

Information on the top five execution venues and quality of execution obtained

Union Investment Institutional GmbH

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Regarding to MiFID II investment management companies are obliged to identify on their website, once a year and 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, together with summary information regarding the quality of execution obtained (Delegated Regulation (EU) 2017/576 of the EU Commission / RTS 28).

However, this reporting requirement does not apply to all transactions, but only covers transactions within the scope of individual financial portfolio management. The top five execution venues and/or brokers are determined on the basis of these transactions only. Execution of transactions within the framework of managing investment fund assets are outside the scope of this report. Therefore, the information provided with this report is not representative of Union Investment Institutional GmbH overall trading activity.

An analysis of the top five execution venues in terms of trading volumes for all client orders executed (for professional investors) during the 2019 reporting period, broken down by class of financial instrument, is provided below – together with summary information regarding the quality of execution obtained.

Please refer to Delegated Regulation (EU) 2017/576 (RTS 28) for more details regarding this publication.

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1. Equities – Shares & Depositary Receipts

1.1 Tick size liquidity bands 5 and 6

Information on the top five brokers

Class of Instrument		Equities – Shares & Depositary Receipts – Tick size liquidity bands 5 and 6			
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 Europe SE (5299007QVIQ7IO64NX37)	14,13 %	11,15 %	N.A.	N.A.	0,00 %
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	12,56 %	7,43 %	N.A.	N.A.	0,00 %
UBS Limited (REYPIEJN7XZHSUI0N355)	7,10 %	11,49 %	N.A.	N.A.	0,00 %
HSBC BANK PLC (MP6I5ZYZBEU3UXPYFY54)	6,36 %	7,51 %	N.A.	N.A.	0,00 %
Goldman Sachs Bank Europe SE (8IBZUGJ7JPLH368JE346)	4,82 %	6,99 %	N.A.	N.A.	0,00 %

1. Equities – Shares & Depositary Receipts

1.1 Tick size liquidity bands 5 and 6

Information on the top five execution venues

Class of Instrument	Equities – Shares & Depositary Receipts – Tick size liquidity bands 5 and 6				
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
Bloomberg Trading Facility Limited (BMTF)	100,00 %	100,00 %	N.A.	N.A.	0,00 %

1. Equities – Shares & Depositary Receipts

1.1 Tick size liquidity bands 5 and 6

Information on the top five brokers (Securities financing transactions)

Class of Instrument	Equities – Shares & Depositary Receipts – Tick size liquidity bands 5 and 6	
Notification if <1 average trade per business day in the previous year	N	
Top five 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)	59,22 %	35,48 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	8,88 %	12,90 %
Credit Suisse Securities (Europe) Limited (DL6FFRRLF74S01HE2M14)	7,96 %	9,68 %
THE BANK OF NOVA SCOTIA (L3I9ZG2KFGXZ61BMYR72)	5,84 %	3,23 %
UniCredit Bank AG (2ZCNRR8UK83OBTEK2170)	4,54 %	12,90 %

1. Equities – Shares & Depositary Receipts

1.2 Tick size liquidity bands 3 and 4

Information on the top five brokers

Class of Instrument	Equities – Shares & Depositary Receipts – Tick size liquidity bands 3 and 4				
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 Europe SE (5299007QVIQ7IO64NX37)	16,49 %	5,54 %	N.A.	N.A.	0,00 %
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	10,16 %	8,24 %	N.A.	N.A.	0,00 %
EXANE (969500UP76J52A9OXU27)	8,82 %	5,92 %	N.A.	N.A.	0,00 %
Citigroup Global Markets Europe AG (6TJCK1B7E7UTX-P528Y04)	8,71 %	5,39 %	N.A.	N.A.	0,00 %
HSBC BANK PLC (MP6I5ZYZBEU3UXPYFY54)	7,81 %	22,47 %	N.A.	N.A.	0,00 %

1. Equities – Shares & Depositary Receipts

1.2 Tick size liquidity bands 3 and 4

Information on the top five brokers (Securities financing transactions)

