

D. E. Shaw & Co. (London), LLP

Annual Summary of Execution Arrangements

30 April 2018

Introduction

D. E. Shaw & Co. (London), LLP (the “Partnership”) is a member of the D. E. Shaw group, a global investment and technology development firm. The Partnership is authorized and regulated by the Financial Conduct Authority (the “FCA”) in the United Kingdom. The Partnership provides investment management services to D. E. Shaw & Co., L.P. (“DESCO LP”), its indirect parent company, and certain of DESCO LP’s investment advisory subsidiaries, which services are for the benefit of certain affiliated private investment funds and separately managed accounts (collectively, the “Funds”). DESCO LP is a U.S.-based investment adviser registered with and regulated by the United States Securities and Exchange Commission.

COBS 11.2A of the FCA Handbook (the “FCA Rule”) implements the requirements set out in Article 27(6) of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (“MiFID II”). Pursuant to these requirements, a firm such as the Partnership that executes client orders must summarize and make public on an annual basis, for each relevant class of financial instruments, the top five execution venues in terms of trading volumes, where it executed client orders in the preceding year, together with information on the quality of execution obtained. In addition, a firm such as the Partnership that provides the service of portfolio management to its clients must, per Article 65 of Commission Delegated Regulation (EU) 2017/565 of 25 April 2016, summarize and make public on an annual basis, for each relevant class of financial instruments, the top five firms in terms of trading volumes where it transmitted or placed client orders for execution in the preceding year and information on the quality of execution obtained. This report summarizes and provides such information in relation to the Partnership’s order execution activities during the period from 1 January 2017 to 31 December 2017 (the “Report Period”). This report applies solely to order execution activity undertaken by the Partnership and does not address the order execution activities of any other member of the D. E. Shaw group.

Order Execution Practices

The Partnership may execute client orders by placing orders and executing transactions directly on an execution venue, or indirectly by placing an order with a broker, who then executes the order. The Partnership generally considers both direct (where available) and indirect execution when determining the optimal execution strategy for an order.

Generally, the Partnership is authorized by its clients to determine the execution venue or broker to be used for transactions executed by the Partnership on behalf of a Fund. In selecting such execution venues or brokers, the Partnership is required by MiFID II and the FCA Rule to take all sufficient steps to obtain the best possible results for its clients. (During the Report Period, however, MiFID II had not taken effect and the then applicable rule required the Partnership to take all reasonable steps to obtain the best possible result for its clients.) The Partnership is not required to solicit competitive bids, and does not have an obligation to seek

the lowest available commission cost. The price offered by an execution venue or broker, including commissions and commission equivalents, if any, and other transaction costs, is normally an important factor in this decision, but the Partnership's execution venue or broker selection also takes into account the overall quality of the execution services offered, including without limitation such factors as: execution capability, including speed and likelihood of execution; willingness and ability to commit capital; creditworthiness and financial stability; clearance and settlement capability; and ability to maintain confidentiality. The relative importance that the Partnership generally assigns to various execution factors in connection with the execution of orders in different classes of financial instruments is listed in the Annexes to this report.

The Partnership is required by MiFID II and the FCA Rule to take into account the following criteria for determining the relative importance of the execution factors described above:

- the client's characteristics, including the client's categorization;
- the characteristics of the relevant orders;
- the characteristics of the instruments or products that are the subject of the relevant orders; and
- the characteristics of the broker through which, and the execution venues on or with which, those orders can be executed.

The Partnership's clients are DESCO LP and certain of its investment advisory subsidiaries, each of which is classified as a professional client for the purposes of MiFID II and the FCA Rule. These clients have delegated discretion to the Partnership to execute orders on behalf of the Funds, each of which would be classified as a professional client if it was a client of the Partnership. The Partnership considers the characteristics of both its client and the relevant Fund when executing orders. The Partnership's order execution arrangements do not vary for any class of financial instrument based upon client categorization, given that all of the Partnership's clients are professional clients. The Partnership does not execute orders for retail clients and does not operate separate order execution arrangements for retail clients.

