

Goldman Sachs International Bank: Best Execution Reports under RTS 28

This report has been prepared by Goldman Sachs International Bank ("Goldman Sachs") for the period ending 31 December 2018 (the "Reporting Period") for the purposes of meeting Goldman Sachs' regulatory obligations under Article 65(6) of Commission Delegated Regulation 2017/565 and Article 27(6) of Directive 2014/65/EU ("MiFID II") which requires Goldman Sachs to annually publish (i) the top five venues where it executed clients orders; and (ii) the top five firms to whom it transmitted or placed client orders for execution, in respect of each class of financial instruments noted below. This report also provides information on Goldman Sachs' assessment of the quality of execution it obtained from these execution venues and firms (based on its internal monitoring), for each class of financial instruments. Goldman Sachs does not guarantee the correctness or completeness of the information in this report and shall not be responsible for or have any liability whatsoever for any loss or damage caused by errors, inaccuracies or omissions in connection with use or reliance on this information. Goldman Sachs reserve the right to amend, update or re-state the information contained in this report at any time.

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Equities Shares & Depositary Receipts

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Equities - Shares & Depositary Receipts - Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)					
Class of Instrument	Equities - Shares & Depositary Receipts - Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Equities - Shares & Depositary Receipts - Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)					
Class of Instrument	Equities - Shares & Depositary Receipts - Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Equities Shares & Depositary Receipts

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Equities - Shares & Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Equities - Shares & Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Equities - Shares & Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Equities - Shares & Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Equities Shares & Depositary Receipts

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Equities - Shares & Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Equities - Shares & Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Goldman Sachs International Bank (GS) does not undertake client executions in this Asset Class.

Debt instruments: (i) Bonds

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Debt instruments: (i) Bonds			
Notification if <1 average trade per business day in the previous year		N			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
TREU - TRADEWEB EUROPE LIMITED	42.10	54.94	N/A	N/A	N/A
N9FYJ29MC81J174MJE92 - GOLDMAN SACHS INTERNATIONAL BANK	26.28	4.92	N/A	N/A	N/A
BMTF - BLOOMBERG TRADING FACILITY LIMITED	18.21	28.62	N/A	N/A	N/A
TRWB - TRADEWEB LLC	9.25	5.28	N/A	N/A	N/A
SSOB - BONDVISION EUROPE MTF	2.79	5.31	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Debt instruments: (i) Bonds			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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 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 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 determine we do owe a best execution obligation and subject to any specific instructions, GS will generally give the highest priority to net price. The remaining execution factors, to the extent relevant, are 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;

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

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 is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by GSIB and its conflicts of interest policy, please refer to the Securities 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 publicly 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.

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;

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

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. 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

Debt instruments: (ii) Money markets instruments

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Debt instruments: (ii) Money markets instruments				
Notification if <1 average trade per business day in the previous year		N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
N9FYJ29MC81J174MJE92 - GOLDMAN SACHS INTERNATIONAL BANK	40.92	9.31	N/A	N/A	N/A	
BMTF - BLOOMBERG TRADING FACILITY LIMITED	31.19	41.47	N/A	N/A	N/A	
TREU - TRADEWEB EUROPE LIMITED	18.20	40.00	N/A	N/A	N/A	
SSOB - BONDVISION EUROPE MTF	4.63	7.25	N/A	N/A	N/A	
TRWB - TRADEWEB LLC	3.09	1.57	N/A	N/A	N/A	

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Debt instruments: (ii) Money markets instruments				
Notification if <1 average trade per business day in the previous year		N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
N/A	N/A	N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	N/A	N/A	

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 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 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 determine we do owe a best execution obligation and subject to any specific instructions, GS will generally give the highest priority to net price. The remaining execution factors, to the extent relevant, are 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;

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

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 is determined, as applicable, by whether execution on such venues allows us to satisfy our best execution obligations or as necessary to interact with clients and is not influenced by any such ownership or revenue share arrangements.

For further details on the execution venues used by GSIB and its conflicts of interest policy, please refer to the Securities 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.

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;

We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

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. 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

Interest rates derivatives: (i) Futures and options admitted to trading on a trading venue

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Interest rates derivatives: (i) Futures and options admitted to trading on a trading venue					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Interest rates derivatives: (i) Futures and options admitted to trading on a trading venue				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Interest rates derivatives: (i) Futures and options admitted to trading on a trading venue					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Interest rates derivatives: (i) Futures and options admitted to trading on a trading venue				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Goldman Sachs International Bank does not undertake client executions in this Asset Class.

