

## **Polygon Global Partners LLP MiFID II RTS 28 Top Five Execution Venue Reporting**

Art. 27 (6) of Directive 2014/65/EU on markets in financial instruments (MiFID II) requires investment firms who execute client orders to summarise and make public on an annual basis, for each class of financial instruments the top five execution venues in terms of trading volumes where they executed client orders in the preceding year and information on the quality of execution obtained.

Polygon Global Partners LLP (Firm) is authorised and regulated by the UK Financial Conduct Authority (FCA) to undertake advisory and discretionary management services on behalf of its clients. The Firm is producing the below information for the period 1 January 2018 to 31 December 2018 pursuant to MiFID II and the FCA Conduct of Business Sourcebook (COBS) 11 Annex 1 EU Regulatory Technical Standard 28 (RTS 28).

The Firm, in undertaking its review, has assessed the quality of execution it has received and identified the top five execution venues<sup>1</sup> (in terms of volumes of transactions executed) for the classes of Financial Instruments set forth in Annex I of COBS 11. Where the Firm did not trade at all in a class of Financial Instruments during the period, no data for that class is set forth below.

Although the Firm is not required to obtain the best possible result for clients on every occasion, it must be able to verify on an on-going basis that its execution arrangements are sufficient through the stages of the order execution process, including assessments of the relevant Execution Factors and Execution Criteria.

### General Notes

1. During the period, the Firm did not specify instructions requesting either passive or aggressive orders. The Firm does not instruct orders in a binary “passive” or “aggressive” manner for any instrument class. Additionally, the Firm did not trade on any trading venues as a direct member of or direct participant in such venues in circumstances where the Firm interacted with an order book maintained by the trading venue. Therefore, it considers this classification as irrelevant. Additionally, there were no orders in which a specific execution venue was specified by a client prior to the execution of that order. Therefore the “directed orders” classification was also irrelevant during 2018.
2. The Firm has excluded the following from these calculations:
  - movement of securities between custodians. These do not reflect changes in the Firm’s holdings or economic positions;
  - tri-party loan/“repo” agreements. Certain of the Firm’s securities financing transactions (SFTs) are tri-party. In these instances the Firm cannot identify the underlying collateral and has no active role in the trade other than determining the amount the Firm deposits in an escrow account and high level parameters for the collateral; and
  - general corporate actions. These include general corporate actions to which the Firm is subject as a security holder. They are generally mandatory or at the discretion of the issuer and applicable to all relevant position holders.

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<sup>1</sup> Execution venue means broker, trading venue, systematic internaliser, market maker, liquidity provider and/or third country entity providing a similar function.

<b>Class of Instrument</b>	<b>(a)(i) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)<sup>2</sup></b>				
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
UBS AG (BFM8T61CT2L1QCEMIK50)	14.75%	5.26%	0%	0%	0%
Goldman Sachs International (W22LROWP2IHZNBB6K528)	14.25%	25.73%	0%	0%	0%
Credit Suisse Securities (Europe) Limited (DL6FFRRLF74S01HE2M14)	12.07%	2.92%	0%	0%	0%
THE SEAPORT GROUP EUROPE LLP (2138003MLD2U3GEMHS70)	9.06%	7.02%	0%	0%	0%
JONESTRADING INTERNATIONAL LIMITED (213800DIYIKDWRCFOC55)	8.12%	8.77%	0%	0%	0%

<b>Class of Instrument</b>	<b>(a)(i) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)</b>	
<b>Summary</b>	<p>The Firm generally conducted its equity trading via “indirect” execution. Where the Firm places an order with a broker for execution, it is not responsible for controlling or influencing the arrangements made by the broker relating to the execution of that order (e.g., the Firm does not control the broker's choice of Execution Venues).</p> <p>Generally equities trades are executed through certain smart order routing tools using a limit order which enable the Firm to have access to a range of venues. This allows the Firm to maximize execution factors such as speed, price and likelihood of execution while minimizing potential conflicts of interest.</p>	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	For this class of instrument, the Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues’ aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.

<sup>2</sup> Tick size liquidity bands are as of 11 April 2019.