The Partnership deploys a variety of trading strategies on behalf of its clients and executes orders involving different financial instruments in a range of asset classes. The Partnership maintains relationships with numerous execution venues and brokers to enable it to take all sufficient steps to obtain the best possible results across the full scope of its trading activities. The order execution policies and processes operated by the Partnership provide for a significant degree of flexibility in deciding which execution factors are to be taken into account in respect of a particular order. This flexibility is required to facilitate execution decisions that are appropriate to the size and nature of an order and that take into account all relevant execution factors, such as the desire to minimize the market impact of the transaction.

The applicable Fund pays any exchange fees and/or commissions associated with orders executed by the Partnership on behalf of such Fund, regardless of the class of financial instrument to which the order relates. Neither the Partnership nor the Funds make payments (other than settlement price, which may include fees and commissions) to, or receive payments from (in the form of discounts, rebates, or otherwise), execution venues or brokers in connection with the execution of orders by the Partnership. The Partnership may receive minor non-monetary benefits, such as market commentary, from its brokers and other counterparties in accordance with MiFID II. The Partnership does not believe that the receipt of such minor non-monetary benefits induce the Partnership to make execution decisions that are inconsistent with its obligation to obtain the best possible result for its clients.

The Partnership may pass orders to DESCO LP or its Hong Kong-based subsidiary for DESCO LP or such subsidiary to execute on an execution venue or with a broker. The Partnership typically uses DESCO LP in this capacity in connection with orders involving instruments, in any asset class, traded on North American execution venues to leverage DESCO LP's expertise and familiarity with such instruments and venues. The Partnership typically utilizes DESCO LP's Hong Kong-based subsidiary in this capacity in connection with orders involving instruments traded in Asia for analogous reasons. With the exception of DESCO LP's indirect ownership of a substantial majority of the Partnership's voting and capital rights, and ownership of all of the equity of its Hong Kong-based subsidiary, the Partnership is not aware of close links or common ownerships between itself (and/or its affiliates) and the execution venues or brokers it uses to execute orders. Similarly, the Partnership is not aware of conflicts of interest between it (or its affiliates) and such execution venues or brokers that would impair its ability to obtain, when executing orders, the best possible result for its clients.

Order Execution Monitoring

The Partnership conducts periodic reviews of its order execution activities utilizing both quantitative and qualitative data to monitor the quality of the execution obtained. The Partnership believes that:

- the execution venues and brokers included in its order execution policy have the capabilities necessary to efficiently execute orders across the full range of asset classes traded by the Partnership on behalf of the Funds;
- the Partnership maintains relationships with a sufficient number of execution venues and brokers, given the extent and nature of its trading activities;
- the commissions charged by the brokers it uses to execute orders are reasonable and consistent with, or more favorable than, standard market rates;
- the Partnership is not overly dependent on a single execution venue or broker for classes of financial instruments that it trades actively; and
- its selection of execution venues and brokers results in the overarching best possible results for its clients.

During the Report Period, the data required to be published by trading venues and certain other market participants in accordance with MiFID II was not available (because MiFID II had not taken effect). Accordingly, the Partnership did not utilize such data in reviews of its order execution activities. Similarly, the Partnership did not utilize the output of a consolidated tape provider, because no such provider has been established. The Partnership's periodic reviews of order execution results inform the Partnership's decisions as to the execution venues and brokers that it utilizes when executing orders on behalf of the Funds. During the Report Period, new execution venues and brokers were added to the Partnership's order execution policy for orders relating to instruments in various equities, equity derivatives, and debt asset classes. These new execution venues and brokers were added to the policy primarily for their specialization in particular instruments, markets, or geographies, their ability to source inventory or market flow, or for their ability to obtain a favorable pricing or low overall transaction costs at a given order size. Various execution venues and brokers were removed from the equities, equity derivatives, bonds, and credit derivatives section of the Partnership's order execution policy during the Report Period, primarily as a result of infrequent use of the execution venue or broker.