Class of Instrument	Equities – Shares & Depositary Receipts – Tick size liquidity bands 3 and 4	
Notification if <1 average trade per business day in the previous year	N	
Top five 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)	55,99 %	42,86 %
Credit Suisse Securities (Europe) Limited (DL6FFRRLF74S-01HE2M14)	22,11 %	14,29 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	10,53 %	21,43 %
Merrill Lynch International (GGDZP1UYGU9STUHRDP48)	9,69 %	14,29 %
UniCredit Bank AG (2ZCNRR8UK83OBTEK2170)	1,68 %	7,14 %

1. Equities – Shares & Depositary Receipts

1.3 Tick size liquidity band 1 and 2

Information on the top five brokers

Equities – Shares & Depositary Receipts – Tick size liquidity band 1 and 2					
Class of Instrument					
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 Europe SE (54930056FHWP7GIWYY08)	17,40 %	11,25 %	N.A.	N.A.	0,00 %
UBS Europe SE (5299007QVIQ7IO64NX37)	14,99 %	15,52 %	N.A.	N.A.	0,00 %
HSBC BANK PLC (MP6I5ZYZBEU3UXPYFY54)	9,38 %	12,53 %	N.A.	N.A.	0,00 %
SANFORD C. BERNSTEIN & CO., LLC (549300I7JYZHT7D5CO04)	8,44 %	3,05 %	N.A.	N.A.	0,00 %
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	4,81 %	8,76 %	N.A.	N.A.	0,00 %

1. Equities – Shares & Depositary Receipts

1.3 Tick size liquidity band 1 and 2

Information on the top five brokers (Securities financing transactions)

Class of Instrument	Equities – Shares & Depositary Receipts – Tick size liquidity band 1 and 2	
Notification if <1 average trade per business day in the previous year	N	
Top five 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 (G5GSEF7VJPSI7OUK5573)	87,68 %	80,00 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	12,32 %	20,00 %

1. Equities – Shares & Depositary Receipts

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument.

For the „Equities - Shares & Depositary Receipts“ class, given the relatively high availability of liquidity across numerous trading venues and the availability of in depth price discovery, the highest priority

is on the price and on the costs associated with order execution. For less liquid equities and equity certificates, whilst high priority is assigned to the speed and probability of execution, price and costs are the most important factors.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

1. Equities – Shares & Depositary Receipts

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. A transaction cost analysis (TCA) prepared by independent providers supports this evaluation process; the TCA also serves as a tool to monitor the quality of order execution, and to determine trading costs. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“. Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network.

The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

2. Debt instruments

2.1 Bonds

Information on the top five brokers

Class of Instrument	Debt instruments – Bonds				
Notification if <1 average trade per business day in the previous year	N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
DZ PRIVATBANK S.A. (SVY0KHTJZBP60K295346)	12,16 %	2,26 %	N.A.	N.A.	0,00 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	8,09 %	9,51 %	N.A.	N.A.	0,00 %
BNP PARIBAS (ROMUWSFPU8MPRO8K5P83)	7,49 %	6,84 %	N.A.	N.A.	0,00 %
BARCLAYS BANK PLC (G5GSEF7VJP5I7OUK5573)	6,53 %	6,39 %	N.A.	N.A.	0,00 %
HSBC TRINKAUS & BURKHARDT AG (JUNT405OW8OY5GN4DX16)	4,50 %	1,66 %	N.A.	N.A.	0,00 %

2. Debt instruments

2.1 Bonds

Information on the top five execution venues

Class of Instrument	Debt instruments – Bonds				
Notification if <1 average trade per business day in the previous year	N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Bloomberg Trading Facility Limited (BMTF)	83,07 %	84,71 %	N.A.	N.A.	0,00 %
Tradeweb Europe Limited (TWEM)	12,03 %	10,77 %	N.A.	N.A.	0,00 %
MARKETAXESS (MAEL)	4,77 %	4,45 %	N.A.	N.A.	0,00 %
Tradeweb Europe Limited (TREU)	0,13 %	0,07 %	N.A.	N.A.	0,00 %

2. Debt instruments

2.1 Bonds

Information on the top five brokers (Securities financing transactions)

