

Firm: Farallon Capital Europe LLP (“**Firm**”)

Calendar Year Disclosure Period: 1 January 2018 to 31 December 2018

Date: 30 April 2019

Summary of classes of instruments included in this report, and class of instruments not included in this report (because the Firm has not executed client orders in that class of instruments during the relevant disclosure period):

Classes of instruments included in this report	Classes of instruments not included in this report
<ul style="list-style-type: none">• Equities – Shares & Depositary Receipts – Tick size liquidity bands 5 and 6 (from 2000 trades per day)• Equities – Shares & Depositary Receipts – Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)• Equities – Shares & Depositary Receipts – Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)• Debt instruments - Bonds• Credit derivatives - Other credit derivatives• Equity Derivatives - Options and Futures admitted to trading on a trading venue• Equity Derivatives - Swaps and other equity derivatives• Securitized Derivatives - Other securitized derivatives• Interest rates derivatives - Futures and options admitted to trading on a trading venue• Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)	<ul style="list-style-type: none">• Debt instruments - Money markets instruments• Interest rates derivatives - Swaps, forwards, and other interest rates derivatives• Credit derivatives - Futures and options admitted to trading on a trading venue• Currency derivatives - Futures and options admitted to trading on a trading venue• Currency derivatives - Swaps, forwards, and other currency derivatives• Structured finance instruments• Securitized Derivatives - Warrants and Certificate Derivatives• Commodities derivatives and emission allowances Derivatives - Options and Futures admitted to trading on a trading venue• Commodities derivatives and emission allowances Derivatives - Other commodities derivatives and emission allowances derivatives• Contracts for difference

	<ul style="list-style-type: none"> • Emission allowances • Other instruments
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1. Equities – Shares & Depository Receipts – Tick size liquidity bands 5 and 6 (from 2000 trades per day)

Top five entities (brokers)

Class of Instrument	Equities – Shares & Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)				
Notification if <1 average trade per business day in the previous year	N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Morgan Stanley & Co. International PLC (LEI: 4PQUHN3JPFQFNF3BB653)	19.9%	26.7%	N/A	N/A	0%
Merrill Lynch International (LEI: GGDZP1UYGU9STUHRDP48)	15.7%	16.8%	N/A	N/A	0%
UBS Limited (LEI: REYPIEJN7XZHSUI0N355)	13.9%	13.7%	N/A	N/A	0%
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	13.3%	14.2%	N/A	N/A	0%
Liquidnet Europe Limited (LEI: 213800ZIRB79BE5XQM68)	8.8%	4.7%	N/A	N/A	0%

General observations	The Firm was satisfied with the quality of execution obtained from each of the brokers listed above for trading in the 'Equities – Shares & Depository Receipts – Tick size liquidity bands 5 and 6 (from 2000 trades per day)' asset class during
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	the relevant period and the Firm's hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the 'Equities – Shares & Depositary Receipts – Tick size liquidity bands 5 and 6 (from 2000 trades per day)' asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of price and transaction cost. However, where relevant (and in accordance with the flexibility afforded to the Firm by its Order Execution policy), the Firm also considered (without limitation) changing volume patterns, news flow impacting the trading pattern of the stock, block trading flow, equity volatility, trader knowledge or market colour regarding supply/demand imbalances, bid/ask spread, size and time of day	The relative importance given to the execution factors was in line with the Firm's order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues	There were only changes made to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy where the Firm deemed this necessary or desirable to achieve	N/A

listed in the Order Execution Policy	best execution	
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools relating to quality of execution	<p>The Firm used TCA data from Liquidmetrix to support its assessment of quality of execution.</p> <p>In particular, members of the Firm's Trading and Legal & Compliance teams undertook regular best execution monitoring throughout 2018. This review considered (among other things) TCA reports, execution quality reports and daily order reports produced by LiquidMetrix, which were tailored for the Firm and set out various TCA data/analysis, including (amongst other things):</p> <ul style="list-style-type: none"> • performance by buy/sell; • performance breakdown by country; • performance breakdown by trader; • performance breakdown by broker; • performance breakdown by portfolio manager; • worst performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics); and • best performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics). <p>In respect of trades that could not be meaningfully analysed by reviewing the data in the TCA reports (for instance, merger and risk arbitrage trades where the spread is relevant), Legal & Compliance regularly selected a number of such trades throughout 2018 and the best execution monitoring team monitored such trades separately by considering relevant trading records and market data (for instance,</p>	N/A