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

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Interest rates derivatives: (ii) Swaps, forwards, and other Interest rate derivatives					
Notification if <1 average trade per business day in the previous year					
N					
Class of Instrument	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Top five execution venues ranked in terms of trading volumes (descending order)					
N9FYJ29MC81J174MJE92 - GOLDMAN SACHS INTERNATIONAL BANK	100.00	100.00	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Interest rates derivatives: (ii) Swaps, forwards, and other Interest rate derivatives					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Top five execution venues ranked in terms of trading volumes (descending order)					
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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 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 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 determine we do owe a best execution obligation and subject to any specific instructions, GS will generally give the highest priority to net price. The remaining execution factors, to the extent relevant, are 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;
 Not applicable, as Goldman Sachs International Bank is the only execution venue for this class of financial instrument.

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, as Goldman Sachs International Bank is the only execution venue for this class of financial instrument.

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;
 We have revised our execution venues list for this asset class to remove those execution venues that are not used for the execution of client orders. Please note GS may use selected brokers venues, OTFs, SEFs, and other platforms as part of its hedging and price discovery process.

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 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 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

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

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Credit derivatives (i) Futures and options admitted to trading on a trading venue			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Credit derivatives (i) Futures and options admitted to trading on a trading venue			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Credit derivatives: (ii) Other credit derivatives

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Credit derivatives: (ii) Other credit derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Credit derivatives: (ii) Other credit derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

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

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Currency derivatives: (i) Futures and options admitted to trading on a trading venue					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Top five execution venues ranked in terms of trading volumes (descending order)					
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Currency derivatives: (i) Futures and options admitted to trading on a trading venue					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Top five execution venues ranked in terms of trading volumes (descending order)					
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Currency derivatives: (ii) Swaps, forwards, and other currency derivatives

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Currency derivatives: (ii) Swaps, forwards, and other currency derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Currency derivatives: (ii) Swaps, forwards, and other currency derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Structured finance instruments

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Structured finance instruments				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Structured finance instruments				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

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

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Equity Derivatives: (i) Options and Futures admitted to trading on a trading venue					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Top five execution venues ranked in terms of trading volumes (descending order)					
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Equity Derivatives: (i) Options and Futures admitted to trading on a trading venue					
Notification if <1 average trade per business day in the previous year					
N/A					
Class of Instrument	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Top five execution venues ranked in terms of trading volumes (descending order)					
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Equity Derivatives: (ii) Swaps and other equity derivatives

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Equity Derivatives: (ii) Swaps and other equity derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Equity Derivatives: (ii) Swaps and other equity derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Securitized Derivatives: (i) Warrants and Certificate Derivatives

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Securitized Derivatives: (i) Warrants and Certificate Derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Securitized Derivatives: (i) Warrants and Certificate Derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Securitized Derivatives: (ii) Other securitized derivatives

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Securitized Derivatives: (ii) Other securitized derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Securitized Derivatives: (ii) Other securitized derivatives			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Goldman Sachs International Bank 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

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument						Commodities derivatives and emission allowances Derivatives: (i) Options and Futures admitted to trading on a trading venue									
Notification if <1 average trade per business day in the previous year						N/A									
Top five execution venues ranked in terms of trading volumes (descending order)						Proportion of volume traded as a percentage of total in that class		Proportion of orders executed as percentage of total in that class		Percentage of passive orders		Percentage of aggressive orders		Percentage of directed orders	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument						Commodities derivatives and emission allowances Derivatives: (i) Options and Futures admitted to trading on a trading venue									
Notification if <1 average trade per business day in the previous year						N/A									
Top five execution venues ranked in terms of trading volumes (descending order)						Proportion of volume traded as a percentage of total in that class		Proportion of orders executed as percentage of total in that class		Percentage of passive orders		Percentage of aggressive orders		Percentage of directed orders	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	
N/A						N/A		N/A		N/A		N/A		N/A	

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

Commodities derivatives and emission allowances Derivatives: (ii) Other commodities derivatives and emission allowances derivatives

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument						Commodities derivatives and emission allowances Derivatives: (ii) Other commodities derivatives and emission allowances derivatives					
Notification if <1 average trade per business day in the previous year						N/A					
Top five execution venues ranked in terms of trading volumes (descending order)						Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument						Commodities derivatives and emission allowances Derivatives: (ii) Other commodities derivatives and emission allowances derivatives					
Notification if <1 average trade per business day in the previous year						N/A					
Top five execution venues ranked in terms of trading volumes (descending order)						Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	
N/A						N/A	N/A	N/A	N/A	N/A	

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

Contracts for difference

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Contracts for difference				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Reporting Entity: GSI
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Contracts for difference				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

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

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument		Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)*			
Notification if <1 average trade per business day in the previous year		N/A			
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Emission Allowances

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Emission Allowances				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Reporting Entity: GSI
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Emission Allowances				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

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

Other instruments

Reporting Entity: GSIB
 Top Five Venue Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Other instruments				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Top Five Broker Report
 Type of Client: Professional Client
 Reporting Entity: GSIB

Class of Instrument	Other instruments				
Notification if <1 average trade per business day in the previous year	N/A				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

N/A - There are no instruments that fall into this category in 2018