Execution Factors and Execution Venues

The Annexes to this report include tables for each of the classes of financial instrument identified in MiFID II setting out (i) the relative importance that the Partnership assigned to the various execution factors in connection with the execution of orders relating to instruments in that class; (ii) the top five execution venues in terms of trading volumes for client orders relating to instruments in that class executed by the Partnership during the Report Period; (iii) the top five firms in terms of trading volumes where the Partnership transmitted or placed client orders for execution during the Report Period; and (iv) the top five execution venues in terms of trading volumes for all securities financing transactions involving that asset class executed by the Partnership during the Report Period. Consistent with all other aspects of this report, the tables in the Annexes relate only to order execution activity carried out by the Partnership during the Report Period and not to the order execution activities of other members of the D. E. Shaw group.

In the tables in the Annexes, each execution venue or broker is ranked by trading volume, which for securities transactions is measured by the sum of the gross market values of all orders executed with the execution venue or broker. In the case of derivative transactions, trading volume is measured by the sum of the gross notional values of all orders executed with the execution venue or broker.

Instruments that could be reasonably categorized in more than one class of financial instrument have been assigned to the class that the Partnership believes most accurately reflects the relative importance of the execution factors for orders involving such instruments.

The legal entity identifier (LEI) of each execution venue and broker is listed after the name of the venue or broker in the tables in the Annexes.

A “directed order” is, for purposes of the tables in the Annexes, an order for which a particular execution venue was specified by the client prior to the execution of the order by the Partnership. None of the orders executed by the Partnership were directed orders.

Annex 1: Transactions in Financial Instruments

Section A: Equities – Shares & Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
=2	Ability to source inventory or market flow
=2	Willingness to execute difficult transactions
3	Reliability and accuracy
4	Quality of market colour on orders placed
5	Specialism in particular instruments, markets, or geographies

Top five execution venues (indirect execution)

Class of Instrument			Equities – Shares & Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)		
Notification if <1 average trade per business day in the previous year			No		
Top 5 Venues ranked in terms of volume (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
Intermonte SIM S.p.A. - YMUU1WGHJKORF9E36I98	18%	16%	4%	96%	N/A
Brewin Dolphin Limited - 213800PLIGVGF4K2R87	10%	8%	0%	100%	N/A
Deutsche Bank AG - 7LTFWZYICNSX8D621K86	8%	5%	12%	88%	N/A
Morgan Stanley & Co. International Plc - 4PQUHN3JPFGFNF3BB653	7%	5%	40%	60%	N/A
Goldman Sachs International - W22LROWP2IHZNBB6K528	6%	2%	0%	100%	N/A

Section B: Equities – Shares & Depositary Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
=2	Ability to source inventory or market flow
=2	Willingness to execute difficult transactions
3	Reliability and accuracy
4	Quality of market colour on orders placed
5	Specialism in particular instruments, markets, or geographies

Top five execution venues (indirect execution)

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			No		
Top 5 Venues ranked in terms of volume (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
Raiffeisen Centrobank AG - 529900M2F7D5795H1A49	19%	0%	0%	0%	N/A
Intermonte SIM S.p.A. - YMUU1WGHJKORF9E36I98	11%	24%	2%	98%	N/A
Credit Suisse Securities (Europe) Limited - DL6FFRRLF74S01HE2M14	9%	23%	20%	80%	N/A
Jefferies International Limited - S5THZMDUJCTQZBTRVI98	7%	9%	97%	3%	N/A
Barclays Capital Securities Limited - K9WDOH4D2PYBSLSOB484	7%	3%	0%	0%	N/A

Section C: Equities – Shares & Depositary Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
=2	Ability to source inventory or market flow
=2	Willingness to execute difficult transactions
3	Reliability and accuracy
4	Quality of market colour on orders placed
5	Specialism in particular instruments, markets, or geographies

Top five execution venues (indirect execution)