	<p>relevant intra-day spread graphs).</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 to 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>In addition, the Firm considered other data and analytics, including TCA information provided to the Firm by its counterparties.</p>	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

2. Equities – Shares & Depositary Receipts – Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)

Top five entities (brokers)

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

	class				
Merrill Lynch International (LEI: GGDZP1UYGU9STUHRDP48)	41.4%	40.5%	N/A	N/A	0%
UBS Limited (LEI: REYPIEJN7XZHSUI0N355)	25.5%	21.6%	N/A	N/A	0%
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	10.5%	8.1%	N/A	N/A	0%
Liquidnet Europe Limited (LEI: 213800ZIRB79BE5XQM68)	7.8%	5.4%	N/A	N/A	0%
Credit Suisse Securities (Europe) Limited (LEI: DL6FFRRLF74S01HE2M14)	5.4%	5.4%	N/A	N/A	0%

General observations	The Firm was satisfied with the quality of execution obtained from each of the brokers listed above for trading in the 'Equities – Shares & Depositary Receipts – Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)' asset class during the relevant period and the Firm's hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the 'Equities – Shares & Depositary Receipts – Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)' asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of price and transaction cost. However, for those equities with lower liquidity, the Firm also considered the likelihood of execution, size, speed and nature of the order as primary considerations	The relative importance given to the execution factors was in line with the Firm's order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A

Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were only changes made to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy where the Firm deemed this necessary or desirable to achieve best execution	N/A
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools relating to quality of execution	<p>The Firm used TCA data from Liquidmetrix to support its assessment of quality of execution.</p> <p>In particular, members of the Firm's Trading and Legal & Compliance teams undertook regular best execution monitoring throughout 2018. This review considered (among other things) TCA reports, execution quality reports and daily order reports produced by LiquidMetrix, which were tailored for the Firm and set out various TCA data/analysis, including (amongst other things):</p> <ul style="list-style-type: none"> • performance by buy/sell; • performance breakdown by country; • performance breakdown by trader; • performance breakdown by broker; • performance breakdown by portfolio manager; • worst performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics); and 	N/A

	<ul style="list-style-type: none"> • best performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics). <p>In respect of trades that could not be meaningfully analysed by reviewing the data in the TCA reports (for instance, merger and risk arbitrage trades where the spread is relevant), Legal & Compliance regularly selected a number of such trades throughout 2018 and the best execution monitoring team monitored such trades separately by considering relevant trading records and market data (for instance, relevant intra-day spread graphs).</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 to 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>In addition, the Firm considered other data and analytics, including TCA information provided to the Firm by its counterparties.</p>	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

3. Equities – Shares & Depositary Receipts – Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)

Top five entities (brokers)

Class of Instrument	Equities – Shares & Depository Receipts - Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)				
Notification if <1 average trade per business day in the previous year	N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS AG (LEI: BFM8T61CT2L1QCEMIK50)	30.8%	26.4%	N/A	N/A	0%
Merrill Lynch International (LEI: GGDZP1UYGU9STUHRDP48)	13.4%	10.5%	N/A	N/A	0%
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	11.6%	14.5%	N/A	N/A	0%
J.P. Morgan Securities LLC (LEI: ZBUT11V806EZRVTWT807)	11.3%	3.0%	N/A	N/A	0%
BTIG Limited (LEI: 213800YZXS7U4QZP6441)	10.8%	21.7%	N/A	N/A	0%