Class of Instrument	(a)(i) Equities - Shares and Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)	
	<p><b>Conflicts of interest</b> The Firm has no conflicts of interest to report.</p>	<p><b>Conflicts of interest</b> Not applicable.</p>
	<p><b>Common ownerships</b> The Firm has no common ownership to report.</p>	<p><b>Common ownerships</b> Not applicable.</p>
<p><b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b></p>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s Trading Supervision Management and Compliance Committee (TMSCC).</p>
<p><b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b></p>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<p><b>Differentiation across client categories</b></p>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<p><b>Use of data / tools relating to quality of execution</b></p>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

Class of Instrument	(a)(i) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)	
	<p>appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	

<b>Class of Instrument</b>	(a)(ii) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day) <sup>3</sup>				
<b>Notification if &lt;1 average trade per business day in 2018</b>	N				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
UBS AG (BFM8T61CT2L1QCEMIK50)	24.87%	24.64%	0%	0%	0%
Goldman Sachs International (W22LROWP2IHZNBB6K528)	14.54%	24.64%	0%	0%	0%
Citigroup Global Markets Limited (XKZZ2JZF41MRHTR1V493)	7.76%	1.08%	0%	0%	0%
NUMIS SECURITIES LIMITED (213800P3F4RT97WDSX47)	5.73%	7.55%	0%	0%	0%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	4.90%	1.26%	0%	0%	0%

<b>Class of Instrument</b>	(a)(ii) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)	
<b>Summary</b>	<p>The Firm generally conducted its equity trading via “indirect” execution. Where the Firm places an order with a broker for execution, it is not responsible for controlling or influencing the arrangements made by the broker relating to the execution of that order (<i>e.g.</i>, the Firm does not control the broker's choice of Execution Venues).</p> <p>Generally equities trades are executed through certain smart order routing tools using a limit order which enable the Firm to have access to a range of venues. This allows the Firm to maximize execution factors such as speed, price and likelihood of execution while minimizing potential conflicts of interest.</p>	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	For this class of instrument, the Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues’ aggregate concentration as compared to the total relevant volume.
	<b>Close links</b>	<b>Close links</b>

<sup>3</sup> Tick size liquidity bands are as of 11 April 2019.

<b>Class of Instrument</b>	(a)(ii) Equities - Shares and Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)	
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	The Firm has no close links to report.	Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.

<b>Class of Instrument</b>	(a)(ii) Equities - Shares and Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)	
	<p>keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	

<b>Class of Instrument</b>	(a)(iii) Equities - Shares and Depository Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day) <sup>4</sup>				
<b>Notification if &lt;1 average trade per business day in 2018</b>	N				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
RBC Europe Limited (TXDSU46SXBWIGJ8G8E98)	18.98%	15.35%	0%	0%	0%
Desjardins Securities Inc. (549300ZG5E3QCXPEEF56)	9.95%	7.73%	0%	0%	0%
SMBC Nikko Capital Markets Limited (G7WFA3G3MT5YHH8CHG81)	7.92%	14.01%	0%	0%	0%
Scotiabank Europe PLC (5G6NVP4WADOI32VUUB17)	6.89%	11.04%	0%	0%	0%
NORTHERN TRUST SECURITIES LLP (549300EF8AZLRG0UC208)	5.37%	1.40%	0%	0%	0%

<b>Class of Instrument</b>	(a)(iii) Equities - Shares and Depository Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)	
<b>Summary</b>	<p>The Firm generally conducted its equity trading via “indirect” execution. Where the Firm places an order with a broker for execution, it is not responsible for controlling or influencing the arrangements made by the broker relating to the execution of that order (e.g., the Firm does not control the broker's choice of Execution Venues).</p> <p>Generally equities trades are executed through certain smart order routing tools using a limit order which enable the Firm to have access to a range of venues. This allows the Firm to maximize execution factors such as speed, price and likelihood of execution while minimizing potential conflicts of interest.</p>	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	For this class of instrument, the Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues’ aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b>	<b>Conflicts of interest</b>

<sup>4</sup> Tick size liquidity bands are as of 11 April 2019.



<b>Class of Instrument</b>	(a)(iii) Equities - Shares and Depositary Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)	
	The Firm has no conflicts of interest to report.	Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data.</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.