Class of Instrument	Debt instruments – Bonds	
Notification if <1 average trade per business day in the previous year	N	
Top five 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
MEDIOBANCA - Banca di Credito Finanziario S.p.A. (PSNL19R2RXX5U3QWHI44)	38,24 %	5,76 %
BNP PARIBAS (ROMUWSFPU8MPRO8K5P83)	22,56 %	19,75 %
Banco Santander, S.A. (5493006QMFDDMYWIAM13)	12,71 %	3,70 %
Société Générale SA (O2RNE8IBXP4R0TD8PU41)	6,32 %	4,53 %
BARCLAYS BANK PLC (G5GSEF7VJP517OUK5573)	5,48 %	9,05 %

2. Debt instruments

2.1 Bonds

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Debt instruments - Bonds“ class, due to (in some cases marked) variance in relation to the availability of liquidity, assigning high priority to the probability of execution

is necessary in some situations – whereby this must not be at the expense of the price, which generally has similarly high priority. Since execution costs for debt securities are largely standardised, these are not given high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

2. Debt instruments

2.1 Bonds

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. A transaction cost analysis (TCA) prepared by independent providers supports this evaluation process; the TCA also serves as a tool to monitor the quality of order execution, and to determine trading costs. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“. Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network.

The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

2. Debt instruments

2.2 Money markets instruments

Information on the top five brokers

Class of Instrument	Debt instruments – Money markets instruments				
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
COMMERZBANK Aktiengesellschaft (851WYGNLUQLF-ZBSYGB56)	45,82 %	25,00 %	N.A.	N.A.	0,00 %
UniCredit Bank AG (2ZCNRR8UK83OBTEK2170)	35,68 %	16,67 %	N.A.	N.A.	0,00 %
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	7,24 %	25,00 %	N.A.	N.A.	16,67 %
Landesbank Baden-Württemberg (B81CK4ESI35472RHJ606)	5,63 %	8,33 %	N.A.	N.A.	0,00 %
Nomura International PLC (DGQCSV2PHVF712743539)	3,19 %	12,50 %	N.A.	N.A.	0,00 %

2. Debt instruments

2.2 Money markets instruments

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Debt instruments - Money markets instruments“ class, due to (in some cases marked) variance in relation to the availability of liquidity, assigning high priority to the

probability of execution is necessary in some situations – whereby this must not be at the expense of the price, which generally has similarly high priority. Since execution costs for debt securities are largely standardised, these are not given high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

2. Debt instruments

2.2 Money markets instruments

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. A transaction cost analysis (TCA) prepared by independent providers supports this evaluation process; the TCA also serves as a tool to monitor the quality of order execution, and to determine trading costs. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

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The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

3. Interest rates derivatives

3.1 Futures and options admitted to trading on a trading venue

Information on the top five brokers

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	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
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	45,94 %	35,83 %	N.A.	N.A.	26,89 %
DZ PRIVATBANK S.A. (SVY0KHTJZBP60K295346)	13,53 %	35,67 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX-8D621K86)	9,75 %	15,06 %	N.A.	N.A.	8,61 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	5,90 %	2,95 %	N.A.	N.A.	0,00 %
JP Morgan AG, Frankfurt, Derivate - Brexit (549300ZK53CNGEEI6A29)	5,22 %	2,90 %	N.A.	N.A.	0,00 %

3. Interest rates derivatives

3.1 Futures and options admitted to trading on a trading venue

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Interest rates derivatives - Futures and options admitted to trading on a trading venue“ class, due to (in some cases marked) variance in relation to the availability of liquidity, as-

signing high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

3. Interest rates derivatives

3.1 Futures and options admitted to trading on a trading venue

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. A transaction cost analysis (TCA) supports this evaluation process; the TCA also serves as a tool to monitor the quality of order execution, and to determine trading costs. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“. Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

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The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