General observations	The Firm was satisfied with the quality of execution obtained from each of the brokers listed above for trading in the ‘Equities – Shares & Depository Receipts – Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Equities – Shares & Depository Receipts – Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)’ asset class during the relevant period, given the majority of these equities have their primary listings abroad, the Firm generally placed the highest importance on the execution factors of price and transaction cost. In all other cases the Firm generally placed the highest importance on the execution factors of likelihood of execution and size. However, where relevant (and in accordance with the flexibility afforded to the	The relative importance given to the execution factors was in line with the Firm’s order execution policy

	Firm by its Order Execution policy), the Firm also considered (without limitation) changing volume patterns, news flow impacting the trading pattern of the stock, block trading flow, equity volatility, trader knowledge or market colour regarding supply/demand imbalances, bid/ask spread, size and time of day	
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were only changes made to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy where the Firm deemed this necessary or desirable to achieve best execution	N/A
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools relating to quality of execution	The Firm used TCA data from Liquidmetrix to support its assessment of quality of execution. In particular, members of the Firm's Trading and Legal &	N/A

Compliance teams undertook regular best execution monitoring throughout 2018. This review considered (among other things) TCA reports, execution quality reports and daily order reports produced by LiquidMetrix, which were tailored for the Firm and set out various TCA data/analysis, including (amongst other things):

- performance by buy/sell;
- performance breakdown by country;
- performance breakdown by trader;
- performance breakdown by broker;
- performance breakdown by portfolio manager;
- worst performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics); and
- best performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics).

In respect of trades that could not be meaningfully analysed by reviewing the data in the TCA reports (for instance, merger and risk arbitrage trades where the spread is relevant), Legal & Compliance regularly selected a number of such trades throughout 2018 and the best execution monitoring team monitored such trades separately by considering relevant trading records and market data (for instance, relevant intra-day spread graphs).

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 to 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. In addition, the Firm considered other data and analytics, including TCA information provided to the Firm by its counterparties.	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

4. Debt instruments - Bonds

Top 5 execution venues

Class of Instrument	Debt instruments - Bonds				
Notification if <1 average trade per business day in the previous year	Y				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Citigroup Global Markets Limited (LEI: XKZZ2JZF41MRHTR1V493)	17.59%	15.43%	N/A	N/A	0%
Jefferies International Limited (LEI: S5THZMDUJCTQZBTRVI98)	13.95%	10.49%	N/A	N/A	0%
Barclays Bank PLC (LEI: G5GSEF7VJP5I7OUK5573)	9.64%	9.88%	N/A	N/A	0%
HSBC Bank PLC (LEI: MP6I5ZYZBEU3UXPYFY54)	7.98%	10.49%	N/A	N/A	0%
DNB Bank ASA (LEI: 549300GKFG0RYRRQ1414)	5.92%	4.32%	N/A	N/A	0%

General observations	The Firm was satisfied with the quality of execution obtained from each of the venues listed above for trading in the ‘Debt instruments – Bonds’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Debt instruments – Bonds’ asset class during the relevant period, the Firm generally placed the highest importance on likelihood of execution as an execution factor, with price and minimisation of the potential market impact as secondary considerations	The relative importance given to the execution factors was in line with the Firm’s order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm’s Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm’s clients are professional clients	N/A

<p>Use of data / tools relating to quality of execution</p>	<p>The Firm used TCA data from Liquidmetrix to support its assessment of quality of execution.</p> <p>In particular, members of the Firm’s Trading and Legal & Compliance teams undertook regular best execution monitoring throughout 2018. This review considered (among other things) TCA reports, fixed income execution quality reports and daily order reports produced by LiquidMetrix, which were tailored for the Firm and set out various TCA data/analysis, including (amongst other things):</p> <ul style="list-style-type: none"> • performance by buy/sell; • performance breakdown by country; • performance breakdown by trader; • performance breakdown by broker; • performance breakdown by portfolio manager; • worst performing trades (against relevant benchmark metrics); and • best performing trades (against relevant benchmark metrics). <p>The best execution monitoring team also considered relevant credit runs for fixed income trades to supplement the fixed income reference data used by LiquidMetrix.</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 to 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>N/A</p>
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	In addition, the Firm considered other data and analytics, including TCA information provided to the Firm by its counterparties.	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