Class of Instrument	(a)(iii) Equities - Shares and Depositary Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)	
	<p>The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	

Class of Instrument	(a) Equities - Shares and Depository Receipts <sup>5</sup>				
Notification if <1 average trade per business day in 2018	Y				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
TD Securities Inc. (5493006RJSLS5DA4PD75)	20.63%	1.33%	0%	0%	0%
NORTHERN TRUST SECURITIES LLP (549300EF8AZLRG0UC208)	20.03%	14.67%	0%	0%	0%
Morgan Stanley & Co. International PLC (4PQUHN3JPFQFNF3BB653)	12.71%	14.67%	0%	0%	0%
Jefferies International Limited (S5THZMDUJCTQZBTRVI98)	9.22%	21.33%	0%	0%	0%
KCG EUROPE LIMITED (549300346EFUPFCXJT79)	5.65%	2.67%	0%	0%	0%

Class of Instrument	(a) Equities - Shares and Depository Receipts	
<b>Summary</b>	<p>The Firm generally conducted its equity trading via “indirect” execution. Where the Firm places an order with a broker for execution, it is not responsible for controlling or influencing the arrangements made by the broker relating to the execution of that order (e.g., the Firm does not control the broker's choice of Execution Venues).</p> <p>Generally equities trades are executed through certain smart order routing tools using a limit order which enable the Firm to have access to a range of venues. This allows the Firm to maximize execution factors such as speed, price and likelihood of execution while minimizing potential conflicts of interest.</p>	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	For this class of instrument, the Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues’ aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b>	<b>Conflicts of interest</b>

<sup>5</sup> This category covers instruments without a tick size liquidity band as of 11 April 2019.

Class of Instrument	(a) Equities - Shares and Depository Receipts	
	The Firm has no conflicts of interest to report.	Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

Class of Instrument	(a) Equities - Shares and Depositary Receipts	
	<p>The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	

Class of Instrument	(b)(i) Debt Instruments - Bonds <sup>6</sup>				
Notification if <1 average trade per business day in 2018	Y				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	12.33%	14.08%	0%	0%	0%
Goldman Sachs International (W22LROWP2IHZNBB6K528)	11.24%	8.80%	0%	0%	0%
Credit Suisse Securities (Europe) Limited (DL6FFRRLF74S01HE2M14)	9.34%	7.39%	0%	0%	0%
BNP PARIBAS (R0MUWSFPU8MPRO8K5P83)	8.95%	5.99%	0%	0%	0%
Citigroup Global Markets Limited (XKZZ2JZF41MRHTR1V493)	6.82%	5.63%	0%	0%	0%

Class of Instrument	(b)(i) Debt Instruments - Bonds	
	Summary of analysis	Conclusion
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity.	Consideration of these factors, including limited liquidity, is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and	The Firm operated within its regulatory obligations in respect of these specific arrangements.  The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of

<sup>6</sup> The price of the bonds with accrual has been used in the calculation above.

<b>Class of Instrument</b>	<b>(b)(i) Debt Instruments - Bonds</b>	
	<p>entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

Class of Instrument	(b)(ii) Debt Instruments - Money Markets				
Notification if <1 average trade per business day in 2018	Y				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Goldman Sachs International (W22LROWP2IHZNBB6K528)	38.26%	41.67%	0%	0%	0%
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX8D621K86)	32.65%	16.67%	0%	0%	0%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	12.81%	8.33%	0%	0%	0%
MIZUHO INTERNATIONAL PLC (213800HZ54TG54H2KV03)	9.78%	16.67%	0%	0%	0%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	3.26%	8.33%	0%	0%	0%

Class of Instrument	(b)(ii) Debt Instruments - Money Markets	
	Summary of analysis	Conclusion
<b>Execution factors</b>	The Firm generally looks at price, transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors, including limited liquidity and the Firm's limited trading in this class of instrument, is demonstrated by the spread of trades on the venue listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes	The Firm operated within its regulatory obligations in respect of these specific arrangements.  The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on



<b>Class of Instrument</b>	(b)(ii) Debt Instruments - Money Markets	
	<p>that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

Class of Instrument	(d)(ii) Credit Derivatives - Other Credit Derivatives				
Notification if <1 average trade per business day in 2018	Y				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Merrill Lynch, Pierce, Fenner & Smith Incorporated (8NAV47TOY26Q87Y0QP81)	23.26%	17.24%	0%	0%	0%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	18.90%	27.59%	0%	0%	0%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	15.37%	17.24%	0%	0%	0%
Credit Suisse Securities (Europe) Limited (DL6FFRRLF74S01HE2M14)	14.82%	13.79%	0%	0%	0%
BNP PARIBAS (R0MUWSFPU8MPRO8K5P83)	14.79%	10.34%	0%	0%	0%

Class of Instrument	(d)(ii) Credit Derivatives - Other Credit Derivatives	
	Summary of analysis	Conclusion
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity. Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet).	Consideration of these factors, including limited liquidity, is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.

