Private Wealth Management Division, total consideration.
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;

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

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 GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including

- *Tradeweb LLC*
- *Bloomberg*
- *MarketAxess*

Our decision to route orders to, or respond to clients' request for quotes on, a particular execution venue was determined, as applicable, by whether execution on such venues allowed us to satisfy our best execution obligations or as necessary to interact with clients and was not influenced by any such ownership or revenue share arrangements.

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

The Private Wealth Management Division utilizes different execution venues to execute client orders. The Private Wealth Management Division 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 is the case, Private Wealth Management can trade through the GS Global Markets Division.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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;****

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

This is not applicable to the Private Wealth Management Division's open architecture order execution platform.

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 has obtained membership to a certain MTFs for these products, including Tradeweb EU B.V., Bloomberg Trading Facility Limited, MarketAxess NL B.V. and Bond Vision Europe as part of Brexit preparations and has been active on those trading venues in 2019.

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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;

The Private Wealth Management Division generally gave the highest priority to total consideration for professional clients which is consistent with the Private Wealth Management Division's approach to execution with its retail clients.

GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Interest Rate Derivatives

(i) Futures and options 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**:

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 is therefore limited to liquidity available on the relevant execution venue for the instrument.

When assessing the relative importance given to execution factors where Goldman Sachs Bank Europe SE ("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 relevant criteria above, the ranking of execution factors was typically as follows:

- price
- speed of execution.

The remaining execution 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 - were generally given equal ranking.

It should also be noted that where we are provided with specific instructions in relation to a trade, our relative prioritization of execution factors were limited to those elements of the execution not covered by the client’s specific instructions.

For further information on GS’ best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

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;

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

For further details on the execution venues used by GS and its conflicts of interest policy, please refer to its 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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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;

Not applicable

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;

The Global Markets Division of GS only executes orders for professional clients and eligible counterparties. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria were used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Interest Rate Derivatives

(ii) Swaps, forwards, and other interest rates 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**:

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These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution, particularly given the market practice for clients to shop around for quotes, and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determined we owed best execution and, subject to any specific instructions, GS generally gave the highest priority to net price. Other execution factors, to the extent relevant – 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.

-
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;

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

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 GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including

- *Tradeweb LLC*
- *Bloomberg*
- *MarketAxess*

Our decision to route orders to, or respond to clients' request for quotes on, a particular execution venue was determined, as applicable, by whether execution on such venues allowed us to satisfy our best execution obligations or as necessary to interact with clients and was not influenced by any such ownership or revenue share arrangements.

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

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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**;

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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;

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Not applicable.

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

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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

Credit Derivatives

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

Goldman Sachs Bank Europe SE does not undertake client executions in this Asset Class

Credit Derivatives

(ii) Other credit derivatives

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These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution, particularly given

the market practice for clients to shop around for quotes, and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determined we owed best execution and, subject to any specific instructions, GS generally gave the highest priority to net price. Other execution factors, to the extent relevant – 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 - 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;

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

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 GS may use to execute orders on behalf of clients or to respond to clients’ requests for quotes in certain financial instruments, including

- *Tradeweb LLC*
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Our decision to route orders to, or respond to clients’ request for quotes on, a particular execution venue was determined, as applicable, by whether execution on such venues allowed us to satisfy our best execution obligations or as necessary to interact with clients and was not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Global Markets Division and its conflicts of interest policy, please refer to the Global Markets Division’s best execution summary which is available at: <http://www.goldmansachs.com/disclosures/mifid/>

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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;**

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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 has obtained membership to certain MTFs for these products, including Tradeweb EU B.V., Bloomberg Trading Facility Limited and MarketAxess NL B.V. as part of Brexit preparations and has been active on those trading venues in 2019.

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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;

GS only executes orders for professional clients and eligible counterparties in these financial instruments. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Currency Derivatives

(i) Futures and options 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**:

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 is therefore limited to liquidity available on the relevant execution venue for the instrument.

When assessing the relative importance given to execution factors where Goldman Sachs Bank Europe SE ("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 relevant criteria above, the ranking of execution factors was typically as follows:

- price
- speed of execution.

The remaining execution 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 - were generally given equal ranking.

It should also be noted that where we are provided with specific instructions in relation to a trade, our relative prioritization of execution factors were limited to those elements of the execution not covered by the client’s specific instructions.

For further information on GS’ best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

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;

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

For further details on the execution venues used by GS and its conflicts of interest policy, please refer to its 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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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;

Not applicable

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;

The Global Markets Division of GS only executes orders for professional clients and eligible counterparties. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria were used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

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 different divisions of Goldman Sachs Bank Europe SE (GS), namely the Global Markets Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to Global Markets Division or to the Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution, particularly given the market practice for clients to shop around for quotes and the high levels of transparency/liquidity in most markets for these products, and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determined we owed best execution and, subject to any specific instructions, GS generally gave the highest priority to net price followed by likelihood of execution and settlement. Other execution factors, to the extent relevant – costs, nature of the order and other considerations relevant to the efficient execution of the client's order - 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;

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

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 GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including

- *Tradeweb LLC*
- *Bloomberg*
- *MarketAxess*

Our decision to route orders to, or respond to clients' request for quotes on, a particular execution venue was determined, as applicable, by whether execution on such venues allowed us to satisfy our best execution obligations or as necessary to interact with clients and was not influenced by any such ownership or revenue share arrangements.