5. Credit derivatives - Other credit derivatives

Top 5 execution venues

Class of Instrument	Credit derivatives - Other credit derivatives				
Notification if <1 average trade per business day in the previous year	Y				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
TW SEF LLC (LEI: 5493003NKIZWOQGS5U67)	93.2%	50.0%	N/A	N/A	0%
JPMorgan Chase Bank, N.A. (LEI: 7H6GLXDRUGQFU57RNE97)	6.8%	50.0%	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

General observations	The Firm was satisfied with the quality of execution obtained from each of the venues listed above for trading in the ‘Credit derivatives - Other credit derivatives’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below
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	Summary of analysis	Conclusion
Execution factors	For trades in the 'Credit derivatives - Other credit derivatives' asset class during the relevant period, the Firm primarily executed such trades over the Tradeweb SEF platform. For liquid contracts, the Firm generally placed the highest importance on price, followed by likelihood of execution and size. For illiquid contracts, likelihood of execution and size were generally the most important factors, followed by price and minimisation of the potential market impact	The relative importance given to the execution factors was in line with the Firm's order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools	The Trading team monitored all quotes obtained so that all electronic	N/A

relating to quality of execution	quote-based trades achieved best execution 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 to 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.	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

6. Credit derivatives - Other credit derivatives

Top 5 Counterparties on Tradeweb SEF platform

Class of Instrument	Credit derivatives - Other credit derivatives				
Notification if <1 average trade per business day in the previous year	Y				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JPMorgan Chase Bank, N.A. (LEI:7H6GLXDRUGQFU57RNE97)	42.8%	70.0%	N/A	N/A	0%

Deutsche Bank AG. (LEI: 7LWTFZYICNSX8D621K86)	38.2%	20.0%	N/A	N/A	0%
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	19.0%	10.0%	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

7. Equity Derivatives - Options and Futures admitted to trading on a trading venue

Top five entities (brokers)

Class of Instrument	Equity Derivatives - Options and Futures admitted to trading on a trading venue				
Notification if <1 average trade per business day in the previous year	N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	98.8%	98.6%	N/A	N/A	0%
UBS AG (LEI: BFM8T61CT2L1QCEMIK50)	1.2%	1.4%	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

General observations	The Firm was satisfied with the quality of execution obtained from each of the brokers listed above for trading in the 'Equity Derivatives - Options and Futures admitted to trading on a trading venue' asset class during the relevant period and the Firm's hierarchy of execution factors is described below	
	Summary of analysis	Conclusion

Execution factors	For trades in the ‘Equity Derivatives - Options and Futures admitted to trading on a trading venue’ asset class during the relevant period, the Firm generally placed the highest importance on price and speed for liquid contracts. For illiquid contracts, the Firm generally placed the highest importance on likelihood of execution and size, followed by price	The relative importance given to the execution factors was in line with the Firm’s order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm’s Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm’s clients are professional clients	N/A
Use of data / tools relating to quality of execution	The Firm has not used data and/or tools relating to quality of execution in respect of 2018 trading. The reason for this is that the Firm has not yet identified any products, services or data sets that the	N/A

	<p>Firm believes would materially assist its analysis of execution quality for this instrument class. The Firm will keep this approach under review, in particular, it will continue to assess whether any such appropriately priced products, services or data sets have become available.</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 to 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>	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

8. Securitized Derivatives – Other securitized derivatives

Top 5 entities (brokers)