Class of Instrument	(d)(ii) Credit Derivatives - Other Credit Derivatives	
<p><b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b></p>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<p><b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b></p>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<p><b>Differentiation across client categories</b></p>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<p><b>Use of data / tools relating to quality of execution</b></p>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

<b>Class of Instrument</b>	(d)(ii) Credit Derivatives - Other Credit Derivatives	
	2018 trading because no consolidated tape providers were in operation in the EEA during 2018.	

Class of Instrument	(e)(ii) Currency Derivatives – Options and Futures admitted on a trading venue				
Notification if <1 average trade per business day in 2018	Y				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS AG (BFM8T61CT2L1QCEMIK50)	NaN	50.00%	0%	0%	0%
Société Générale SA (O2RNE8IBXP4R0TD8PU41)	NaN	33.33%	0%	0%	0%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	NaN	16.67%	0%	0%	0%

Class of Instrument	(e)(ii) Currency Derivatives – Options and Futures admitted on a trading venue	
	Summary of analysis	Conclusion
Execution factors	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity. Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as credit limits, willingness of a counterparty to accept the risk on its balance sheet).	Consideration of these factors, including limited liquidity, is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
Close links, conflicts of interest and common ownership with respect to execution venues	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes	The Firm operated within its regulatory obligations in respect of these specific arrangements.  The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on

<b>Class of Instrument</b>	(e)(ii) Currency Derivatives – Options and Futures admitted on a trading venue	
	<p>that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

<b>Class of Instrument</b>	(f) Structured finance instruments				
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
BARCLAYS CAPITAL INC. (AC28XWWI3WIBK2824319)	100.00%	100.00%	0%	0%	0%

<b>Class of Instrument</b>	(f) Structured finance instruments	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity. Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet).	Consideration of these factors, including limited liquidity, is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.	The Firm operated within its regulatory obligations in respect of these specific arrangements.  The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm's TMSCC.

<b>Class of Instrument</b>	(f) Structured finance instruments	
	The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.	
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.



Class of Instrument	(g)(i) Equity Derivatives - Options and Futures Admitted to Trading on a Trading Venue <sup>7</sup>				
Notification if <1 average trade per business day in 2018	N				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	31.97%	32.85%	0%	0%	0%
Goldman Sachs International (W22LROWP2IHZNBB6K528)	23.76%	22.67%	0%	0%	0%
UBS AG (BFM8T61CT2L1QCEMIK50)	23.08%	22.38%	0%	0%	0%
Société Générale SA (O2RNE8IBXP4R0TD8PU41)	21.08%	21.22%	0%	0%	0%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	0.07%	0.58%	0%	0%	0%

Class of Instrument	(g)(i) Equity Derivatives - Options and Futures Admitted to Trading on a Trading Venue	
	Summary of analysis	Conclusion
<b>Execution factors</b>	The Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received,</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements	The Firm operated within its regulatory obligations in respect of these specific arrangements.

<sup>7</sup> The Firm has calculated the notional value of options without a delta adjustment. Listed options and listed futures with the same type of underlying security are classified as the same class of financial instrument and over-the-counter options, swaps and forwards with the same underlying security are classified as the same class of financial instrument. As such, the Firm has elected to use notional value as the measure for all options.

<b>Class of Instrument</b>	<b>(g)(i) Equity Derivatives - Options and Futures Admitted to Trading on a Trading Venue</b>	
<b>discounts, rebates or non-monetary benefits received</b>	<p>in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

Class of Instrument	(g)(ii) Equity Derivatives - Swaps and Other Equity Derivatives <sup>8</sup>				
Notification if <1 average trade per business day in 2018	Y				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Société Générale SA (O2RNE8IBXP4R0TD8PU41)	36.93%	35.05%	0%	0%	0%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	31.06%	14.43%	0%	0%	0%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	21.30%	17.53%	0%	0%	0%
UBS AG (BFM8T61CT2L1QCEMIK50)	10.43%	41.24%	0%	0%	0%
Credit Suisse AG (ANGGYXNX0JLX3X63JN86)	0.28%	1.03%	0%	0%	0%

Class of Instrument		
	Summary of analysis	Conclusion
<b>Execution factors</b>	The Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity). Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant	Consideration of these factors, including limited liquidity, is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.