Class of Instrument			Equities – Shares & Depositary Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)		
Notification if <1 average trade per business day in the previous year			No		
Top 5 Venues ranked in terms of volume (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 - XKZZ2JZF41MRHTR1V493	27%	47%	31%	2%	N/A
Morgan Stanley & Co. International Plc - 4PQUHN3JPFQFNF3BB653	27%	4%	0%	100%	N/A
Olivetree Financial Limited - 213800WJG33TNCVFZK61	17%	2%	0%	100%	N/A
Credit Suisse Securities (Europe) Limited - DL6FFRRLF74S01HE2M14	14%	20%	11%	78%	N/A
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	7%	2%	0%	100%	N/A

Section D: Debt instruments - Bonds

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
3	Specialism in particular instruments, markets, or geographies
4	Reliability and accuracy
5	Ability to provide hedging

Top five execution venues (direct execution)

Class of Instrument		Debt instruments - Bonds			
Notification if <1 average trade per business day in the previous year		No			
Top 5 Venues ranked in terms of volume (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 - XKZZ2JZF41MRHTR1V493	22%	17%	0%	0%	N/A
Société Générale SA - O2RNE8IBXP4R0TD8PU41	12%	6%	0%	0%	N/A
Deutsche Bank AG - 7LTWFZYICNSX8D621K86	10%	6%	0%	0%	N/A
J.P. Morgan Securities Plc - K6Q0W1PS1L1O4IQL9C32	6%	6%	0%	0%	N/A
HSBC Bank Plc - MP6I5ZYZBEU3UXPYFY54	6%	13%	0%	0%	N/A

Section E: Interest rates derivatives – Futures and options admitted to trading on a trading venue

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity

Top five execution venues (indirect execution)

Class of Instrument			Interest rates derivatives – Futures and options admitted to trading on a trading venue		
Notification if <1 average trade per business day in the previous year			No		
Top 5 Venues ranked in terms of volume (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
Deutsche Bank AG - 7LTWFZYICNSX8D621K86	66%	53%	13%	87%	N/A
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	28%	40%	6%	94%	N/A
Merrill Lynch International - GGDZP1UYGU9STUHRDP48	6%	6%	18%	82%	N/A

Section F: Interest rates derivatives – Swaps, forwards, and other interest rates derivatives

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity

Top five execution venues (direct execution)

Class of Instrument			Interest rates derivatives – Swaps, forwards, and other interest rates derivatives		
Notification if <1 average trade per business day in the previous year			Yes		
Top 5 Venues ranked in terms of volume (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
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	100%	100%	0%	0%	N/A

Section G: Credit derivatives – Other credit derivatives

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
3	Ability to source inventory or market flow

Relative Importance of Execution Factors (swap transactions)

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
=3	Netting benefits
=3	Ability to provide leverage

Top five execution venues (direct execution)

Class of Instrument			Credit derivatives – Other credit derivatives		
Notification if <1 average trade per business day in the previous year			Yes		
Top 5 Venues ranked in terms of volume (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
Credit Suisse International - E58DKGMJYYYYJLN8C3868	45%	5%	0%	0%	N/A
BNP Paribas - ROMUWSFPU8MPRO8K5P83	23%	30%	0%	0%	N/A
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	10%	15%	0%	0%	N/A
Bank of America, N.A. - B4TYDEB6GKMZO031MB27	9%	15%	0%	0%	N/A
JPMorgan Chase Bank, N.A. - 7H6GLXDRUGQFU57RNE97	6%	8%	0%	0%	N/A

Section H: Currency derivatives – Swaps, forwards, and other currency derivatives

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size

Top five execution venues (direct execution)

Class of Instrument			Currency derivatives – Swaps, forwards, and other currency derivatives		
Notification if <1 average trade per business day in the previous year			Yes		
Top 5 Venues ranked in terms of volume (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
Deutsche Bank AG - 7LTWFZYICNSX8D621K86	49%	47%	0%	0%	N/A
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	30%	7%	0%	0%	N/A
Bank of America, N.A. - B4TYDEB6GKMZO031MB27	21%	46%	0%	0%	N/A

Section I: Equity Derivatives - Options and Futures admitted to trading on a trading venue

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
3	Speed of execution

Top five execution venues (direct execution)