Class of Instrument	Securitized Derivatives – Other securitized derivatives
Notification if <1 average trade per business day in the previous year	y

Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS AG (LEI: BFM8T61CT2L1QCEMIK50)	100.0%	100.0%	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%

General observations	The Firm was satisfied with the quality of execution obtained from the broker listed above for trading in the ‘Securitized Derivatives – Other securitized derivatives’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below.	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Securitized Derivatives – Other securitized derivatives’ asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of price and cost.	The relative importance given to the execution factors was in line with the Firm’s order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements	The Firm has no specific arrangements to report	

with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received		
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools relating to quality of execution	<p>The Trading teams regularly monitored swap financing rates and undertook a request for quote ("RFQ") process where appropriate</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 to 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>	N/A
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

9. Equity Derivatives - Swaps and other equity derivatives

Top 5 execution venues

Class of Instrument	Equity Derivatives - Swaps and other equity derivatives				
Notification if <1 average trade per business day in the previous year	N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Merrill Lynch International (LEI: GGDZP1UYGU9STUHRDP48)	37.26%	38.49%	N/A	N/A	0%
UBS AG (LEI: BFM8T61CT2L1QCEMIK50)	36.45%	24.07%	N/A	N/A	0%
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	12.91%	5.72%	N/A	N/A	0%
Credit Suisse Securities (Europe) Limited (LEI: DL6FFRRLF74S01HE2M14)	6.37%	19.48%	N/A	N/A	0%
JPMorgan Chase Bank, National Association (LEI: 7H6GLXDRUGQFU57RNE97)	4.71%	5.96%	N/A	N/A	0%

General observations	<p>The Firm was satisfied with the quality of execution obtained from each of the venues listed above for trading in the ‘Equity Derivatives - Swaps and other equity derivatives’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below.</p> <p>Transactions that are included within the ‘Equity Derivatives - Swaps and other equity derivatives’ instrument class are often effected by the Firm seeking “indicative pricing” from an executing broker. If the indicative pricing is acceptable to</p>
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	<p>the Firm, the executing broker then enters into a cash equity transaction with the relevant swap counterparty and a corresponding swap arises between the swap counterparty and the fund or funds on whose behalf of which 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 executing brokers in the analysis of its top 5 execution venues above (or in the ‘Equities – Shares & Depositary Receipts’ instrument class) because the Firm does not execute (or transmit or place orders that give rise to) such transactions. Instead, the Firm has, for the purposes of the ‘Equity Derivatives - Swaps and other equity derivatives’ instrument class, counted only the swap transactions to which the relevant funds are party (and has treated the Firm’s involvement in effecting those transactions as a form of “direct” execution, with the consequence that the Firm has categorised the relevant swap counterparties as execution venues rather than brokers).</p>	
	Summary of analysis	Conclusion
Execution factors	<p>For trades in the ‘Equity Derivatives - Swaps and other equity derivatives’ asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of price and transaction costs and, in the case of short exposures, borrower availability (size) and, in the case of long exposures, counterparty exposure capacity (size)</p>	<p>The relative importance given to the execution factors was in line with the Firm’s order execution policy</p>
Close links, conflicts of interest and common ownership with respect to execution venues	<p>Close links The Firm has no close links to report</p>	<p>Close links N/A</p>
	<p>Conflicts of interest The Firm has no conflicts of interest to report</p>	<p>Conflicts of interest N/A</p>
	<p>Common ownerships The Firm has no common ownership to report</p>	<p>Common ownerships N/A</p>
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	<p>The Firm has no specific arrangements to report</p>	<p>N/A</p>

Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools relating to quality of execution	<p>The Trading teams regularly monitored swap financing rates and undertook a request for quote ("RFQ") process where appropriate</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 to 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>	N/A
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

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

Top 5 entities (brokers)

Class of Instrument	Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)				
Notification if <1 average trade per business day in the previous year	Y				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS AG (LEI: BFM8T61CT2L1QCEMIK50)	91.8%	85.7%	N/A	N/A	0%
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	8.2%	14.3%	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%