<sup>8</sup> Transactions that are included within the equity derivatives (swaps and other equity derivatives) instrument class are often effected in connection with the Firm seeking “indicative pricing” from a v. If the indicative pricing is acceptable to the Firm, the broker then enters into a cash equity transaction with the relevant swap counterparty and a corresponding swap arises between the swap counterparty and the underlying fund or funds on whose behalf the Firm is acting. Although the pricing of the cash equities transaction influences the pricing of the related swap, the Firm has not included the indicative pricing activity conducted with brokers in the analysis of its top five execution venues above (or in the equities instrument class) because the Firm does not execute (or transmit or place orders that give rise to) such cash equities transactions. Instead, the Firm has, for the purposes of the equity derivatives instrument class, counted only the swap transactions to which the relevant funds are party (and has treated its involvement in effecting those transactions as a form of execution, with the consequence that it has categorised the relevant swap counterparties as execution venues rather than brokers). Additionally, each of these swaps allocated to a single counterparty is counted as a separate order. The calculation for this report takes into account two types of equity derivative trades - contracts for difference and variance and volatility swaps. The comparative size of these two notional value of the different types of swaps may have affected the calculation of our “top five”.

Class of Instrument		
	agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet).	
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.

Class of Instrument		
	<p>venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	

<b>Class of Instrument</b>	(h)(i) Securitized Derivatives - Warrants and Certificate Derivatives				
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
KEPLER CHEUVREUX (9695005EOZG9X8IRJD84)	69.11%	75.00%	0%	0%	0%
Cantor Fitzgerald Europe (549300KM6VUHPKQLQX53)	30.89%	25.00%	0%	0%	0%

<b>Class of Instrument</b>	(h)(i) Securitized Derivatives - Warrants and Certificate Derivatives	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity. Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet).	Consideration of these factors, including limited liquidity, is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.	The Firm operated within its regulatory obligations in respect of these specific arrangements.  The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings.

Class of Instrument	(h)(i) Securitized Derivatives - Warrants and Certificate Derivatives	
	<p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>Payments and testing were reviewed by the Firm’s TMSCC.</p>
<p><b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b></p>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<p><b>Differentiation across client categories</b></p>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<p><b>Use of data / tools relating to quality of execution</b></p>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

Class of Instrument	(h)(ii) Securitized Derivatives - Other Securitized Derivatives				
Notification if <1 average trade per business day in 2018	Y				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
SMBC Nikko Capital Markets Limited (G7WFA3G3MT5YHH8CHG81)	77.85%	3.33%	0%	0%	0%
OLIVETREE FINANCIAL LIMITED (213800WJG33TNCVZK61)	22.04%	66.67%	0%	0%	0%
Credit Suisse Securities (Europe) Limited (DL6FFRRLF74S01HE2M14)	0.11%	16.67%	0%	0%	0%
UBS AG (BFM8T61CT2L1QCEMIK50)	0.00%	6.67%	0%	0%	0%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	0.00%	6.67%	0%	0%	0%

Class of Instrument	(h)(ii) Securitized Derivatives - Other Securitized Derivatives	
	Summary of analysis	Conclusion
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity. Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet).	Consideration of these factors, including limited liquidity and the Firm's limited trading in this class of instrument, is demonstrated by the spread of trades across the venue listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.



Class of Instrument	(h)(ii) Securitized Derivatives - Other Securitized Derivatives	
<p><b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b></p>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<p><b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b></p>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<p><b>Differentiation across client categories</b></p>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<p><b>Use of data / tools relating to quality of execution</b></p>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

<b>Class of Instrument</b>	(h)(ii) Securitized Derivatives - Other Securitized Derivatives	
	2018 trading because no consolidated tape providers were in operation in the EEA during 2018.	

<b>Class of Instrument</b>	(i)(i) Commodities Derivatives - Options and Futures Admitted to Trading on a Trading Venue <sup>9</sup>				
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	NaN	100.00%	0%	0%	0%

<b>Class of Instrument</b>	(i)(i) Commodities Derivatives - Options and Futures Admitted to Trading on a Trading Venue	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity. Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet).	Consideration of these factors, including limited liquidity and the Firm's limited trading in this class of instrument, is demonstrated by the spread of trades across the venue listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes	The Firm operated within its regulatory obligations in respect of these specific arrangements.  The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on

<sup>9</sup> The Firm has calculated the notional value of options without a delta adjustment. Listed options and listed futures with the same type of underlying security are classified as the same class of financial instrument and over-the-counter options, swaps and forwards with the same underlying security are classified as the same class of financial instrument. As such the Firm has elected to use notional value as the measure for all options.