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			No		
Top 5 Venues ranked in terms of volume (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 - BFM8T61CT2L1QCEMIK50	14%	13%	0%	0%	N/A
Credit Suisse Securities (Europe) Limited - DL6FFRRLF74S01HE2M14	14%	16%	0%	0%	N/A
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	12%	12%	0%	0%	N/A
BNP Paribas - ROMUWSFPU8MPRO8K5P83	10%	9%	0%	0%	N/A
Banco Bilbao Vizcaya Argentaria SA - K8MS7FD7N5Z2WQ51AZ71	9%	8%	0%	0%	N/A

Top five execution venues (indirect execution)

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			No		
Top 5 Venues ranked in terms of volume (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 - GGDZP1UYGU9STUHRDP48	61%	56%	24%	75%	N/A
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	15%	12%	46%	42%	N/A
Deutsche Bank AG - 7LTWFZYICNSX8D621K86	13%	8%	14%	86%	N/A
Credit Suisse Securities (Europe) Limited - DL6FFRRLF74S01HE2M14	7%	2%	52%	35%	N/A
Cantor Fitzgerald Europe - 549300KM6VUHPKQLQX53	4%	22%	46%	54%	N/A

Section J: Equity Derivatives – Swaps, forwards, and other equity derivatives

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
=2	Liquidity
=2	Willingness to execute difficult transactions
=2	Ability to source inventory or market flow
=3	Reliability and accuracy
=3	Speed of execution
4	Quality of market colour on orders placed
5	Specialism in particular instruments, markets, or geographies

Relative Importance of Execution Factors (swap transactions)

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
=3	Netting benefits
=3	Ability to provide leverage

Top five execution venues (direct execution)

Class of Instrument			Equity Derivatives – Swaps, forwards, and other equity derivatives		
Notification if <1 average trade per business day in the previous year			No		
Top 5 Venues ranked in terms of volume (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
Citibank, N.A. - E57ODZWZ7FF32TWEFA76	23%	16%	0%	0%	N/A
Deutsche Bank AG - 7LTWFZYICNSX8D621K86	17%	19%	0%	0%	N/A
Merrill Lynch International - GGDZP1UYGU9STUHRDP48	14%	14%	0%	0%	N/A
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	13%	14%	0%	0%	N/A
Credit Suisse Securities (Europe) Limited - DL6FFRRLF74S01HE2M14	7%	8%	0%	0%	N/A

Top five execution venues (indirect execution)

Class of Instrument			Equity Derivatives - Swaps and other equity derivatives		
Notification if <1 average trade per business day in the previous year			No		
Top 5 Venues ranked in terms of volume (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
BNP Paribas - R0MUWSFPU8MPRO8K5P83	65%	13%	86%	0%	N/A
J.P. Morgan Securities Plc - K6Q0W1PS1L1O4IQL9C32	19%	2%	0%	100%	
Intermonte SIM S.p.A. - YMUU1WGHJKORF9E36I98	13%	6%	0%	100%	N/A
HSBC Bank Plc - MP6I5ZYZBEU3UXPYFY54	2%	30%	12%	88%	N/A
Merrill Lynch International - GGDZP1UYGU9STUHRDP48	1%	2%	100%	0%	N/A

Section K: Commodities derivatives and emission allowances Derivatives - Options and Futures admitted to trading on a trading venue

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
3	Access to products

Top five execution venues (indirect execution)

Class of Instrument		Commodities derivatives and emission allowances Derivatives - Options and Futures admitted to trading on a trading venue			
Notification if <1 average trade per business day in the previous year		No			
Top 5 Venues ranked in terms of volume (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 - 4PQUHN3JPFGFNF3BB653	39%	89%	94%	0%	N/A
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	28%	1%	16%	84%	N/A
Deutsche Bank AG - 7LTWFZYICNSX8D621K86	10%	1%	12%	88%	N/A
Tullett Prebon (Securities) Limited - 549300BMVW85YF9FGN67	9%	4%	62%	38%	N/A
J.P. Morgan Securities Plc - K6Q0W1PS1L1O4IQL9C32	9%	1%	55%	45%	N/A