3. Interest rates derivatives

3.2 Swaps, forwards, and other interest rates derivatives

Information on the top five brokers

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	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 (XKZZ2JZF41MRHTR1V493)	37,11 %	14,43 %	N.A.	N.A.	0,00 %
Nomura International PLC (DGQCSV2PHVF7I2743539)	16,27 %	8,76 %	N.A.	N.A.	0,00 %
Goldman Sachs International (W22LROWP2IHZNBB6K528)	8,23 %	6,19 %	N.A.	N.A.	0,00 %
BARCLAYS BANK PLC (G5GSEF7VJP5I7OUK5573)	7,57 %	14,43 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX-8D621K86)	7,40 %	6,70 %	N.A.	N.A.	0,00 %

3. Interest rates derivatives

3.2 Swaps, forwards, and other interest rates derivatives

Information on the top five execution venues

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	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
Tradeweb Europe Limited (TWEM)	100,00 %	100,00 %	N.A.	N.A.	0,00 %

3. Interest rates derivatives

3.2 Swaps, forwards, and other interest rates derivatives

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Interest rates derivatives - Swaps, forwards, and other interest rates derivatives“ class, due to (in some cases marked) variance in relation to the availability of liquidity,

assigning high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

3. Interest rates derivatives

3.2 Swaps, forwards, and other interest rates derivatives

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network. The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

4. Credit derivatives

4.1 Other credit derivatives

Information on the top five brokers

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
J.P. Morgan AG (Frankfurt) (549300ZK53CNGEEI6A29)	27,32 %	26,42 %	N.A.	N.A.	0,00 %
BARCLAYS BANK PLC (G5GSEF7VJP517OUK5573)	21,07 %	16,06 %	N.A.	N.A.	0,00 %
Goldman Sachs Bank Europe SE (8IBZUGJ7JPLH368JE346)	13,80 %	8,81 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX-8D621K86)	10,57 %	7,77 %	N.A.	N.A.	0,00 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	10,38 %	12,95 %	N.A.	N.A.	0,00 %

4. Credit derivatives

4.1 Other credit derivatives

Information on the top five execution venues

Class of Instrument	Credit derivatives – Other credit 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
Tradeweb Europe Limited (TWEM)	99,04 %	98,30 %	N.A.	N.A.	0,00 %
Bloomberg Trading Facility Limited (BMTF)	0,98 %	1,70 %	N.A.	N.A.	0,00 %

4. Credit derivatives

4.1 Other credit derivatives

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Credit derivatives - Other credit derivatives“ class, due to (in some cases marked) variance in relation to the availability of liquidity,

assigning high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

4. Credit derivatives

4.1 Other credit derivatives

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network. The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

5. Currency derivatives

5.1 Futures and options admitted to trading on a trading venue

Information on the top five brokers

Class of Instrument	Currency derivatives – Futures and options 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
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	71,99 %	32,55 %	N.A.	N.A.	7,43 %
DZ PRIVATBANK S.A. (SVY0KHTJZBP60K295346)	9,99 %	46,43 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LWTFZYICNSX-8D621K86)	8,06 %	12,36 %	N.A.	N.A.	0,00 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	5,80 %	6,48 %	N.A.	N.A.	0,00 %
Morgan Stanley Bank Aktiengesellschaft (7CPI4ZQUQVBDH8SA1F44)	3,74 %	0,87 %	N.A.	N.A.	0,00 %

5. Currency derivatives

5.1 Futures and options admitted to trading on a trading venue

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Currency derivatives - Futures and options admitted to trading on a trading venue“ class, due to (in some cases marked) variance in relation to the availability of liquidity,

assigning high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

5. Currency derivatives

5.1 Futures and options admitted to trading on a trading venue

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network. The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

5. Currency derivatives

5.2 Swaps, forwards, and other currency derivatives

Information on the top five brokers

Class of Instrument	Currency derivatives – Swaps, forwards, and other currency 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, National Association (7H6GLXDRUGQFU57RNE97)	50,65 %	38,54 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX-8D621K86)	23,41 %	17,71 %	N.A.	N.A.	0,00 %
MORGAN STANLEY & CO. INTERNATIONAL PLC (4PQUHN3JPFGFNF3BB653)	18,52 %	2,08 %	N.A.	N.A.	0,00 %
Goldman Sachs International (W22LROWP2IHZNBB6K528)	4,69 %	12,50 %	N.A.	N.A.	0,00 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	1,13 %	2,08 %	N.A.	N.A.	0,00 %