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

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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;**

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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 has obtained membership to certain MTFs for these products, including Bloomberg Trading Facility Limited, FX Connect and FX All as part of Brexit preparations and has been active on those trading venues in 2019.

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;

GS only executes orders for professional clients and eligible counterparties in these financial instruments. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Structured Finance 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 different divisions of Goldman Sachs Bank Europe SE (GS), namely the Global Markets Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to Global Markets Division or to the Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

These instruments are typically traded on a request for quote and via a Bid Wanted in Competition basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes. In limited circumstances, structured finance products may involve bilateral discussions which typically include specific unique client customization. For such products, there are generally few comparable alternatives, price transparency is limited as a consequence of the product customization and the client has limited ability to obtain alternative quotes for the same product from other broker/dealers in the market. As a consequence, we would generally expect that clients are legitimately relying on us to provide best execution in such unique bespoke situations.

To the extent we determined we owed best execution and, subject to any specific instructions, GS generally gave the highest priority to net price. Other execution factors – costs, nature of the order and other considerations relevant to the efficient execution of the client's order - to the extent relevant, were generally given equal ranking.

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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;

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

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 GS may use to execute orders on behalf of clients or to respond to clients' requests for quotes in certain financial instruments, including

- *Tradeweb LLC*
- *Bloomberg*
- *MarketAxess*

Our decision to route orders to, or respond to clients' request for quotes on, a particular execution venue was determined, as applicable, by whether execution on such venues allowed us to satisfy our best execution obligations or as necessary to interact with clients and was not influenced by any such ownership or revenue share arrangements.

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

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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**;

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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 has obtained membership to certain MTFs for these products, including Tradeweb EU B.V., Bloomberg Trading Facility Limited and MarketAxess NL B.V. as part of Brexit preparations and has been active on those trading venues in 2019.

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;

GS only executes orders for professional clients and eligible counterparties in these financial instruments. Under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not Applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

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 different divisions of Goldman Sachs Bank Europe SE (GS), namely the Global Markets Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to Global Markets Division or to the Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are 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.

When assessing the relative importance given to those execution factors that are applicable where GS determined that it owed a best execution obligation for a relevant 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 relevant criteria above, the ranking of execution factors was typically as follows:

- price

- speed of execution.

The remaining execution 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 - were generally given equal ranking.

It should also be noted that where we are provided specific instructions in relation to a trade or all trades via a particular execution channel, our relative prioritization of execution factors is limited to those elements of the execution not covered by the client’s specific instructions.

For further information on GS’ best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

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;

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

For further details on the execution venues used by the Global Markets Division and its conflicts of interest policy, please refer to the Global Markets Division’s best execution summary which is available at: <http://www.goldmansachs.com/disclosures/mifid/>

Private Wealth Management Division executes these financial instruments via the Global Markets Division, and where appropriate, other GS affiliates. The Private Wealth Management Division 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 the Global Markets Division please refer to the Global Markets Division’s best execution summary which is available via the link above.

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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**;

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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;

Not applicable.

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;

GS executed orders for professional clients of the Global Markets Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Equity Derivatives

(ii) Swaps and other equity 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 different divisions of Goldman Sachs Bank Europe SE (GS), namely the Global Markets Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to Global Markets Division or to the Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution, particularly given the market practice for clients to shop around for quotes and the levels of transparency in the market

for these products, and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determined we owed best execution and, subject to any specific instructions, GS generally gave the highest priority to net price. Other execution factors, to the extent relevant – 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.

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;

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

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 GS may use to execute orders on behalf of clients or to respond to clients’ requests for quotes in certain financial instruments, including

- *Tradeweb LLC*

Our decision to route orders to, or respond to clients’ request for quotes on, a particular execution venue was determined, as applicable, by whether execution on such venues allowed us to satisfy our best execution obligations or as necessary to interact with clients and was not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by the Global Markets Division and its conflicts of interest policy, please refer to the Global Markets Division’s best execution summary which is available at: <http://www.goldmansachs.com/disclosures/mifid/>

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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;**

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 Venues rules. Information on such arrangements is publically available on the relevant Execution Venues 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 structures or volume discounts.

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;

Not applicable.

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;

GS executed orders for professional clients of the Global Markets Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

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

These instruments are typically traded on a request for quote and via a Bid Wanted in Competition basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes.

To the extent we determined we owed best execution and, subject to any specific instructions, GS generally gave the highest priority to net price. Other execution factors, to the extent relevant, were generally given equal ranking.