Section L: Commodities derivatives and emission allowances Derivatives - Other commodities derivatives and emission allowances derivatives

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
3	Access to products

Top five execution venues (indirect execution)

Class of Instrument			Commodities derivatives and emission allowances Derivatives - Other commodities derivatives and emission allowances derivatives		
Notification if <1 average trade per business day in the previous year			No		
Top 5 Venues ranked in terms of volume (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 - GGDZP1UYGU9STUHRDP48	43%	33%	93%	0%	N/A
Morgan Stanley & Co. International Plc - 4PQUHN3JPFQFNF3BB653	28%	53%	91%	0%	N/A
ICAP Energy Limited - 213800CZM9YMSN4AL882	25%	12%	0%	0%	N/A
Citigroup Global Markets Limited - XKZZ2JZF41MRHTR1V493	2%	1%	0%	0%	N/A
Tullett Prebon (Europe) Limited - 549300MU2MYJLOY6IJ51	1%	1%	0%	0%	N/A

Section M: Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Reliability and accuracy
3	Specialism in particular instruments, markets, or geographies

Top five execution venues (direct execution)

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			Yes		
Top 5 Venues ranked in terms of volume (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
Citibank, N.A. - E57ODZWZ7FF32TWEFA76	100%	100%	0%	0%	N/A

Section N: Other instruments

Top five execution venues (direct execution)

Class of Instrument			Other instruments		
Notification if <1 average trade per business day in the previous year			Yes		
Top 5 Venues ranked in terms of volume (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
Citibank, N.A. - E57ODZWZ7FF32TWEFA76	100%	100%	0%	0%	N/A

Annex 2: Securities Financing Transactions

Relative Importance of Execution Factors

Rank	Execution Factor
1	Price/overall transaction cost at the given order size
2	Liquidity
=3	Netting benefits
=3	Ability to provide leverage

Top five execution venues

Class of Instrument	Equities – Shares & Depositary Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)	
Notification if <1 average trade per business day in the previous year	No	
Top 5 Venues ranked in terms of volume (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
Deutsche Bank AG - 7LTWFZYICNSX8D621K86	33%	61%
Barclays Bank Plc - G5GSEF7VJP517OUK5573	22%	3%
Citibank, N.A. - E57ODZWZ7FF32TWFA76	10%	8%
Goldman Sachs & Co. LLC - FOR8UP27PHTHYVLBNG30	6%	0%
Merrill Lynch International - GGDZP1UYGU9STUHRDP48	6%	1%

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	No	
Top 5 Venues ranked in terms of volume (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
Barclays Bank Plc - G5GSEF7VJP5I7OUK5573	52%	17%
Citibank, N.A. - E57ODZWZ7FF32TWEFA76	11%	4%
Deutsche Bank AG - 7LTFWZYICNSX8D621K86	10%	20%
Société Générale SA - O2RNE8IBXP4R0TD8PU41	8%	0%
Merrill Lynch International GGDZP1UYGU9STUHRDP48	6%	54%

Class of Instrument		Equities – Shares & Depositary Receipts - Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)
Notification if <1 average trade per business day in the previous year		No
Top 5 Venues ranked in terms of volume (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
Barclays Capital Securities Limited - K9WDOH4D2PYBSLSOB484	64%	79%
Barclays Bank Plc - G5GSEF7VJP517OUK5573	27%	7%
Merrill Lynch International GGDZP1UYGU9STUHRDP48	2%	13%
Citibank, N.A. - E57ODZWZ7FF32TWEFA76	1%	0%
Deutsche Bank AG - 7LTFWZYICNSX8D621K86	1%	0%

Class of Instrument		Debt instruments - Bonds	
Notification if <1 average trade per business day in the previous year		Yes	
Top 5 Venues ranked in terms of volume (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	
Barclays Capital Securities Limited - K9WDOH4D2PYBSLSOB484	74%	83%	
Deutsche Bank AG - 7LTFWZYICNSX8D621K86	14%	11%	
Citibank, N.A. - E57ODZWZ7FF32TWEFA76	12%	6%	