5. Currency derivatives

5.2 Swaps, forwards, and other currency derivatives

Information on the top five execution venues

Class of Instrument	Currency derivatives – Swaps, forwards, and other currency 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
FXALL (TRAL)	84,73 %	54,05 %	N.A.	N.A.	0,00 %
Bloomberg Trading Facility Limited (BMTF)	15,27 %	45,95 %	N.A.	N.A.	2,92 %

5. Currency derivatives

5.2 Swaps, forwards, and other currency derivatives

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Currency derivatives - Swaps, forwards, and other currency derivatives“ class, due to (in some cases marked) variance in relation to the availability of liquidity, assigning

high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

5. Currency derivatives

5.2 Swaps, forwards, and other currency derivatives

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

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No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

6. Structured finance instruments

Information on the top five brokers

Class of Instrument	Structured finance instruments				
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
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	14,90 %	8,11 %	N.A.	N.A.	0,00 %
Natixis SA (KX1WK48MPD4Y2NCUIZ63)	11,60 %	17,12 %	N.A.	N.A.	0,00 %
BofA Securities Europe SA (549300FH0WJAPEHTIQ77)	8,80 %	8,11 %	N.A.	N.A.	0,00 %
Citigroup Global Markets Limited (XKZZ2JZF41MR-HTR1V493)	7,69 %	9,91 %	N.A.	N.A.	0,00 %
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	6,42 %	6,31 %	N.A.	N.A.	0,00 %

6. Structured finance instruments

Information on the top five execution venues

Class of Instrument	Structured finance instruments	
Notification if <1 average trade per business day in the previous year	N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class
Nomura International PLC (DGQCSV2PHVF7I2743539)	73,86 %	66,67 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	26,14 %	33,33 %

6. Structured finance instruments

Information on the top five execution venues

Class of Instrument	Structured finance instruments				
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
Bloomberg Trading Facility Limited (BMTF)	94,96 %	89,32 %	N.A.	N.A.	0,00 %
MARKETAXESS (MAEL)	5,04 %	10,68 %	N.A.	N.A.	0,00 %

6. Structured finance instruments

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Structured finance instruments“ class, due to (in some cases marked) variance in relation to the availability of liquidity, assigning

high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

6. Structured finance instruments

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network. The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

7. Equity Derivatives

7.1 Options and Futures admitted to trading on a trading venue

Information on the top five 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
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	31,30 %	52,76 %	N.A.	N.A.	12,07 %
JP Morgan AG, Frankfurt, Derivate - Brexit (549300ZK53CNGEEI6A29)	19,52 %	4,62 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX-8D621K86)	9,61 %	14,30 %	N.A.	N.A.	0,00 %
JP Morgan AG, Frankfurt - Derivate Algo - Brexit (549300ZK53CNGEEI6A29)	9,16 %	6,04 %	N.A.	N.A.	0,00 %
Goldman Sachs Bank Europe SE (8IBZUGJ7JPLH368JE346)	6,04 %	0,57 %	N.A.	N.A.	0,00 %

7. Equity Derivatives

7.1 Options and Futures admitted to trading on a trading venue

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Equity Derivatives - Options and Futures admitted to trading on a trading venue“ class, due to (in some cases marked) variance in relation to the availability of liquidity, as-

signing high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

7. Equity Derivatives

7.1 Options and Futures admitted to trading on a trading venue

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. A transaction cost analysis (TCA) supports this evaluation process; the TCA also serves as a tool to monitor the quality of order execution, and to determine trading costs.

Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“. Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment's shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network.