<b>Class of Instrument</b>	<b>(i)(i) Commodities Derivatives - Options and Futures Admitted to Trading on a Trading Venue</b>	
	<p>that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

Class of Instrument	(j) Contracts for Difference				
Notification if <1 average trade per business day in 2018	N				
Top five execution venues ranked in terms of trading volume (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
BNP PARIBAS (ROMUWSFPU8MPRO8K5P83)	19.99%	10.12%	0%	0%	0%
Credit Suisse AG (ANGGYXNX0JLX3X63JN86)	16.71%	20.46%	0%	0%	0%
UBS AG (BFM8T61CT2L1QCEMIK50)	13.13%	22.39%	0%	0%	0%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	11.95%	8.56%	0%	0%	0%
Société Générale SA (O2RNE8IBXP4R0TD8PU41)	11.56%	10.11%	0%	0%	0%

Class of Instrument	(j) Contracts for Difference	
	Summary of analysis	Conclusion
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity. Additionally the Firm may also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.

Class of Instrument	(j) Contracts for Difference	
<p><b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b></p>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<p><b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b></p>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<p><b>Differentiation across client categories</b></p>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<p><b>Use of data / tools relating to quality of execution</b></p>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

<b>Class of Instrument</b>	(j) Contracts for Difference	
	2018 trading because no consolidated tape providers were in operation in the EEA during 2018.	

<b>Class of Instrument</b>	(k) Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)				
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
Credit Suisse Securities (Europe) Limited (DL6FFRRLF74S01HE2M14)	34.58%	12.87%	0%	0%	0%
Scotiabank Europe PLC (5G6NVP4WADOI32VUUB17)	15.25%	11.76%	0%	0%	0%
RBC Europe Limited (TXDSU46SXBWIGJ8G8E98)	9.18%	17.65%	0%	0%	0%
BMO Capital Markets Limited (L64HM9LHPDOS1B9HJC68)	6.96%	11.76%	0%	0%	0%
Desjardins Securities Inc. (549300ZG5E3QCXPEEF56)	5.87%	13.97%	0%	0%	0%

<b>Class of Instrument</b>	(k) Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this	The Firm operated within its regulatory obligations in respect of these specific arrangements.



<b>Class of Instrument</b>	(k) Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)	
	<p>report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

<b>Class of Instrument</b>	(m) Other Instruments <sup>10</sup>				
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y				
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>	<b>Percentage of passive orders</b>	<b>Percentage of aggressive orders</b>	<b>Percentage of directed orders</b>
UBS AG (BFM8T61CT2L1QCEMIK50)	100.00%	100.00%	0%	0%	0%

<b>Class of Instrument</b>	(m) Other Instruments	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at price and transaction cost (especially in the cases of greater transparency and/or liquidity). Other factors that may be considered include likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity (especially in the case of less transparency and/or liquidity).	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm's TMSCC.</p>

<sup>10</sup> "Other" includes Asset Swapped Convertible Option Transactions.

<b>Class of Instrument</b>	(m) Other Instruments	
	“minor non-monetary benefits”) with any of the entities listed in this disclosure form.	
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms is in a format that is difficult to use/assess and the Firm is not aware of any products that are currently available that facilitate a comparative analysis of the performance of the relevant brokers and venues enable using the RTS 27 data. Consequently, the Firm has not used the RTS 27 data this year in carrying out analysis of the quality of execution. The Firm will keep this approach under review, particularly if appropriately priced products become available which enable market participants to make better use of the data. The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.

<b>Class of Instrument</b>	Securities Financing Transactions (a)(i) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day) <sup>11</sup>	
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y	
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>
Credit Suisse AG (ANGGYXNX0JLX3X63JN86)	29.21%	10.81%
UBS AG (BFM8T61CT2L1QCEMIK50)	22.25%	37.84%
The Bank of Nova Scotia (L3I9ZG2KFGXZ61BMYR72)	19.57%	16.22%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	13.22%	13.51%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	11.29%	2.70%

<b>Class of Instrument</b>	Securities Financing Transactions (a)(i) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Secondly, the Firm will also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet). Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity.	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b>	<b>Common ownerships</b>

<sup>11</sup> Tick size liquidity bands are as of 11 April 2019.

<b>Class of Instrument</b>	Securities Financing Transactions (a)(i) Equities - Shares and Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)	
	The Firm has no common ownership to report.	Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms does not differentiate securities financing transactions and the Firm is not sure that the data that has been published includes data relating to such transactions. Therefore, the Firm has not used any RTS 27 data in relation to securities financing transactions.</p> <p>The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.