General observations	The Firm was satisfied with the quality of execution obtained from each of the brokers listed above for trading in the ‘Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below.	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Exchange traded products -Exchange traded funds, exchange traded notes and exchange traded commodities’ asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of price and speed. However, in the case of an exchange traded fund order that represented a large	The relative importance given to the execution factors was in line with the Firm’s order execution policy

	proportion of the volume, likelihood of execution or size was generally the primary execution factor, with price and minimisation of market impact as important secondary considerations	
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools relating to quality of execution	The Firm used TCA data from Liquidmetrix to support its assessment of quality of execution. In particular, members of the Firm's Trading and Legal & Compliance teams undertook regular best execution monitoring throughout 2018. This review considered (among other things) TCA reports, execution quality reports and daily order reports produced by	N/A

	<p>LiquidMetrix, which were tailored for the Firm and set out various TCA data/analysis, including (amongst other things):</p> <ul style="list-style-type: none"> • performance by buy/sell; • performance breakdown by country; • performance breakdown by trader; • performance breakdown by broker; • performance breakdown by portfolio manager; • worst performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics); and • best performing orders and trades (including broker and venue details and implementation shortfall and VWAP metrics). <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 to 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>	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

11. Interest rate derivatives – Futures and options admitted to trading on a trading venue

Top five entities (brokers)

Class of Instrument	Interest rate derivatives – Futures and options admitted to trading on a trading venue				
Notification if <1 average trade per business day in the previous year	Y				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	100%	100%	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%
N/A	N/A	N/A	N/A	N/A	0%

General observations	The Firm was satisfied with the quality of execution obtained from each of the brokers listed above for trading in the ‘Interest rate derivatives – Futures and options admitted to trading on a trading venue’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Interest rate derivatives – Futures and options admitted to trading on a trading venue’ asset class during the relevant period, given the contracts were liquid, the Firm generally placed the highest importance on the execution factors of price and speed	The relative importance given to the execution factors was in line with the Firm’s order execution policy
Close links, conflicts of interest and common ownership	Close links The Firm has no close links to report	Close links N/A

with respect to execution venues	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm's Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm's clients are professional clients	N/A
Use of data / tools relating to quality of execution	<p>The Firm has not used data and/or tools relating to quality of execution in respect of 2018 trading. The reason for this is that the Firm has not yet identified any products, services or data sets that the Firm believes would materially assist its analysis of execution quality for this instrument class. The Firm will keep this approach under review, in particular, it will continue to assess whether any such appropriately priced products, services or data sets have become available</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</p>	N/A

	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 to 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.	
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

12. Securities Financing Transactions (Equities – Shares & Depositary Receipts) - Tick size liquidity bands 5 and 6 (from 2000 trades per day)

Top five execution venues

Class of Instrument	Securities Financing Transactions (Equities – Shares & Depositary Receipts) Tick size liquidity bands 5 and 6 (from 2000 trades per day)	
Notification if <1 average trade per business day in the previous year	Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume executed as a percentage of total in that class	Proportion of orders executed as percentage of total in that class
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	100%	100%
N/A	N/A	N/A

General observations	The Firm was satisfied with the quality of execution obtained from each of the venues listed above for trading in the ‘Securities Financing Transactions (Equities – Shares & Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Securities Financing Transactions (Equities – Shares & Depositary Receipts) - Tick size liquidity bands 5 and 6 (from 2000 trades per day)’ asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of price, likelihood of recall and size	The relative importance given to the execution factors was in line with the Firm’s order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm’s Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm’s clients are professional clients	N/A

Use of data / tools relating to quality of execution	The Firm has not used data and/or tools relating to quality of execution in respect of 2018 trading. The reason for this is that the Firm has not yet identified any products, services or data sets that the Firm believes would materially assist its analysis of execution quality for this instrument class. The Firm will keep this approach under review, in particular, it will continue to assess whether any such appropriately priced products, services or data sets have become available	N/A
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