The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

7. Equity Derivatives

7.2 Swaps and other equity derivatives

Information on the top five brokers

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
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	78,11 %	7,43 %	N.A.	N.A.	0,00 %
J.P. Morgan Securities PLC (K6Q0W1PS1L1O4IQL9C32)	6,18 %	27,72 %	N.A.	N.A.	0,00 %
MORGAN STANLEY & CO. INTERNATIONAL PLC (4PQUHN3JPF6FNF3BB653)	6,04 %	7,92 %	N.A.	N.A.	0,00 %
J.P. Morgan AG (Frankfurt) (549300ZK53CNGEEI6A29)	4,20 %	25,74 %	N.A.	N.A.	0,00 %
UBS AG (BFM8T61CT2L1QCEMIK50)	3,05 %	9,90 %	N.A.	N.A.	0,00 %

7. Equity Derivatives

7.2 Swaps and other equity derivatives

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Equity Derivatives - Swaps and other equity derivatives“ class, due to (in some cases marked) variance in relation to the

availability of liquidity, assigning high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

7. Equity Derivatives

7.2 Swaps and other equity derivatives

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network. The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

8. Securitized Derivatives

8.1 Warrants and Certificate Derivatives

Information on the top five brokers

Class of Instrument	Securitized Derivatives – Warrants and Certificate 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
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	43,18 %	38,30 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX8D621K86)	26,51 %	29,79 %	N.A.	N.A.	0,00 %
UBS Limited (REYPIEJN7XZHSUI0N355)	10,89 %	2,13 %	N.A.	N.A.	0,00 %
Credit Suisse International (E58DKGMJYYYYJLN8C3868)	9,71 %	2,13 %	N.A.	N.A.	0,00 %
Goldman Sachs Bank Europe SE (8IBZUGJ7JPLH368JE346)	3,42 %	2,13 %	N.A.	N.A.	0,00 %

8. Securitized Derivatives

8.1 Warrants and Certificate Derivatives

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Securitized Derivatives - Warrants and Certificate Derivatives“ class, due to (in some cases marked) variance in relation to the

availability of liquidity, assigning high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

8. Securitized Derivatives

8.1 Warrants and Certificate Derivatives

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network. The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

9. Commodities derivatives and emission allowances Derivatives

9.1 Other commodities derivatives and emission allowances derivatives

Information on the top five brokers

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	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
Société Générale SA (O2RNE8IBXP4R0TD8PU41)	31,90 %	25,53 %	N.A.	N.A.	0,00 %
Morgan Stanley Europe SE (54930056FHWP7GIWYY08)	24,67 %	13,83 %	N.A.	N.A.	0,00 %
MORGAN STANLEY & CO. INTERNATIONAL PLC (4PQUHN3JPFGFNF3BB653)	18,61 %	11,70 %	N.A.	N.A.	0,00 %
Goldman Sachs Bank Europe SE (8IBZUGJ7JPLH368JE346)	9,91 %	6,38 %	N.A.	N.A.	0,00 %
Deutsche Bank Aktiengesellschaft (7LTWFZYICNSX-8D621K86)	7,50 %	27,66 %	N.A.	N.A.	0,00 %

9. Commodities derivatives and emission allowances Derivatives

9.1 Other commodities derivatives and emission allowances derivatives

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Commodities derivatives and emission allowances Derivatives – Other commodities derivatives and emission allowances derivatives“ class, due to (in some cases marked)

variance in relation to the availability of liquidity, assigning high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

9. Commodities derivatives and emission allowances Derivatives

9.1 Other commodities derivatives and emission allowances derivatives

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

Where a Professional Client issues instructions with regard to the terms of execution within the scope of individual portfolio management, such instructions are always given priority and are implemented when executing orders, subject to the requirements of German investment law.

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No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

10. Exchange traded products

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

Information on the top five 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	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 Bank Europe SE (8IBZUGJ7JPLH368JE346)	25,10 %	5,87 %	N.A.	N.A.	0,00 %
Flow Traders B.V. (549300CLJI9XDH12XV51)	11,80 %	6,04 %	N.A.	N.A.	0,00 %
Citigroup Global Markets Europe AG (6TJCK1B7E7UTXP528Y04)	9,15 %	3,63 %	N.A.	N.A.	0,00 %
HSBC France S.A. (F0HUI11NY1AZMJMD8LP67)	8,62 %	1,73 %	N.A.	N.A.	0,00 %
HSBC BANK PLC (MP6I5ZYZBEU3UXPYFY54)	7,63 %	45,60 %	N.A.	N.A.	0,00 %