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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;

The Private Wealth Management Division operates an “open architecture” model for executing all fixed income trades where the GS Global Markets Division is one of the possible execution venues. Where the open architecture platform does not support a certain product or an order is subject to specific instructions the Private Wealth Management Division can trade through the Global Markets Division.

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**;

This is not applicable to the Private Wealth Management Division’s open architecture order execution platform.

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;

Not applicable.

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;

GS executed orders for professional clients of the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Goldman Sachs Bank Europe SE does not undertake client executions in this Asset Class

Commodities derivatives and emission allowances Derivatives

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

Goldman Sachs Bank Europe SE does not undertake client executions in this Asset Class

Commodities derivatives and emission allowances Derivatives

(ii) Other commodities derivatives and emission allowances 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 different divisions of Goldman Sachs Bank Europe SE (GS), namely the Global Markets Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to Global Markets Division or to the Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

These instruments are typically traded on a request for quote basis, including where clients approach us for a quote or are responding to our streamed prices where we predominantly act in a principal capacity and the client ultimately decides whether to proceed with the transaction based upon the price provided by us and those of other liquidity providers from whom it has sourced quotes. Generally we would not expect clients to be legitimately relying on us to provide best execution, particularly given the market practice for clients to shop around for quotes and therefore our best execution obligations for these instruments are likely to apply in more limited circumstances than that for other asset classes.

To the extent we determined we owed best execution and, subject to any specific instructions, GS generally gave the highest priority to net price. Other execution factors, to the extent relevant – 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.

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;

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

GS is a member of the Goldman Sachs group of companies. The Global Markets Division of GS may execute transactions in certain asset classes with or through affiliated entities. Execution quality received from affiliated entities is subject to the same monitoring and assessment applied to third party entities and execution venues utilized by GS for execution of client orders.

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;

Not applicable

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;

GS executed orders for professional clients of the Global Markets Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Contracts for Difference

N/A – Contracts for Difference instrumented are addressed under the MiFID II Swaps Asset Class.

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

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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 different divisions of Goldman Sachs Bank Europe SE (GS), namely the Global Markets Division and the Private Wealth Management Division. Unless otherwise indicated, the responses provided below are relevant for both divisions save for when references are made to the Global Markets Division or Private Wealth Management Division specifically. For further information on each division's best execution arrangements please refer to the relevant summaries which are available at: <http://www.goldmansachs.com/disclosures/mifid/>

When assessing the relative importance given to execution factors, where GS determined that it had a best execution obligation in respect of relevant orders, 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 net price, 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.

Notwithstanding the above, we prioritised one or more of the other execution factors in certain scenarios: (i) where 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 was not 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 is executed using an algorithm.

We have a degree of discretion in how to apply the different execution factors and this may have resulted in a range of different permissible approaches to executing client orders.

It should also be noted that where we are provided with specific instructions in relation to a trade or all trades via a particular execution channel, our relative prioritization of execution factors was limited to those elements of the execution not covered by the client's specific instructions.

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;

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

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

SIGMA X MTF – Goldman Sachs Bank Europe SE is under common ownership with Goldman Sachs International Bank which operates SIGMA X MTF, a multilateral trading facility for trading in European

equity and equity-like instruments. SIGMA X MTF is operated on an independent and segregated basis to other Goldman Sachs businesses. For further information on SIGMA X MTF please visit the SIGMA X MTF website at <http://gset.gs.com/sigmamaxmtf/>

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 GS 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*

Our 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.

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

For further details on the execution venues used by the Private Wealth Management Division and its conflicts of interest policy, please refer to 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;**

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 venues rules. Information on such arrangements is publically available on the relevant execution venues website. Our 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 fee structures or volume discounts.

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;

Not applicable.

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;

GS executed orders for professional clients of the Global Markets Division and the Private Wealth Management Division where the approach to order execution is consistent. GS also executes orders for eligible counterparties, however under applicable law and regulation GS is not obliged to provide best execution when it executes orders on behalf of eligible counterparties.

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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;

Not applicable.

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 relevant client transactions. Where appropriate market data is not available other criteria are used to review relevant client transactions for monitoring purposes. This monitoring is undertaken on a systematic basis via best execution monitoring systems or, where required, on a manual basis in accordance with internal monitoring policies and procedures. As part of its overall best execution monitoring framework and on-going assessment of execution venues utilised, GS may also take account of information published under RTS 27 by those execution venues (if applicable) alongside data sources used as part of its systematic best execution monitoring arrangements.

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

Emissions Allowances

N/A – Emission Allowances will be addressed under the MiFID II Commodities Derivatives and Emission Allowances Derivatives report.

Other Instruments

The data within the report is inclusive of order execution in Equity, Interest Rate and Commodity Derivatives executed on non-EU trading venues by GS Affiliates or Brokers. Please cross refer to the relevant asset class specific sections of this report for applicable commentary.