<b>Class of Instrument</b>	Securities Financing Transactions (a)(ii) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day) <sup>12</sup>	
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y	
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>
BMO Nesbitt Burns Inc (M3LKFDNSJGJ7TMLH6Z15)	36.82%	0.93%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	29.27%	50.00%
The Bank of Nova Scotia (L3I9ZG2KFGXZ61BMYR72)	24.39%	28.70%
UBS AG (BFM8T61CT2L1QCEMIK50)	4.73%	10.19%
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX8D621K86)	3.92%	7.41%

<b>Class of Instrument</b>	Securities Financing Transactions (a)(ii) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Secondly, the Firm will also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet). Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity.	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.

<sup>12</sup> Tick size liquidity bands are as of 11 April 2019.

<b>Class of Instrument</b>	Securities Financing Transactions (a)(ii) Equities - Shares and Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)	
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms does not differentiate securities financing transactions and the Firm is not sure that the data that has been published includes data relating to such transactions. Therefore, the Firm has not used any RTS 27 data in relation to securities financing transactions.</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.

<b>Class of Instrument</b>	Securities Financing Transactions (a)(ii) Equities - Shares and Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)	
	The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.	



<b>Class of Instrument</b>	Securities Financing Transactions (a)(iii) Equities - Shares and Depository Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day) <sup>13</sup>	
<b>Notification if &lt;1 average trade per business day in 2018</b>	N	
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>
The Bank of Nova Scotia (L3I9ZG2KFGXZ61BMYR72)	31.06%	44.96%
BMO Nesbitt Burns Inc (M3LKFDNSJGJ7TMLH6Z15)	29.95%	5.81%
UBS AG (BFM8T61CT2L1QCEMIK50)	19.62%	20.83%
Credit Suisse AG (ANGGYXNX0JLX3X63JN86)	11.82%	17.93%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	3.98%	6.10%

<b>Class of Instrument</b>	Securities Financing Transactions (a)(iii) Equities - Shares and Depository Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Secondly, the Firm will also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet). Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity.	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b>	<b>Common ownerships</b>

<sup>13</sup> Tick size liquidity bands are as of 11 April 2019.

<b>Class of Instrument</b>	Securities Financing Transactions (a)(iii) Equities - Shares and Depositary Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)	
	The Firm has no common ownership to report.	Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	<p>During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm operated within its regulatory obligations in respect of these specific arrangements.</p> <p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms does not differentiate securities financing transactions and the Firm is not sure that the data that has been published includes data relating to such transactions. Therefore, the Firm has not used any RTS 27 data in relation to securities financing transactions.</p> <p>The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.

<b>Class of Instrument</b>	Securities Financing Transactions (a) Equities - Shares and Depository Receipts <sup>14</sup>	
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y	
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>
UBS AG (BFM8T61CT2L1QCEMIK50)	100.00%	100.00%

<b>Class of Instrument</b>		
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Secondly, the Firm will also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet). Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity.	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.	The Firm operated within its regulatory obligations in respect of these specific arrangements.  The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings.

<sup>14</sup> This category covers instruments without a tick size liquidity band as of 11 April 2019.

<b>Class of Instrument</b>		
	<p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms does not differentiate securities financing transactions and the Firm is not sure that the data that has been published includes data relating to such transactions. Therefore, the Firm has not used any RTS 27 data in relation to securities financing transactions.</p> <p>The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

<b>Class of Instrument</b>	Securities Financing Transactions (b)(i) Debt Instruments - Bonds	
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y	
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>
Credit Suisse AG (ANGGYXNX0JLX3X63JN86)	53.59%	43.55%
The Bank of Nova Scotia (L3I9ZG2KFGXZ61BMYR72)	18.94%	24.19%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	13.89%	20.97%
Deutsche Bank Aktiengesellschaft (7LTFWFZYICNSX8D621K86)	13.58%	11.29%

<b>Class of Instrument</b>	Securities Financing Transactions (b)(i) Debt Instruments - Bonds	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Secondly, the Firm will also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet). Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity.	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID II research agreements and corporate access agreements in place with certain execution venues listed in this	The Firm operated within its regulatory obligations in respect of these specific arrangements.