10. Exchange traded products

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

Information on the top five execution venues

Class of Instrument	Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)				
Notification if <1 average trade per business day in the previous year	N				
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
Tradeweb Europe Limited (TWEM)	100,00 %	100,00 %	N.A.	N.A.	0,00 %

10. Exchange traded products

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

Information on the top five brokers (Securities financing transactions)

Class of Instrument	Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)	
Notification if <1 average trade per business day in the previous year	N	
Top five 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
MORGAN STANLEY & CO. INTERNATIONAL PLC (4PQUHN3JPFGFNF3BB653)	57,84 %	33,33 %
Goldman Sachs International (W22LROWP2IHZNBB6K528)	23,45 %	33,33 %
BARCLAYS BANK PLC (G5GSEF7VJP5I7OUK5573)	18,72 %	33,33 %

10. Exchange traded products

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

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)“ class, due to (in some cases marked) variance in rela-

tion to the availability of liquidity, assigning high priority to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

10. Exchange traded products

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

A list providing an evaluation of execution venues and/or brokers, incorporating the quantitative and qualitative factors set out above, is prepared in regular intervals. Sustainably achieving the best possible results when placing orders may require changes to be made within the scope of regular evaluation of execution venues and/or brokers – including the addition, removal or exchange of execution venues and/or brokers.

The summary information regarding the quality of execution is solely based on transactions for clients classified as „Professional Clients“.

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Union Investment’s shareholders are German cooperative banks, DZ BANK AG, as well as additional partner entities from the Volksbanken Raiffeisenbanken cooperative financial network. The Company does not perceive any conflict of interest in this connection; when placing orders, said shareholders are subject to the same strict rules for execution venues and/or brokers.

No specific arrangements are in place with any execution venues regarding payments made or received, or any discounts or rebates. Other non-monetary benefits may be obtained in the form of research and analysis services: these are designed for use in making investment decisions, in the interests of the investors.

11. Other instruments

Information on the top five brokers

Class of Instrument	Other instruments				
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
HSBC TRINKAUS & BURKHARDT AG (JUNT405OW8OY5GN4DX16)	38,47 %	6,07 %	N.A.	N.A.	0,00 %
Zürcher Kantonalbank (165GRDQ39W63PHVONY02)	25,26 %	55,47 %	N.A.	N.A.	0,00 %
BNP Paribas Securities Services SCA (549300WCGB70D06XZS54)	15,30 %	3,64 %	N.A.	N.A.	0,00 %
Hypo Vorarlberg Bank AG (NS54DT27LJMDYN1YFP35)	8,53 %	10,53 %	N.A.	N.A.	0,00 %
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (529900HNOAA1KXQJUQ27)	7,96 %	9,31 %	N.A.	N.A.	0,00 %

11. Other instruments

Information on the quality of execution obtained

Within the scope of individual portfolio management, orders are generally placed with execution venues and/or brokers subject to the proviso that such orders are placed at the best available terms and conditions prevailing at the time of placing the order, given all information available at that time. Quantitative and qualitative factors which may be relevant for achieving the best possible results include, in particular:

- the price of the financial instrument;
- the associated costs of order execution;
- the speed of order execution;

- the likelihood of execution and settlement; and
- the volume and type of order.

Further qualitative factors include the financial stability and credit rating of the execution venue and/or broker, the scope and consistency of their offer, as well as their access to sources of liquidity.

The priority of these factors is differentiated according to the respective class of financial instrument. For the „Other Instruments“ class, due to (in some cases marked) variance in relation to the availability of liquidity, assigning high priori-

ty to the probability of execution is necessary in some situations – whereby this must not be at the expense of the price and the costs associated with execution, which generally have similarly high priority.

Execution venues and/or brokers are selected on the basis of factors relevant for achieving the best possible results, in an independent process, and in accordance with all regulatory requirements, their Best Execution Policy, and in compliance with applicable law and regulations as well as the BVI Rules of Conduct.

11. Other instruments

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Disclaimer

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