13. Securities Financing Transactions (Equities – Shares & Depositary Receipts) - Tick size liquidity bands 1 and 2 (0 to 79 trades per day)

Top five execution venues

Class of Instrument	Securities Financing Transactions (Equities – Shares & Depositary Receipts) Tick size liquidity bands 1 and 2 (0 to 79 trades per day)	
Notification if <1 average trade per business day in the previous year	Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume executed as a percentage of total in that class	Proportion of orders executed as percentage of total in that class
Goldman Sachs International (LEI: W22LROWP2IHZNBB6K528)	100%	100%
N/A	N/A	N/A

General observations	The Firm was satisfied with the quality of execution obtained from each of the venues listed above for trading in the ‘Securities Financing Transactions (Equities – Shares & Depository Receipts) - Tick size liquidity bands 1 and 2 (0 to 79 trades per day)’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Securities Financing Transactions (Equities – Shares & Depository Receipts) - Tick size liquidity bands 1 and 2 (0 to 79 trades per day)’ asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of price, likelihood of recall and size	The relative importance given to the execution factors was in line with the Firm’s order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm’s Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm’s clients are professional clients	N/A

Use of data / tools relating to quality of execution	The Firm has not used data and/or tools relating to quality of execution in respect of 2018 trading. The reason for this is that the Firm has not yet identified any products, services or data sets that the Firm believes would materially assist its analysis of execution quality for this instrument class. The Firm will keep this approach under review, in particular, it will continue to assess whether any such appropriately priced products, services or data sets have become available.	N/A
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	

14. Securities Financing Transactions (Debt instruments – Bonds)

Top execution venues

Class of Instrument	Securities Financing Transactions (Debt instruments – Bonds)	
Notification if <1 average trade per business day in the previous year	Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume executed as a percentage of total in that class	Proportion of orders executed as percentage of total in that class
Goldman Sachs International (LEI: W22LROWP2IHZNB6K528)	100%	100%
N/A	N/A	N/A

General observations	The Firm was satisfied with the quality of execution obtained from each of the venues listed above for trading in the
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	‘Securities Financing Transactions (Debt instruments – Bonds)’ asset class during the relevant period and the Firm’s hierarchy of execution factors is described below	
	Summary of analysis	Conclusion
Execution factors	For trades in the ‘Securities Financing Transactions (Debt instruments – Bonds)’ asset class during the relevant period, the Firm generally placed the highest importance on the execution factors of likelihood of execution and likelihood of recall, with price, transaction cost and likelihood of settlement being important secondary considerations	The relative importance given to the execution factors was in line with the Firm’s order execution policy
Close links, conflicts of interest and common ownership with respect to execution venues	Close links The Firm has no close links to report	Close links N/A
	Conflicts of interest The Firm has no conflicts of interest to report	Conflicts of interest N/A
	Common ownerships The Firm has no common ownership to report	Common ownerships N/A
Specific arrangements with execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received	The Firm has no specific arrangements to report	N/A
Factors leading to a change in the list of execution venues listed in the Order Execution Policy	There were no changes to the list of execution venues/brokers for this asset class in the Firm’s Order Execution Policy	N/A
Differentiation across client categories	N/A - all of the Firm’s clients are professional clients	N/A

Use of data / tools relating to quality of execution	The Firm has not used data and/or tools relating to quality of execution in respect of 2018 trading. The reason for this is that the Firm has not yet identified any products, services or data sets that the Firm believes would materially assist its analysis of execution quality for this instrument class. The Firm will keep this approach under review, in particular, it will continue to assess whether any such appropriately priced products, services or data sets have become available	N/A
Use of consolidated tape provider output	The Firm has not used output from consolidated tape providers as no such consolidated tape providers are available in respect of 2018 trading	N/A
Use of DEA	N/A	