<b>Class of Instrument</b>	Securities Financing Transactions (b)(i) Debt Instruments - Bonds	
	<p>report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	<p>The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.</p>
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	<p>Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.</p>	<p>The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.</p>
<b>Differentiation across client categories</b>	<p>All of the Firm’s clients are professional.</p>	<p>Not applicable.</p>
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms does not differentiate securities financing transactions and the Firm is not sure that the data that has been published includes data relating to such transactions. Therefore, the Firm has not used any RTS 27 data in relation to securities financing transactions.</p> <p>The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	<p>From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.</p>

<b>Class of Instrument</b>	Securities Financing Transactions (k) Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)	
<b>Notification if &lt;1 average trade per business day in 2018</b>	Y	
<b>Top five execution venues ranked in terms of trading volume (descending order)</b>	<b>Proportion of volume traded as a percentage of total in that class</b>	<b>Proportion of orders executed as a percentage of total in that class</b>
The Bank of Nova Scotia (L3I9ZG2KFGXZ61BMYR72)	57.67%	59.81%
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	28.64%	6.54%
Credit Suisse AG (ANGGYXNX0JLX3X63JN86)	12.95%	28.97%
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	0.74%	4.67%

<b>Class of Instrument</b>	Securities Financing Transactions (k) Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)	
	<b>Summary of analysis</b>	<b>Conclusion</b>
<b>Execution factors</b>	The Firm generally looks at liquidity, likelihood of execution, speed of execution and other factors such as the specific expertise or history of liquidity, given the generally illiquid nature of the securities traded. Secondly, the Firm will also consider other implicit transaction or administrative costs, such as whether the required infrastructure is in place or would require implementation ( <i>i.e.</i> , relevant agreements such as an ISDA Master Agreement, credit limits, willingness of a counterparty to accept the risk on its balance sheet). Price and transaction cost may become more relevant factors in cases of greater transparency and/or liquidity.	Consideration of these factors is demonstrated by the spread of trades across the top venues listed and the top venues' aggregate concentration as compared to the total relevant volume.
<b>Close links, conflicts of interest and common ownership with respect to execution venues</b>	<b>Close links</b> The Firm has no close links to report.	<b>Close links</b> Not applicable.
	<b>Conflicts of interest</b> The Firm has no conflicts of interest to report.	<b>Conflicts of interest</b> Not applicable.
	<b>Common ownerships</b> The Firm has no common ownership to report.	<b>Common ownerships</b> Not applicable.
<b>Specific arrangements with execution venues regarding payments made or received,</b>	During the period, in addition to payments made in respect of execution of transaction, the Firm had MiFID	The Firm operated within its regulatory obligations in respect of these specific arrangements.

<b>Class of Instrument</b>	Securities Financing Transactions (k) Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange Traded Commodities)	
<b>discounts, rebates or non-monetary benefits received</b>	<p>If research agreements and corporate access agreements in place with certain execution venues listed in this report. The Firm also received business gifts and entertainment during the period. Further, the Firm notes that certain of its prime brokers, or their affiliates, may also appear in the RTS 28 disclosure below.</p> <p>The Firm did not have in place any other arrangements for payment, discounts, rebates or other non-monetary benefits (other than those which may be classified as “minor non-monetary benefits”) with any of the entities listed in this disclosure form.</p>	The Firm conducted testing against its Compliance Manual, including its Order Execution Policy, Code of Ethics, Conflicts Mitigation Policy and Policy on Research and Use of Research Payment Accounts during the period and had no material findings. Payments and testing were reviewed by the Firm’s TMSCC.
<b>Factors leading to a change in the list of execution venues listed in the Order Execution Policy</b>	Changes to the list of execution venues in the Firm’s Order Execution Policy during 2018 were monitored by the TMSCC, including on boarding and ongoing diligencing and review.	The TMSCC’s oversight of changes to the list of execution venues was appropriate during the period.
<b>Differentiation across client categories</b>	All of the Firm’s clients are professional.	Not applicable.
<b>Use of data / tools relating to quality of execution</b>	<p>The Firm utilised a Transaction Cost Analysis monitoring system to track and review execution quality received. These monitoring reports are received by the Firm on a quarterly basis and reviewed by the TMSCC.</p> <p>RTS 27 data became available for the first time during 2018. However, the raw data published by venues and relevant investment firms does not differentiate securities financing transactions and the Firm is not sure that the data that has been published includes data relating to such transactions. Therefore, the Firm has not used any RTS 27 data in relation to securities financing transactions.</p> <p>The Firm did not use output from consolidated tape providers to monitor execution quality in relation to 2018 trading because no consolidated tape providers were in operation in the EEA during 2018.</p>	From its monitoring activities, the Firm is satisfied that the results (in terms of quality of execution) obtained from the execution venues listed above are consistent with the execution factors to which the Firm ascribes the most importance for this instrument class.